The Role of Quality Control in the Formation of an Auditor’s Professional Skepticism

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Abstract
Purpose: This study aimed to assess the role of professional skepticism auditors related to quality control as moderating variables in the relationship between time pressure, locus of control, and auditors’ professional skepticism.
Method: The population included auditors in the city of Semarang, Indonesia. Data were collected using questionnaires distributed to 100 respondents, with only 78 returned, while the hypotheses were tested using multiple regression methods.
Finding: The results showed that time pressure does not affect professional skepticism. There was no moderating effect of quality control on this relationship, and the external locus of control on professional skepticism and quality control was able to moderate this effect.
Novelty: The research’s originality was using quality control as a moderating variable. However, several situational factors like quality control are usually adopted in a public accounting firm as an agreement with clients, promising performance, and monitoring for auditor.

Keywords: Professional Skepticism, Time pressure, Locus of Control, Quality Control

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INTRODUCTION
According to professional standards, skepticism is defined as an auditor’s attitude towards the critical evaluation of audit evidence. Hurtt (2010) further explained that an auditor needs professional skepticism while performing the whole responsibility and not only at the planning stage. It is associated with the multidimensional characteristics of this concept comprising the individual nature during the acceptance of an assignment by audit teams and the situational variables influencing the concept during the process. It has also been reported that skepticism is a continuum construct (Glover & Prawitt, 2014) by adapting to the potential factors observed in each situation faced by an auditor. For example, if a client has a higher fraud risk, a relatively high level of skepticism is required compared to low-risk situations, which depends on the auditor. However, it is important to reveal several threats to this attribute.

There are, however, several threats to professional skepticism, such as ethical dilemmas, knowledge and experience gaps, deadline pressures, auditor and personal characters, and the receipt of short feeds as a reward by auditors (Nelson, 2009). According to Robinson (2011) and
Westermann et al. (2014), time pressure has a negative influence on professional skepticism, while Nolder and Kadous (2014) reported it is the result of cognitive processes based on the character of the auditor, client, evidence, and environment. This attribute changes based on these factors, as Hurtt et al. (2013).

On another side, Attribution theory can explain how an auditor makes behavior and his motivation. According to Arrington et al. (1985), internal attribution and external attribution are the dichotomy that causes individual behavior. Kelley & Michela (1980) proved that attribution theory is based on the assumption that rational individuals interpret and analyze events to get an understanding of the causal structure of their environment, so the implementation of this theory in research is divided into two areas, namely, research what test of the antecedent factors of attribution and the effect of attribution on its consequences. Robin (1996) stated that attribution theory is known as dispositional and situational attributions. Dispositional attribution is internal causal factors oriented to aspects of individual behavior. Meanwhile, situational attributions are external causes that recognize that the surrounding environment contributes to influence a person's behavior.

The time pressure faced by auditors triggers the completion of the assignment within the stipulated timeframe and increases work efficiency as long as rationality is maintained. Time budget pressure as a situational attribute also provides two different impacts on the behavior of auditors, especially regarding skepticism, and these include increasing motivation to ensure high accuracy and less reason with damning consequences (DeZoort & Lord, 1997). The time limit set by the public accounting firm is not expected to reduce the auditor's professional skepticism. For the time budget to work as an instrument to strengthen the auditor's professional skepticism, public accounting firm must carry out quality control. Auditors' acceptance of quality control and time budget is expected to contribute to auditor behavior. Therefore, using this factor as an effective instrument to improve the accuracy of auditors' professional skepticism is one of the objectives of this study by using quality control as a moderator, strengthening or weakening the relationship between the two variables.

Another factor or characteristic observed to influence the level of professional skepticism is the locus of control as dispositional attribution. For example, an auditor with a strong internal locus of control is expected to have the ability to moderate personal objectives and also to view events or conditions as opportunities without any pressure. It further ensures the use of more audit evidence due to this variable to increase the level of professional skepticism. It is possible to moderate this relationship by using certain situational factors. Therefore, this study used quality control as the moderating variable determining the relationship between locus of control and time pressure to auditors' professional skepticism.

Implementing quality control will increase the possibility of detecting deviant auditor behavior, such as decreasing the level of auditor skepticism—quality control as situational attribution. There are five indicators of quality control independence, integrity and objectivity, personnel management, acceptance, continuity, agreements with clients, promising performance, and monitoring (Weningtyas et al., 2006). In public accounting firm organizations with high-quality control, it will impact the implementation of audit procedures as determined. Boyle & Carpenter (2015) suggest that to increase professional skepticism in auditors, one of the motivating factors is a quality control system that can implement policies and procedures at public accounting firm. Research by Girik & Noegroho (2021) proves that the quality control system at public accounting firm has a positive relationship with auditor skepticism. However, Ridloi's (2021) research demonstrates that the quality control system does not affect professional skepticism. Therefore, this study places the quality control system as a moderating variable because the working mechanism of the quality control system in an organization can function well or not.

**Auditors’ Professional Skepticism**
According to Nelson (2009), professional skepticism indicates that an auditor’s judgment and decisions reflect high risks in erroneous management assertions based on the information provided. From another perspective, the concept is not just a mindset but also an attitude, and this is in line with the submission of Nolder & Kadous (2014) that skepticism results from cognitive processes involving the feelings in responding to risks causing misstatements due to insufficient evidence material as a basis for audit decision-making. Moreover, Nelson (2009) divided skepticism into two components: judgment and action. Skeptical judgment involves the recognition of the existence of a potential issue and the energy and effort required to resolve it, and it coincides with the cognitive processes conducted by auditors. Meanwhile, skeptical action is observed with an auditor’s behavior changes based on skeptical judgment.

According to Nolder & Kadous (2014), the process of forming professional skepticism is connected to the theory of decision-making. Hurtt et al. (2013) also reported the fundamental development of this concept is through the cognitive process obtained from several inputs such as the characteristics of the auditor, client, evidence, and the environment. The auditor’s characteristics are considered an antecedent of judgment, skepticism, and action in traits, experiences and expertise, training, motivation, moral reasoning and courage, independence, and knowledge. Moreover, the characteristics of the evidence include complexity and proof accuracy. At the same time, those for the client involve management integrity, complexity, risk level, preference, negotiation skills, industry, good governance mechanism, and risk-taking ability. Environmental characteristics can be accountability for reviewers and regulators, public accounting firm rotation, legal obligations, incentives for acts of skepticism, and international issues.

The mechanism for forming professional auditor skepticism is based on Figure 1. Professional skepticism is the result of an auditor’s cognitive process. To carry out the cognitive process, the auditor receives input consisting of auditor characteristics, client characteristics, evidence characteristics, and environmental characteristics. This study uses an external locus of control as a proxy for auditor characteristics. Meanwhile, the auditor accepts time budget pressure and quality control variables as proxies of environmental characteristics.

Based on the information obtained as well as the research findings of Hurtt et al. (2013) concerning the possible interactions between the input as mentioned earlier variables, developed
the following hypothesis for this purpose of this study:

**Time pressure**

Pressure is defined as a construct functioning as an objective stimulus to individual characteristics and events occurring in their environment and impacting individual cognitive processes and perception formation (DeZoort & Lord, 1997). Time pressure can cause two opposite effects in the auditing profession, positive and negative. It is positive if it increases effectiveness and negative if it causes a reduction in productivity. It is consistent with the pattern observed with the influence of time pressure on performance based on the theory of Inverted-U. The relationship is shown through a curve such that a higher amount of pressure exerted improves the quality of the performance up to a certain point, but after reaching the point maximum, there is a reduction in the quality (Gundry & Liyanarachchi, 2013; Broberg et al. 2016 ). Based on attribution theory. Time budget pressure received by the auditor will affect his behavior. Professional skepticism as an action is expected to decrease when the auditor feels that the time for conducting the audit of financial statements is limited.

Several time-related works of research have reported the effect of time budget pressure on the behavior of auditors (Margheim et al., (2005); Holstrom, (2015)). In another research, time budget pressure didn't affect professional skepticism (Pattiasina (2019); Hadijah, (2019s); Ayun & Kurnia, (2016)). Normatively, when an auditor experiences tight budget time, there is usually the tendency to speed up the assignment in the field, which leads to a reduction in professional skepticism and audit evidence. It is the policy mostly practiced by auditors to ensure punctuality, and as a result of this, the following hypothesis was formulated:

$H_1$: Auditors with high time budget pressure tend to have a reduced level of professional skepticism.

**Locus of Control**

Locus of control is a form of individual characteristics that can reflect a person's level of confidence concerning the influence of an action or behavior on the success or failure experienced. This factor is classified into two groups. These include internal and external such that individuals with a high external locus of control have confidence that success or failure tends to be more controlled by outsiders (Robin, 2008). The auditor's locus of control is a dispositional attribution based on attribution theory. Auditors with a high external locus of control assume that factors outside of themselves cause an event or failure. As a result, he assumed that the decline was primarily due to external factors when he behaved less skeptically during the audit assignment.

This conclusion is the same as Sari & Ruhiyat (2017), that locus of control has a significant positive effect on audit judgment. But, Kurnia (2014) stated that locus of control significantly negatively affects professional skepticism. It means there is the possibility of manipulating a situation the auditors feel there is limited support to survive. It is mainly conducted to put up a defense in their environment. Therefore, auditors with a high external locus of control tend to have the ability to reduce skepticism due to their fore-knowledge of the external factors affecting their behavior. It led to the formation of the following hypothesis:

$H_2$: Auditors with a high internal locus of control tend to have a high level of skepticism.

**Quality control**

Quality control is an activity conducted by a public accounting firm to assure the implementation of professional standards in audit assignments. It includes aspects of auditor's independence, integrity, objectivity, personnel management, acceptance, sustainability, agreements with clients, promising performance, and monitoring. Based on attribution theory, quality control is a situational attribution, and Situational factors can serve as moderating variables that function to strengthen or weaken existing relationships. According to Owen-smith (2015), an individual's skepticism is influenced by an evaluation mechanism, including social control and
monitoring functions conducted by public accounting firms in accountants.

Moreover, Boyle & Carpenter (2015) explicitly stated quality control policy implemented by public accounting firms is a monitoring element to ensure appropriate procedures have been designed and applied effectively while conducting an auditing assignment. Therefore, this variable has an important role in strengthening or weakening the relationship between antecedent factors towards skepticism (Girik & Noegroho (2021). According to Fabianska et al. (2021), an auditor’s professional skepticism is acceptable for ensuring audit services’ quality control procedures. Time budget pressure from environmental characteristics affects professional skepticism as a proxy, and we predict that good quality control can improve professional skepticism. For example, when an auditor experiences time pressure while conducting an assignment, the quality control is expected to be relatively high. It means the relationship between time budget pressure and skepticism is weakened. It led to the formulation of the following hypothesis:

H₃: Quality control can moderate the relationship between time budget pressure and professional auditor skepticism.

Quality control also has a strategic position to moderate the relationship between external locus of control and skepticism. When auditors have a high external locus of internal control, there is a tendency to set relatively high skepticism. However, through the application of quality control by the public accounting firm, there is adequate monitoring to ensure skepticism is not set too low. Ridloi (2021) proved that the quality control variable could not be a predictor variable for professional skepticism. So that this study places the quality control variable as a moderating variable, which led to the formulation of the following hypothesis:

H₄: Quality control can moderate the relationship between locus of control and professional auditor skepticism.

METHODS

Data Collection
This research was conducted quantitatively with auditors in the city of Semarang, Indonesia. The reason for choosing Semarang is because this city is the capital of the province of Central Java, so the public accounting firm in the town of Semarang has the majority of quality control. Samples were selected randomly by involving 10 public accounting firm available to be a participant—the amount of population 238 auditors. We used the slovin formula and decided to error 10%. The result of the slovin formula is 70 (minimum sample). Sampling technique using purposive sampling with the following criteria: The auditor has a working period of more than one year and has audited financial statements. One hundred questionnaires were distributed online. Ninety-three responses were obtained from the respondents through questionnaires, while only 78 were processed further for analysis.

Operational Definition
Professional skepticism was measured using the instruments developed by Hurtt (2010), covering six indicators: questioning mind, suspension of judgment, search for knowledge,
interpersonal understanding, self-esteem, and autonomy. Time pressure is when the public accounting firm requires an auditor to ensure efficient costs and time during the audit process. This variable was measured using an instrument developed by Svanberg and Öhman (2013), consisting of 5 indicators, including three items about time budget pressure and two things about time deadline pressure. Moreover, an external locus of control is when an individual believes trust, opportunity, luck, or other people are the main determinants of success or failure. This study was measured using an instrument developed by Spector (1988) consisting of 8 indicators. Quality control is the monitoring activity of public accounting firms to determine if the procedures implemented by an auditor during the auditing process meet the required standards. This variable was measured using a questionnaire modified by Weningtyas, Setiawan, and Triatmoko (2006) to be consisting of 4 questions. Variable measurement using five Likert scales. Respondents were asked to provide responses consisting of options strongly agree to strongly disagree.

Data Analysis Method

Multiple regression analysis was used to test the hypotheses, while the moderated regression analysis model is used to test the moderating role of Quality Control. SPSS was used to process the data by observing several quality tests qualifying regression as a predictor model. Equation 1 shows the model used in this study:

\[
PS = \alpha + \beta_1 TP + \beta_2 LOC + \beta_3 QC + \beta_4 TP \times QC + \beta_5 LOC \times QC + e \quad \text{...............(1)}
\]

\[
\begin{align*}
PS & : \text{Professional Skepticism} \\
TP & : \text{Time Pressure} \\
LOC & : \text{Locus of Control} \\
QC & : \text{Quality Control} \\
\beta_1-\beta_5 & : \text{Regression coefficients} \\
e & : \text{Error}
\end{align*}
\]

RESULTS AND DISCUSSION

a). Descriptive Analysis

The survey sample included all types of job hierarchy in public accountant offices, with the junior auditor found to be 73.08%, the senior auditor was 23.08%. In comparison, the auditor manager or partner was 3.85%. The respondents consisted of 47.44% male and 52.56% female, while the dominating age was 21-40 years for the junior auditors that have worked in the public accounting firm for 1-4 years. The findings temporarily showed junior auditors dominate the public accounting sector of Semarang City. Moreover, it found the highest educational qualification to be at the bachelor's level, which means most respondents know to conduct the audit process under the professional standards of financial statement auditing. All the demographic information of the respondents is presented in Table 2.

The descriptive statistics are presented in Table 3. Table 3 shows the mean time pressure was 14 while it found the maximum value to be 23, and this means the respondents tend to experience time pressure but not in extreme conditions. For the quality control variable, the highest value was 18, while the mean was 15. It indicates that most respondents feel the high-quality control provided by the public accounting firm aids the auditing process. Furthermore, the locus of control has a maximum value of 36 while the average value is 31, and this means the sampled auditors have a relatively high external locus of control. Concerning the skepticism variable, the maximum point that an auditor can obtain is 180, but it recorded a maximum value of only 120 with a mean value of 108. This figure shows the auditor's skepticism to being at a moderate level.

b). Hypothesis Testing

The results of the hypothesis tested using multiple regression interaction models are presented in Table 4. The study proved time pressure reduced auditors' professional skepticism,
Table 2. Respondents Demographics

<table>
<thead>
<tr>
<th>Description</th>
<th>Sum</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Male</td>
<td>37</td>
<td>47.44%</td>
</tr>
<tr>
<td>b) Female</td>
<td>41</td>
<td>52.56%</td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>100%</td>
</tr>
<tr>
<td>2. Job Level:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Auditor Junior</td>
<td>57</td>
<td>73.08%</td>
</tr>
<tr>
<td>b) Auditor Senior</td>
<td>18</td>
<td>23.08%</td>
</tr>
<tr>
<td>c) Manager/partner</td>
<td>3</td>
<td>3.85%</td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>100%</td>
</tr>
<tr>
<td>3. Tenure:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) 1-4 year</td>
<td>58</td>
<td>74.36%</td>
</tr>
<tr>
<td>b) 5-9 year</td>
<td>10</td>
<td>12.82%</td>
</tr>
<tr>
<td>c) &gt;9 year</td>
<td>10</td>
<td>12.82%</td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>100%</td>
</tr>
<tr>
<td>4. Age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) 21-30 year</td>
<td>49</td>
<td>62.82%</td>
</tr>
<tr>
<td>b) 31-40 year</td>
<td>24</td>
<td>30.77%</td>
</tr>
<tr>
<td>c) &gt;41 year</td>
<td>5</td>
<td>6.41%</td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>100%</td>
</tr>
<tr>
<td>5. Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Post Bachelor</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>b) Bachelor</td>
<td>66</td>
<td>85%</td>
</tr>
<tr>
<td>c) Diploma</td>
<td>8</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>100%</td>
</tr>
</tbody>
</table>

(Source: Primary Data, 2020)

as indicated by the TP coefficient of -0.256. This negative value means an increase in the time pressure would lead to the reduction of professional skepticism but due to the significance level of 0.721, the first hypothesis was not accepted. It is not following the findings of Westermann et al. (2014), but this result supports Nelson (2009) because skepticism professional is a continuum variable and depends on any situation. It can make high or low depending on the client’s case. The incontinence could be associated with the low to moderate level of time pressure experienced by the auditors in Semarang, as observed in the relatively small variation in the mean and median values. This condition makes the auditor not disturbed by time budget pressure. As a result, his

Table 3. Result of Descriptive Test

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Pressure</td>
<td>78</td>
<td>5</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Control Quality</td>
<td>78</td>
<td>11</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Locus of control</td>
<td>78</td>
<td>24</td>
<td>36</td>
<td>31</td>
</tr>
<tr>
<td>Professional Skepticism</td>
<td>78</td>
<td>83</td>
<td>120</td>
<td>109</td>
</tr>
</tbody>
</table>

(source: SPSS result, 2020)
The act of professional skepticism was not affected. From another perspective, the theory proposed by DeZoort and Lord (1997) states that pressure has a positive effect on performance if the pressure is realistic, while Otley and Pierce (1996) and Gundry and Liyanarachchi (2007) also reported the influence of control environments on time budget pressure. The results showed the quality control provided by the public accounting firms was relatively high to ensure there was no negative effect of time budget pressure on professional skepticism.

The second hypothesis showed a significance value of 0.005 (<0.05), which means accepted. It is in line with the research conducted by Hurtt et al. (2013), which showed the effect of auditor characteristics on the act of skepticism. Moreover, external locus of control as part of these characteristics was found to influence the level of skepticism. It means an individual with a high external locus of control tends to make an emotional focus strategy by avoiding problems and potentially manipulating colleagues or other objects as a form of defense. Therefore, skepticism has a high possibility of causing a change in an auditor. The results of this study support Sari & Ruhiyat (2017) that locus of control has a significant positive effect on audit judgment and follows attribution theory. That internal factors themselves have a contribution to his behavior. The research data shows that the auditor has a high internal locus of control to organize his work and assumes that success in acting and acting is a result of his ability.

The third hypothesis showed a significance value of 0.661 (> 0.05), which was rejected. It indicates there was no effect of quality control as a moderating variable on the relationship between time budget pressure and professional skepticism. The malfunctioning of quality control on the relationship between time budget pressure and professional skepticism can be justified based on the data obtained by the researcher. Demographic data shows that most of the sample are auditors with a working period of 1-4 years of 74.36% and 73.08% are junior auditors. So the experience is relatively limited. The data also shows that the auditors in Semarang are relatively not subject to tight time budget pressures. The moderating role of the quality control variable does not appear in the relationship between budget time pressure and professional skepticism.

Table 5. Result of hypotheses test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Significance</th>
<th>Hypotheses</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP → PS</td>
<td>0.721</td>
<td>H1</td>
<td>Rejected</td>
</tr>
<tr>
<td>LoC → PS</td>
<td>0.001*</td>
<td>H2</td>
<td>Accepted</td>
</tr>
<tr>
<td>TP * CQ → PS</td>
<td>0.661</td>
<td>H3</td>
<td>Rejected</td>
</tr>
<tr>
<td>LoC* CQ → PS</td>
<td>0.007*</td>
<td>H4</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

*) Level of significance 0.05
However, the fourth hypothesis has a significant value of 0.020 (<0.05), which means the hypothesis was accepted. It shows quality control has a moderating influence on the relationship between LoC and professional skepticism. When an auditor has a high locus of control and quality control is applied by a strict public accounting firm, a higher skepticism would be observed. Based on attribution theory, quality control as a moderating variable is a proxy for situational variables. Furthermore, according to Trevino (1986), situational variables can serve as moderating variables in the relationship of predictor variables to auditor behavior in an organization. The role of the mediating variable in the locus of control relationship to professional skepticism serves as a reinforcer. The stronger an auditor’s internal locus of control, the higher the professional skepticism he has. This relationship becomes stronger because the quality control system owned by public accounting firm is running well.

CONCLUSION

The conclusion of this study is the proven influence of locus of control on professional skepticism. This study also shows that the quality control variable can moderate the relationship between locus of control and professional skepticism. The results also prove that time budget pressure does not affect auditors’ professional skepticism, likewise for quality control variables. This variable cannot be a moderating variable in the above relationship.

This study has limitations in proving the role of quality control variables in the relationship between time budget pressure and professional skepticism. Therefore, future research is expected to add another moderating variable, for example, ethical climate, organization culture, etc. This research contributes directly to the science of auditing, especially the mechanism for increasing an auditor’s professional skepticism. This research also has implications for management policies in public accounting firm regarding the factors that need to be used to improve professional skepticism. The quality control factor becomes an instrument for public accounting firm to strengthen professional skepticism. The factor of budgetary pressure on auditors is not the primary choice for public accounting firm to increase professional skepticism should be avoided.

REFERENCES


