# The Role of the Supply Chain Management in Responsibility of Indonesian Government Auditors in Detecting Corruptions: Analysis of Cognitive and Moral Effects

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Abstract- This study tends to examining how a new analytical tool, can be useful to detect the fraudulent activities in Supply Chain Management. This study aims to analyze and provide empirical evidence regarding the perception of the Indonesian government's internal auditors' responsibility in detecting corruption. The theory of triangle model of responsibility [29] is used as a reference for analyzing research results. The 2x2 between experimental subjects design was conducted to investigate the research questions. The cognitive style tested is field style independent and field dependent, while the moral of the auditor is divided into high and low levels. The Participants are 92 internal government auditors in Indonesia. Results show that perceptions of responsibility for detecting corruption among groups that are field independent and dependent fields differ significantly. Thus the perception of responsibility for detecting corruption is higher for auditors with independent field cognitive style (FI) than for auditors with field dependent (FD) cognitive styles. Furthermore, the results show that the perception of responsibility for detecting corruption is higher for auditors with a high level of moral development than a low moral development level.

**Keywords-** Cognitive Style, Supply Chain Management, Responsibility, Triangle Model of Responsibility.

## 1. Introduction

Supply chain management (SCM) is an integrated and complex network concept that refers to the sum of all the processes starting from the procurement of the raw material from the manufacturer/producer and ending with delivery of the end-product to the consumer. This research extends the results of previous studies related to the responsibility of detecting corruption. The results of the research by [1-3] show that the type of corruption and accountability of the Indonesian government's internal auditors influences the perception of responsibility in detecting corruption. This study examines the effect of field independent-dependent cognitive style on perceptions of auditor responsibility in detecting corruption. A person's cognitive style refers to a person's particular way of obtaining, storing, recovering and transforming information [4-8].

International Journal of Supply Chain Management IJSCM, ISSN: 2050-7399 (Online), 2051-3771 (Print) Copyright © Exceling Tech Pub, UK (<u>http://excelingtech.co.uk/</u>) Individuals with field dependent styles understand globally, adhere to structures as given and have a social orientation. While field independent individuals tend to be analytical, they are able to determine their own structure of information and have an impersonal orientation [9-14].

Previous research has shown that cognitive style influences the auditor's decisions and abilities in detecting corruption [15-20] Cognitive style influences accounting decisions [21-30]. Cognitive style influences the performance of accountants and auditors [6]. However, researchers have not found a study that examines the role of cognitive style field dependency with how much responsibility the auditor perceives to detect corruption.

Triangle model of responsibility theory uses to explain the role of the cognitive style of internal government auditors in their responsibility to detect corruption. The theory of triangle model of responsibility in the identity-event relationship (personal control) can also be observed from the FI/FD measurement model the Group Embedded Figure Test/GEFT [26]. Individuals will be categorized as field independent if they are able to identify more embedded figures. Field independent is an important characteristic of the audit because the auditor must evaluate complex information and identify certain problems in the context of the overall environment. An independent person is more efficient in building conclusions and is better at solving problems [3],[9] and decision making [2]. This is in line with the results of [27] study which found that independent auditors detected higher levels of fraud. Thus internal auditors who have a cognitive field independent style are better able to analyze the occurrence of corruption because they are able to think and process information more comprehensively.

Other factors that can shape perceptions of auditor responsibility in detecting corruption that will be tested in this study are the level of moral development. Research that links moral development with the responsibility of detecting corruption is based on a model of moral development [19],[28]. The developmental moral explains the fundamental framework of the cognitive processes of individual decision making related to ethical dilemmas. The Kohlberg stage model [19] consists of three levels namely preconventional, conventional, and principled or postconventional. This study assumes that the ethical dilemma faced by internal auditors is how they perceive responsibility for detecting corruption.

Previous research has shown that moral development influences auditor decisions and judgment [1] Effect of moral development on risk [10]. Effect of moral development on ethical decisions [12]. Effect of moral development on perceptions of reputation and performance [11]. However, researchers have not found a study that examines the role of moral development on how much responsibility the auditor perceives to detect corruption.

The research aims to examine the influence of cognitive style and the moral level of the auditor's development on the auditor's responsibility to detect corruption. Cognitive style variables are categorized in the type of cognitive field dependent and field independent. For moral variables tested at high and low levels.

### 2. Literature Review

#### **2.1 The Triangle Model of Responsibility Theory**

The Triangle Model of Responsibility [29] provides an integrative framework for evaluating perceived responsibility and the relationship between accountability, responsibility and performance. In this context, the responsibility one perceives is related to the performance standards and also the events covered by the standard. In [6] suggests that responsibility is "a psychological condition that is attached to someone in building a form of feeling / prescription and managing events based on that prescription".

To further understand the framework of the Triangle understanding of The Model of Responsibility, it will be explained more deeply about the concepts and definitions of responsibility, elements in TMoR. The elements contained in the framework of The Triangle Model of Responsibility are prescription, event and identity. Each element has a relationship that is event prescription; prescription-identity and identityevent link. The relationship between prescription and events has task clarity. The relationship between prescription and identity has a personal obligation. The relationship between identity and event has personal control.

The elements contained in the framework of The Triangle Model of Responsibility are prescription, event, identity. Prescription is a code or rule for the behavior that applies and provides an answer to the "What should happen here?". auestion. The prescriptions explicitly or implicitly include information about goals or objectives to be achieved, guidelines or ways to achieve goals, and standards used to assess the quality of performance. This event is a performance unit or work unit that is under examination, and provides answers to the question, "What is happening here?". An event usually consists of a series of actions and consequences. The size of the unit depends on the purpose of the evaluation. Identity refers to the role of actors, quality, commitment, aspirations, and pretensions because they are associated with prescriptions and events. This identity characteristic answers the question, "Who is involved?".

Figure 1 shows the model of Schlenker's responsibility, namely The Triangle Model of Responsibility.



## Figure 1

Figure 1 shows the relationship between *prescription-event* (*task clarity*), *prescription-identity* (*personal obligation*), *identity-event* (*personal control*). The relationship between prescription-event (task clarity) refers to the extent to which prescription clarity applies to certain events. The relationship between prescription-identity (personal obligation) refers to the extent to which certain prescriptions are seen as applicable to actors based on the characteristics of actors, including the physical qualities of actors (for

example, physically healthy and of sufficient age), roles (eg parents, lawyers, supervisors), and beliefs (for example, religious beliefs, political affiliations). The relationship between identity-event (personal control) refers to the extent to which a person is associated with the event itself.

# 3. Hypotheses

# **3.1 Triangle Model of Responsibility, Cognitive Style and Perceived Responsibility**

In the supply chain, and especially concerning global organisations, the potential for corruption is high, due to the increase in touch points involved and the differing standards of ethics in various countries." Taking short cuts outside of agreed processes, or accepting gifts - which leads to favouring an outcome to a certain supplier - is also fraud, as is purposely not documenting meeting outcomes and actions, or being influenced by senior management to perform duties outside code of conduct and policy. Cognitive style is defined as a preferred approach and individual habits to organize and represent information [8]. [24] defines cognitive style as individual differences in preferred ways to organize and process information and experience. According to [3], cognitive style is an individual difference in how to see, think, solve problems, learn, and relate to one another. This explains how individu processes and organizes information so that it comes to an assessment or conclusion based on their observations of the situation [3].

In [8] use two different perceptual styles, namely the field dependence consisting of field dependent (FD) and field independent (FI). Individuals with field dependent styles understand globally, adhere to structures as given and have a social orientation. Individuals with field independent styles tend to be analytical, able to determine their own structure for information and have an impersonal orientation [14]. Field dependent individuals have perceptions and information processing that are influenced by the context in which they operate. This is the extent to which the organization dominates the perception of each of its parts [8]. Field dependents rely on external views while field-independent relies on internal views.

The triangle model of responsibility theory in the identity-event relationship (personal control) can explain the role of internal government auditors in their responsibility to detect corruption. The identity-event relationship (personal control) can also be observed from the FD / FI measurement model, namely The Group Embedded Figure Test [26]. The model measures the ability of individuals to recognize embedded figures in larger and more complex forms. Someone will be said to be independent if they are able to identify more embedded figures. Because auditors must evaluate complex information and identify problems embedded in the context of the environment as a whole, field independence can be an important characteristic of the audit. An independent person is more efficient in building conclusions and is better at solving problems [3],[9] and decision making [2]. This is in line with the results of [27] study which found that independent auditors detected higher levels of fraud.

Cognitive field-depedence characteristics [15], show that cognitive field independent style is able to analyze well the occurrence or absence of corruption, able to determine their own structure of information and impersonal orientation, having freedom in working and not depending on the social environment. While the field dependent cognitive style works with a more structured and sensitive social environment.

Thus internal auditors who have a cognitive field independent style are better able to analyze the occurrence of corruption because they are able to think and process information more comprehensively. In addition, cognitive style has a more personal sense of control over the occurrence of corruption in the government environment. The inherent characteristics of each of these cognitive styles will have an impact on how far the responsibility is perceived in detecting corruption. Thus it can be concluded that internal auditors with cognitive field independent tend to have higher levels of perceived responsibility in detecting corruption than field dependent.

Based on this framework, this study builds one hypothesis as follows:

H1: Internal auditors with independent field cognitive styles have a higher level of responsibility than field dependent styles in detecting corruption.

## 3.2 Triangle Model of Responsibility, Moral development and Perceived Responsibility

Kohlberg argues that moral development is an increase in complexity from a social perspective into argumentative considerations of how moral dilemmas should be resolved [24]. Kohlberg divides moral beliefs into six stages, starting from an egocentric perspective, followed by considering the interests of others and then group expectations, then covering the interests of society as a system, and finally placing human rights before society and ethical principles.

In [22] uses the Lawrence Kohlberg framework to position the assumption that human behavior is significantly related to a number of accounting theories in organizational practice. The article concluded that, although accounting reflects the prevailing values and beliefs of modernity, it is not enough for matters related to morality. Research conducted by [17] shows the level of moral auditor development influences sensitivity sensitivity and judgment independence. Research conducted by [17] shows that moral responsibility will increase with increasing hardness of consequences, moral certainty and level of involvement. Conversely moral responsibility will decrease with the amount of pressure. Research conducted by [8] shows that obedience pressure from superiors significantly increases the auditor's desire to sign-off accounts that are materially misstated, whereas conformity pressure has no effect. Research conducted by [15] conducted a test of the role of discussion on auditor moral reasoning. The results show that auditors have higher moral reasoning scores after prescriptive discussions with peers and lower moral reasoning scores after deliberative discussions with peers.

In [26] examined auditor moral reasoning by comparing auditors from Canada and America. The results show that institutional factors are more likely to be related to the discussion of auditor reasoning from their prescriptive reasoning in both countries. In addition, the study shows that the national institutional context found in the United States, where the country has stricter regulations and a more law-conscious environment, seems to encourage auditors to talk about things they consider "ideal" judgment compared to the Canadian context.

This study uses the Triangle Model of Responsibility theory as a basis for connecting the influence of moral development on the auditor's responsibility in detecting corruption. The moral development of preconventional, conventional and postconventional auditors is in line with the triangle model of responsibility theory. This can be explained through moral characteristics possessed bv preconventional, conventional and postconventional. By observing the characteristics of each moral development and associated with each element / link on the triangle theory of responsibility, it can be concluded how far the responsibilities perceived by the internal auditor in detecting corruption.

Preconventional moral reasoning is based on the focus of selfishness to avoid punishment and seek rewards, whereas conventional moral development is based on laws and regulations that represent good interpersonal relations and maintain social order. For postconventional moral reasoning it is based on the principles of universality and virtues such as justice and care, and building social contracts and upholding individual rights. In the relationship of task clarity, the auditor with a low moral (preconventional and conventional) feels unclear rules and standards that must be fulfilled when faced with corruption cases. Whereas in the identity-event relationship (personal control), they will avoid their responsibility by feeling the inability to control an event which in this case is the event of detecting corruption. In the relationship between prescription-identity (professional obligation), the auditor will avoid the responsibility of detecting corruption by assuming that it is not his responsibility.

For auditors with high moral development (postconventional), auditors will feel that they must meet binding standards and rules in carrying out their functions of detecting corruption (task clarity) .The auditor will do his best to do his job of detecting corruption with the perception that they are able to perform quality procedures in an effort to detect corruption (the relationship between identity-event (personal control). In the relationship of prescriptionidentity (professional obligation), the auditor will carry out his function in detecting corruption by assuming that it is fully his responsibility.

Based on this framework, this study builds the second hypothesis as follows:

H2: Internal auditors with postconventional moral development (high) have perceived responsibility higher than conventional and conventional (low) in detecting corruption.

# 4. Research Method

The subjects in this study are internal auditors of government institutions in Indonesia. Demographic variables asked were age, gender, work experience, position, educational background. The data collection was carried out when the internal auditors of government agencies throughout Indonesia participated in auditors' functional education and training organized by the Indonesian Financial and Development Supervisory Agency (BPKP).

# 4.1 Research Design

This study uses an experimental design 2X2 factorial design to investigate hypotheses. The independent variable was level of cognitive style and the moral level of the auditor. We manipulated two levels of cognitive style as fields are independent and field dependent. While the moral level of the auditor is manipulated at two high and low levels.

# 4.2 Experimental Task Procedures

All experimental tasks can be completed in approximately forty minutes. The task that participants must perform are the government agencies in which they work. The questions include name, age, gender, education, work place agency, job title, length of service and amount of audit experience. In addition, participants were also asked to select the accountability pressure provided. Second, there should be information about the government agency and the corruptions content that occurs. The participants were then asked to answer questions related to auditors' perceived responsibility based on the three elements of triangle model of responsibility from [6]. In the last session a question was asked for manipulation checks to ascertain whether participants understood the given experiment assignment scenario.

## 4.3 Measures

Perceived responsibility to detect fraud as measured by six questions related to the triangle of responsibility models. Specifically, two questions related to the prescription-identity (professional obligation) link, two questions related to task clarity, and two questions related to the identity event (personal control) link. The questions were measured using a 100 point scale [29]. The participant's field dependent / independent cognitive style was measured through The Group Embedded Figures Test (GEFT) developed by [18]. While the level of moral development (high and low) is measured through the Defining Issues Test [28].

# 5. Results

#### **5.1 Manipulations Checks**

Table 1 presents a description of participants' answers to manipulation questions.

	N	Range	Min	Max	Mean	Std. Dev.
Materiality	92	8	2	10	7,47	2.030
Understandable	92	8	2	10	6,75	2.284
Realistic	92	9	1	10	8,21	1.671
More budget leftovers	92	9	1	10	5,59	2.590
Perceived Responsibility	92	9	1	10	6,59	2.387
Tend to detect	92	9	1	10	7,38	1.932
Responsibility change	92	8	2	10	7,49	1.486
Valid N (listwise)	92					

 Table 1. Descriptive Statistics Tests for Manipulation Questions

From the participant's answers to 7 (seven) manipulation questions obtained above 5 values (range 1 to 10). This value is higher than the middle value of the given scale. Thus it can be concluded that participants can understand the experimental scenario given by the researcher.

Table 2 presents the number, average and standard deviation of perceptions of responsibility for detecting corruption as indicated by the choice of the number of audit procedures that will be used to detect corruption. Responsibility is measured using a Likert scale of 0 to 100 (0 = "no responsibility"; 100 = "very responsible") for 6 (six) items that are adopted from responsibility triangle links [29].

#### **5.2 Descriptive statistics**

Table 2. Perception of Responsibility for Detecting Corruption

		N	<u>Mean</u>	Dev. Std.
Cognitive Style	Field Independent	52	84,67	12,420
	Field Dependent	40	70,58	13,243
Moral Develop	High	49	81,47	12,401
ment	Low	43	75,21	16,125

Table 2 shows that based on differences in cognitive style, there were 52 field independent participants, while 40 field dependent participants. This amount was obtained from filling in cognitive style instruments from the Embedded Figure Test (GEFT) group by participants. Participants who were able to find more than 9 (nine) simple figures embedded in more complex figures were categorized as field independent cognitive styles (FI) whereas if less than those numbers were categorized as field dependent (FD). The average perception of responsibility detects corruption in field independent participants of 84.67 (St.Dev. 12.420) while the participants in the field dependent are 70.58. Based on differences in the level of moral development, 49 participants with high moral development and 43 with low moral development. The average perception of responsibility detects corruption

in participants with high moral development of 81.47 while participants with low moral development are 75.21.

To assess the relationship between the three points of view of responsibility based on the theory of the triangle model of responsibility (Schlencker, 1994) used six items of questions. Two questions related to the relationship of prescription-identity (professional obligation), two questions related to the relationship of prescription events (task clarity) and two questions related to identity-event relationships (personal control). These questions are measured using a 100point scale. Table 3 presents the average perception of responsibility for each question in the Triangle Model of Responsibility (TMoR) element based on a corruption scenario.

Table 3. Descriptive Statistics	Link Triangle Model	of Responsibility (TMoR)

TMoR Link	Mean
PO #1	80,29
PO #2	84,12
PO Mean	82,21
TC #1	78,82
TC #2	77,65
TC Mean	78,24
PC #1	75,00
PC #2	76,18
PC Mean	75,59

Information:

PO: Professional Obligation (Prescription-Identity) link TC: Task Clarity (Prescription-Event) link PC: Personal Control (Identity-Event) link

Item questions in PO#1 and PO#2 are related to the Professional Obligation (Prescription-Identity) link. The question PO#1 is measured by asking "how is the relevance of detecting this corruption to your work?". The question in PO#2 is measured by asking "how far is your obligation to detect such corruption?". The average answer to PO#1 questions is 80.29 while the average answer to PO#2 questions is 84.12. Thus indicating that the perception of responsibility for detecting corruption is based on the professional obligation element, the element of relevance is lower than the element of detecting obligation to the Indonesian government's internal auditors.

The item questions on TC#1 and TC#2 are related to Task Clarity (Prescription-Event) links. Questions on TC#1 are measured by asking "how clear is your authorization to detect corruption?". Questions on TC#2 are measured by asking "how does the information that you get about the procedure that must be followed to detect the corruption?". The average answer to the TC#1 question is 78.82 while the average answer to the TC#2 question is 77.65. Thus this result shows that the perception of responsibility for

detecting corruption is based on elements of task clarity, the element of authorization is higher than the element of information in detecting corruption in the Indonesian government's internal auditors.

Item questions on PC#1 and PC#2 are related to Personal Control (Identity-Event) links. The question on PC#1 is measured by asking "how much control do you have as an internal auditor over your ability to detect such corruption?". The question on PC#2 is measured by asking "how many contributions can you make in detecting the corruption?". The average answer to the PC#1 question is 75.00 while the average answer to the PC#2 question is 76.18. Thus demonstrating that the perception of responsibility for detecting corruption is based on a personal control element, the element of "control" is lower than the element of "contribution" in detecting corruption in the Indonesian government's internal auditors.

#### 5.3 Hypothesis testing

The first hypothesis (H1) which states that Internal Auditors with independent field cognitive style have a higher level of responsibility than field dependent styles in detecting corruption. The test results can be seen in table 4.

Cognitive Style	N	Mean	51	Levene Test		Equal Variance Assumed	
				F	Sig	Τ	Sig
Field	52	84,67	12,420	1,949	0,166*	5,244	0,000*
Independent		04,07					
Field Dependent	40	70,58	13,243				

1	5	
Table 4	. Hypothesis One Results (H	H1)

\* Significance at 0.05

Table 4 shows that based on descriptive statistical data, participants with field independent cognitive styles were 52 people and had an average perception of responsibility for detecting corruption at 84.67 (st. dev. 12.420). For participants with field dependent 40 people and having an average perception

of responsibility for detecting corruption at 70.58 (st. dev. 13.293). From table 4, it can be seen that the F calculated levene test is 1.949 with a probability of 0.166. Because the probability is more than 0.05, it can be concluded that the two groups have the same variance. Thus the analysis of different tests t-test uses the assumption of equal variance assumed. The results of the different test t-test indicate that the value of t at

the equal variance assumed is 5.244 with a significance probability of 0.000. A probability value below 0.05 indicates a significant average difference between the two test groups. Thus it can be concluded that the average perception of responsibility for detecting corruption among groups that are field independent and dependent fields differ significantly. Based on the results of these tests, it can be concluded that the first hypothesis (H1) states that internal auditors with field independent cognitive styles have a higher degree of perceived responsibility than field dependent in detecting corruption statistically supported.

The second hypothesis (H2) which states that Internal Auditors with high moral development have a higher level of responsibility than low moral development in detecting corruption. The test results can be seen in table 5.

Table 5. Hypothesis Test Results Two (H2)

Moral Development	N	Mean	-						ariance sumed
				F	Sig	Т	Sig		
High	49	81,47	12,401	4,320	0,041	2,065	0.042*		
Low	43	75,21	16,125				0,012		

Table 5 shows that based on descriptive statistical data, participants with a high moral development level amounted to 49 people and had an average perception of responsibility for detecting corruption at 81.47 (st. dev. 12.401). For participants with low moral development levels, there were 43 people and had an average perception of responsibility for detecting corruption of 75.21 (st. dev. 16.125). From table 5, it can be seen that the F calculated levene test is 4.320 with a probability of 0.041. Because the probability is less than 0.05, it can be concluded that the two groups have different variances. Thus the analysis of different tests t-test uses the assumption of equal variance not assumed. The results of different tests t-test indicate that the value of t in equal variance not assumed is 2.065 with a significance probability of 0.042. A probability value below 0.05 indicates a significant average difference between the two test groups. Thus it can be concluded that the average perception of responsibility for detecting corruption among groups with high and low levels of moral development differs significantly. Based on the results of these tests, it can be concluded that the second hypothesis (H2) states that high moral development has a higher level of perceived responsibility than moral development which is low in detecting corruption statistically supported.

### 6. Discussion

Supply chain management is an efficient role for detection of corupption faced by Indonesian government internal auditors in this study indicate that the cognitive field independent style is better able to analyze the occurrence of corruption because they are able to think and process information more comprehensively. In addition, cognitive style has a more personal sense of control over the occurrence of corruption in the government environment. The inherent characteristics of each cognitive style will have an impact on how far the responsibility is perceived in detecting corruption. Thus internal auditors with cognitive field independent tend to have a higher level of perceived responsibility in detecting corruption than field dependent.

The case of corruption detection is one case that requires a high level of analysis and sensitivity in managing information as an effort to detect corruption. In this case the government internal auditor will manage financial statement information that contains corruption. Conclusions on processing information will produce different perceptions depending on how they respond and manage information. Thus the difference in cognitive style of an internal auditor will result in different perceptions of responsibility in detecting corruption.

The results of this study which indicate a difference in perceptions of responsibility between the two types of cognitive styles (field independent and field dependent) can be explained by the relationship between elements of the theory of Triangle Model of Responsibility (TMOR). Analysis of the relationships between elements of the Triangle Model of Responsibility theory provides an explanation of the factors underlying internal auditors perceive responsibility for detecting corruption. Thus internal auditors who have a cognitive field independent style are better able to analyze the occurrence of corruption because they are able to think and process information more comprehensively. In addition, cognitive style has a more personal sense of control over the occurrence of corruption in the government environment. The inherent characteristics of each cognitive style will have an impact on how far the responsibility is perceived in detecting corruption. Thus, internal auditors with cognitive field independent tend to have higher levels of perceived responsibility in detecting corruption than field dependent.

The results of this study support previous studies which showed that field independent individuals were more efficient in building conclusions and were better at problem solving [3],[9] and decision making [2],[4]. This is in line with the results of the [7] study which found that independent auditors detected fraud at a higher level. The results of this study are in line with the results of previous studies, although not tested on similar variables.

The results of second hypotheses of this study indicate that auditors with a high level of moral development (postconventional) have more perceptions of responsibility than auditors with low levels of moral development (preconventional and conventional). Preconventional moral reasoning is based on the focus of selfishness to avoid punishment and seek rewards, whereas conventional moral development is based on laws and regulations that represent good interpersonal relations and maintain social order. For postconventional moral reasoning it is based on the principles of universality and virtues such as justice and care, and building social contracts and upholding individual rights.

The results of this study which show that there are differences in perceptions of responsibility between the two levels of moral development (high and low) can be explained by the relationships between elements of the Triangle Model of Responsibility (TMOR) theory. Analysis of the relationships between elements of the Triangle Model of Responsibility theory provides an explanation of the factors underlying internal auditors perceive responsibility for detecting corruption. In the relationship of task clarity, the auditor with a low moral (preconventional and conventional) feels unclear rules and standards that must be fulfilled when faced with corruption cases. Whereas in the identity-event relationship (personal control), they will avoid their responsibility by feeling the inability to control an event which in this case is the event of detecting corruption. In the relationship between prescription-identity (professional obligation), the auditor will avoid the responsibility of detecting corruption by assuming that it is not his responsibility.

For auditors with high moral development (postconventional), auditors will feel that they must meet binding standards and rules in carrying out their functions of detecting corruption (task clarity) .The auditor will do his best to do his job of detecting corruption with the perception that they are able to perform quality procedures in an effort to detect corruption (the relationship between identity-event (personal control). In the relationship of prescriptionidentity (professional obligation), the auditor will carry out his function in detecting corruption by assuming that it is fully his responsibility.

The results of this study indicate the role of moral development on how much responsibility the auditor perceives to detect corruption. The results of this study support previous studies which showed that the level of moral development can influence auditor decisions and judgments [1],[17],[21]. Moral development influences ethical decisions [12]. Effect of moral development on perceptions of reputation and performance [11],[20].

### 7. Conclusion

There is no effective audit tool available as on date for identification of all types of mistakes/frauds/irregularities. In the fraudulent transactions scenario of Supply Chain, the various detection techniques for fraud can be seen as a problem of classification of legitimate transactions from the fraudulent transactions. The results of this study are expected to provide empirical contributions regarding the theory of responsibility of The Triangle Model of Responsibility [30] which is a psychological theory that can confirm the responsibility of the auditor's perception in detecting fraud. The Triangle Model of Responsibility places that the perception of the responsibilities of internal government auditors is a direct function of the strengths of the three psychological relationships between these three formative elements of responsibility. Findings from the results of testing the first hypothesis (H1) and the second hypothesis (H2) prove that the determinants of someone to be responsible can be explained by professional elements of obligation, task clarity and personal control.

Government agencies/regulators should be able to provide clear guidelines and references on risks and ways of detecting corruption faced by government institutions. Thus, they are expected to continue to have high responsibility in detecting corruption that they must handle. The results of this study which indicate the existence of different levels of perceptions of responsibility in detecting corruption from cognitive styles and auditor moral development levels can be a direction for managers of government institutions in an effort to improve the capabilities of their internal auditors. By understanding the cognitive style and moral development level of the auditor, it can be predicted how internal auditors perceive their responsibility in detecting corruption. Thus, if the auditor's characteristics can be understood and conditioned in his assignment as an internal auditor, his performance will be higher.

### 8. Limitations and future Research

The limitations of this study are, first, due to the background of the research participants. Although the internal auditors who were 41.30% participants were from S1 (strata 1) education majoring in accounting but most were still at level 1 (first auditor) which was equal to 47.83% and had audit experience of less than 5 years (46.75%) Educational background and experience and auditor level can affect the performance of internal auditors both in the implementation of tasks and the power of analysis and sensitivity to corruption cases. The next limitation is that which is inherent in the experimental research method is the existence of low external validity. This means that the level of generalization of research results cannot be stated in general.

The next researcher can further expand the results of this study suggestions that can be given to further researchers can measure the efforts made by the auditor in detecting corruption through measurements of brainstorming effort. Thus research that will be able to comprehensively measure perceptions of the responsibility felt by auditors in detecting corruption as well as the effort that they undertake in audit activities detects such corruption

#### References

- [1] Abdolmohammadi, M. J. "Ethical Training in Graduate Accounting Courses. Research on Professional Responsibility and Ethics in Accounting" Published online: 37-62, 2005.
- [2] Benbasat, I., and A. S. Dexter. "Individual Differences in The Use of Decision Support Aids" Journal of Accounting Research 20 (1) (Spring): 1-11, 1982.
- [3] Bennink, C. D., & T. Spoelstra. "Individual Differences in Field Articulation as A Factor in Language Comprehension" Journal of Research in Personality (October): 480-489, 1979.
- [4] Bernardi, R. A. "Reply: Fraud Detection: The Effect of Client Integrity and Competence and Auditor Cognitive Style" A Journal of Practive & Theory 13 (Supplement): 97-101, 1994.
- [5] Bernardi, R. A. "Students Performance in Accounting: Differential Effect of Field Dependence-Independence as a Learning Style" Psychological Reports 93: 135–142, 2003.
- [6] Bryant, S., Murthy, U., & Wheeler, P. "The effects of cognitive style and feedback type on performance in an internal control task", *Behavioral Research in Accounting*, 21(1), 37-58, 2009.
- [7] Chen, S. dan R. Macredie. "Cognitive Styles and Hypermedia Navigation: Development of a Learning Model" Journal of the American Society for Information Science and Technology 53 (1): 3–15, 2002.
- [8] Cheng, Mandy M., Peter F. Luckett and Axel K-D. Schulz. "The Effects of Cognitive Style Diversity on Decision-Making Dyads: An Empirical Analysis in the Context of a Complex Task" Behavioral Research in Accounting. Vol. 15: 39-62, 2003.
- [9] Cochran, K. F., and J. K. Davis, "Individual Differences in Inference Process" Journal of Research Personality (June): 197-210, 1987.
- [10] Eckensberger, Lutz H., Thomas Doring and Heiko Breit. "Moral Dimensions in Risk Evaluation" Environmental Risk: Perception, Evaluation and Management. Published online: 137-163, 2001.
- [11] Emler, Nicholas, Hammond Tarry and Angela St. James. "Post-conventional Moral Reasoning and Reputation" Journal of Research in Personality. Vol. 41: 76-89, 2007.
- [12] Everett, Jeff and Marie-Soleil Tremblay. "Ethics and Internal Audit: Moral Will and Moral Skill in A Heteronomous Field". Critical Perspectives on Accounting. Vol. 25: 181-196, 2014.
- [13] Fuller, Lori R., dan Steven E. Kaplan. "A Note About The Effect of Auditor Cognitive Style on Task Performance" Behavioral Research in Accounting, 16: 131-143, 2004.
- [14] Garger, S. and Guild. M. "Learning Style: The Crucial Differences" Curriculum Review, February: 9-12, 1984.
- [15] Goodenough, D. "The Role of Individual Differences in Field Dependence as A Factor in Learning and Memory" Psychological Bulletin 83: 675–694, 1976.

- [16] Ho, J. L., and W. Rodgers. "A Review of Accounting Research on Cognitive Characteristics" Journal of Accounting Literature: 101-130, 1993.
- [17] Jones, Thomas M and Lori Verstegen Ryan. "The Effect of Organizational Forces on Individual Morality: Judgment, Moral Approbation, and Behavior" The Next Phase of Business Ethics: Integrating Psychology and Ethics. Publised online: 285-300, 2001.
- [18] Kogan, N. "Creativity and Cognitive Styles: A Lifespan Perspective" In Life-Span Developmental Psychology: Personality and Socialization, edited by P. B. Baltes, and, 1973.
- [19] Kohlberg, L. "Stages and Sequences: The Cognitive Developmental Approach to Socialization" In Handbook of Socialization Theory and Research, edited by D. Goslin, 347-480. Chicago: Rand McNally, 1969.
- [20] Lieber, Paul S. "Moral development in Public Relations: Measuring Duty to Society in Strategic Communication" Public Relations Review. Vol. 34: 244-251, 2008.
- [21] Lord, Alan T., and F. Todd DeZoort. "The Impact of Commitment and Moral Reasoning on Auditors' Responses to Social Influence Pressure" Accounting, Organizations and Society. Vol. 26: 215-235, 2001.
- [22] Lovell, Alan. "Moral Reasoning and Moral Atmosphere in The Domain of Accounting" Accounting, Auditing and Accountability Journal. Vol. 8(3): 60-80, 1995.
- [23] Lusk, E., and M. Kersnick. "The Effect of Cognitive Style and Report Format on Task Performance: The MIS Design Consequences", Management Science 25 (8): 787-798, 1979.
- [24] Messick, S. "Personality Consistencies in Cognition and Creativity" In Messick, S. (Ed.) Individuality in Learning. San Francisco, CA: Jossey Bass, 4–22, 1976.
- [25] Mills, Tina Y. "The Effect of Cognitve Style on External Auditors' Reliance Decisions on Internal Audit Functions" Behavioral Research in Accounting. Vol. 8: 49-73, 1996.
- [26] Oltman, P. K., E. Raskin, & H. A. Witkin. "Group Embedded Figures Test". Palo Alto, CA: Consulting Psychologists Press, 1971.
- [27] Pincus, K. V. "Auditor Individual Differences and Fairness of Presentation Judgments", Auditing: A Journal of Practice & Theory 9 (Fall): 150-166, 1990.
- [28] Rest, J. "*Defining Issues Test. Minneapolis*", MN: University of Minnesota Press, 1979.
- [29] Schlenker, B. R., Britt, T. W., Pennington, J., Murphy, R., & Doherty, K. "The triangle model of responsibility" Psychological Review, 101, 632–652, 1994.
- [30] Schlenker, B. R. "Personal Responsibility: Applications of The Triangle Model" In L. L. Cummings & B. M. Staw (Eds.). Research in Organizational Behavior (pp. 241–301). Greenwich, CT: JAI Press, 1997.