THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

Translation and Validation of Hurtt's Professional Skepticism Scales for Indonesian Context

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Abstract:
Administering questionnaire in different countries require adjustment of instrument especially when the original instrument has different language with respondent. I translate Hurtt' professional skepticism scale, this scales was early developed and I validate the scale in Indonesian Context. Back translation procedure was performed with 25 lecturers from English, Psychology and Accounting department. The result, describe that from the aspect of clarity of language and practical pertinence, the translated version is in satisfactory condition. Factor analysis also used to validate the measure, suggested that 7 factors test of sphericity was significant and appropriate. This result is different from Hurt' scale where comprises 6 dimensions.   The correlation between skepticism with truthfulness is -0.353, and significant showing that there are significant relationship between skepticism and truthfulness. The relationship between skepticism and risk assessment showing that skepticism as measured by Hurtt' are significant but its value is lower than the relationship between truthfulness and risk assessment.

Keyword: Back-Translation, Professional-skepticism, Truthfulness, Risk-Assessment, Forensic Course & Training
Data Availability: Available upon request.

1. Introduction

The Audit Standard Setter Body has been recognized the importance of professional skepticism. From beginning codification of auditing standard (SAS no 1), trough today, Professional skepticism has been widely recognized as one of the auditor professional attribute. According to SAS no 1, "an auditor must have questioning mind and critically assess the evidence obtained". Unfortunately, although all of auditing standard has stated the importance of professional skepticism, none of these statements has giving a comprehensive measure and explicitly describing an indicator of professional skepticism.

Many of research conducting in professional skepticism area have been trying to investigate the relationship between professional skepticism and fraud detection skill (Carpenter and Reimers 2011; McMillan and White 1993; Payne and Ramsay 2005; Rose 2007; Saksena 2010). All of these research have been recognized that professional skepticism is one of auditor's attribute that will increase auditor skill especially in performing fraud detection task (Harris and Brown 2000; Munter and Ratcliff 1999;   Sandra et al 2001; Saksena 2010). But although concept of professional skepticism is widely accepted and used as research variable, much of research are lack of consistent measures (Hurtt's 2010). Some of research conducted in professional skepticism uses the measures that depend on researcher experimental condition (Hurtt 2010), that lead to inconsistent measure of professional skepticism.

This lack of consistent measure scale of professional skepticism was un favorable because the professional and researcher use many indicators of professional skepticism, and its result is less comparable to each other. To overcome this problems, Hurtt (2010) tried to develop a measurement scale of auditor professional skepticism. As stated by DeCoster (2000) the purpose of scale construction is to design questionnaire that provide a quantitative measurement of an abstract theoretical variables. Consistent with this argument, Hurtt' scales of professional skepticism was intended to provide researcher especially who studying auditor skepticism with a standard measurement about professional skepticism. Hurtt' scale of professional skepticism was a trait skepticism, and constructed from various dimension of individual characteristics, and developed from characteristics which derived from audit standard, psychology, philosophy and consumer behavior research. In psychology research, trait was combining with context and prior experience to produce some subjective level of trust or suspicion, which may translate into skeptical behavior (Kee and Knox 1970).

According to Hurtt (2010) professional skepticism was comprises six dimensions including questioning mind, suspension of judgment, search for knowledge, interpersonal understanding, autonomy, and self esteem. Questioning mind is on going questioning of whether information and evidence obtained suggests that a material misstatement due to fraud has been occurred (AICPA 2002). In other accounting studies, questioning mind has following aspect of professional skepticism i.e. Suspicion (Hurtt, 2010) , disbelief, or doubt, presumptive doubt (Nelson 2009).

Because Hurtt's scale of professional skepticism was created and validated using rigorous development procedures, it is need to be validated by future research in order to achieve the standardized instruments (Comrey 1988; Hurtt 2010). Hurtt' scale of professional skepticism is relatively stable over the time but the score tend to decrease in second administration of the instrument and individual

component of the score is change significantly The standardized instrument is an important part of assessment procedure, and its also enable the researcher make an *a priori* measure of the study. In order achieve the good standardized instrument, the instrument must write specifically to measure the same construct and having statistical criterion (Comrey 1988). In order to prove its validity, Hurt's professional skepticism also have to be administered in different country.

While administering questionnaire in difference country, the instrument has to be adjusted to the native respondent' language,   if the original language of instrument is different from mother tongue of targeted   population. The culture boundaries of respondent believed have impact on result of survey. The Auditing Practices Board also addressing the variation of professional skepticism is across culture. In order to overcome this limitation, an instrument which administered in different language, culture, custom and social context must be translated in a systematic manner to achieve comparability result (Balbinotti, et al 2006). For this reason, Hurtt' scale of professional skepticism which is originaly administered in US which the mother tongue is English must be translated if it intended to be administered in Indonesia.

As stated in previous paragraph, professional skepticism is Using professional skepticism in performing audit task will increase auditor sensitiveness of fraud (Carpenter and Reimers, 2011). McMillan and White (1993), Payne and Ramsay (2005), stated that auditor who having higher professional skepticism also showing higher fraud risk assessment compared with low professional skepticism. Another research also showing that higher auditor skepticism increasing auditor sensitiveness to fraud possibility conducted by management (Rose 2007; Carpenter and Reimers, 2011). As professional skepticism is believed affect auditor risk assessment, in order to validate Hurtt scale of professional skepticism, I also investigate whether those scales has correlation with risk assessment,.

This research is contribute to literature in several ways. First, it's giving a guidance of Indonesian version of Hurtt's professional skepticism for researcher who will conduct research in Indonesia. Indonesian auditor also benefited from this instrument translation while this test in selecting audit teams based on skepticism scores. This research also give supporting evidence for validation of Hurtt' professional skepticism or indication of a revision of the scale according to research result as suggested by Nelson (2009), that it is useful for future research to test descriptive validity of professional skepticism. In order to examine whether there any affect of fraud training or course on professional skepticism, I investigate whether any difference in professional skepticism between respondents who have been enrolled in fraud auditing training or courses and respondent who are not. Finally this research also provide evidence about the effect of forensic training on skepticism and effect of professional skepticism on risk assessment as proposed by validation procedure in psychology.

The remainder of the paper is presented in four main parts. The first section describes the theoretical foundation and development. The second section describes the research method and procedures used. The third section presents and discusses the results. The forth section concludes the paper and highlights the value of this instrument translation for future research.

2. Hypothesis Development

2.1. Audit Judgment
In conducting audit, auditor performs variety of tasks and procedures whic is the final result is audit opinion. To do so, this outcome is influenced by auditor personal' attributes such as skill and personality (Nelson and Tan, 2005). The personal attributes are an essential part in performing task where auditor is interact with other auditors and firm's stakeholders. While interact with other parties, auditors influenced most by their personal attribute. In psychological literature, relationship among people in audit task, influenced most by auditor characteristics and attribute. Because the importance of personal attributes in developing auditor expertise, auditing standards introduce the personal attribute standard for auditor. Personal attribute affect auditor task in area of evidence search and decision making activities. One of that personal attribute is professional skepticism.

When making audit judgment, auditor can direct professional skepticism towards either audit evidence or their own judgment and decision making (Griener, 2010). The auditors judgment (including judgment with regard to the extent of evidence search adn evaluated) is determined by various characteristics of audit evidence, task environment, public firm' culture,   and also by characteristics of the auditor.

2.2. Professional Skepticism
Merriam-Webster Dictionary defines skepticism as an attitude of doubt or disposition to incredulity either in general or toward a particular object. In social science, skepticism is defined vary widely presented in list of below as immediately representation of the variation.

- The subjective feeling of alienation and mistrust (Tsfati 2003a)
- A response that varies depending on the context and content of the communication (Tan 2002)
- Merely questioning a claim (Koslow 2000)
- Doubts regarding the ability of medical care to alter health (Fiscella et al 1999)
- A trait leading to doubt (Forehand & Grier 2003)
- Tendency toward disbelief a claim (Obemiller & Spangenburg 2000)
- An application of trust in context (Tsfati & Capella 2003).

To summarize those definitions, skepticism is a subjective of felling, evoked by disbelief or mistrust, that present in form of doubt, questioning, or reject of claim,   which may collectively be called as resistance to persuasion. Skepticism is formed when individuals create cognitive "categories" of incoming information and treat all information according to a set of stereotypes or

beliefs regarding what they feel a particular message is trying to accomplish (Friestad and Wright 1999). According to those definition, in conducting assessment of audit evidence auditor need skepticism or suspicion (see Kerler and Killoug 2009; Nelson 2009; Rose 2007; Quadackers et al. 2009) as required by auditing standard. Although thre are many definition about skepticism, audit standard giving no definition about professional skepticism, while accounting studies also using different type and measure of professional skepticism (Nelson 2009). Payne and Ramsay (2005) using truthfulness as indicator of professional skepticism, Hurtt (2010) proposed scale to measure traits skepticism, Nelson (2009) using presumptive doubt which indicates relatively doubt about validity of some assertion, and Quadackers et al (2009) using interpersonal trust, need for closure, locus of control as indicators of skeptical characteristics.

2.3. Hurtt' Dimension of Professional Skepticism

Skepticism appear has many dimension. With no single dimension of skepticism, skepticism has many factor or component of that interact with its others to produce skeptical and skeptical behaviors. Hurtt (2010), has been developing a scale to measure professional skepticism comprising six characteristics which can be both a trait and a state. This scale was described as follows:

- Questioning mind: This characteristic was found in the SAS No. 82 (AICPA, 1997a) and SAS 99 (AICPA, 2002) definition of professional skepticism. SAS 99 defines professional skepticism as requires an ongoing questioning whether the information and evidence obtained suggest that a material misstatement due to fraud has occurred. In ISA no 240, professional skepticism was proposed as an attitude that includes questioning mind and critical assessment of audit evidence. In philosophy literature, skepticism is also includes the concept of questioning mind or disposition toward inquiry. Kurtz, 1992, writes skeptics as a question of "what do you mean?' seeking clarification and definition and 'why do you believe what you do? indicating request to reason, evidence and justification or proof. In marketing areas, Obermiller and Spangeberg 1998, defined skepticism toward advertising as a tendency to disbelieve information claims of advertising.
- Suspension of judgment: As noted in many philosopher noted, suspension of judgment is main characteristics of skeptics (Bunge 1991, Kurtz 1992, Hurtt 2010). Bunge (1991) stated that "skeptics do not accept naively the first thing they perceive or think, they are not gullible. Nor are they neophobic. They are just critical; they want to see evidence before believing'. In the Auditing Standards, SAS no. 1 indicates the importance of suspension of judgment when accepting management assertion until sufficient evidence is collected.
- Search for Knowledge: Concept of search for knowledge is parallel with concept of curiosity, characterization of skepticism in Johnson (1978) that skeptics seek knowledge for knowledge sake. As stated by Bunge (1991), skepticism encourages a search for knowledge. In auditing literature, Mautz and Sharaf (1961) also indicate the importance of curiosity when performing audit. Search for knowledge is different from concept of questioning mind where questioning mind is related with some sense of disbelief or doubt, while search for knowledge is more of general curiosity or interest (Hurtt 2010).
- Interpersonal understanding: Much philosophy literature, indicate this characteristics is key to understanding the potential for bias or differences in perception (Johnson 1978; Popkin 1979; Burnyeat 1983; McGinn 1988; Kurtz 1992). Interpersonal understanding is much related with evidence evaluation, which deal with the motivation and integrity of the individual whose provide evidence. Auditing Standard, SAS no. 82, recognize that   potentially misleading evidence might come from client personnel and recommends corroboration. Wilk and Zimbelman (2004) highlighted that fraud is considered occurred when there are any interaction of three causal influences: incentive, attitude, and opportunity. Two causal factors were much related with subject factor. Thus by having interpersonal understanding, its posited that auditor will recognize the potential bias, inaccurate, or misleading information provided by client.
- Autonomy: Autonomy is important aspect of auditor characteristics, while he or she decide when a sufficient level of information has been obtained to personally satisfy. Mcginn (1988), proposed that a skeptic as one of who does not easily accept the claim of others. Mautz and Sharaf (1961) noted that auditor must have professional courage not only to critically examine and perhaps discard the proposal from other, but also to submit his own inventions to same kind of detached and searching evaluation.
- Self Esteem: Self esteem refers to individual overall evaluation of his/her competencies (Rosenberg 1965). Neff (2011) defined self esteem as evaluation of worthiness individual, a judgment that he/she good or valuable people. Skepticism required a certain level of self esteem (Hurtt 2010). Self esteem was an important aspect in successful inquiry (Hookway 1990). By having self esteem, auditor able to resist persuasion attempts and   challenges another's assumption or conclusion. When evaluating evidence, self esteem also increasing auditor awareness about trustfulness assertion and explanation from client.

2.4. Increasing Professional Skepticism

Increasing skepiticm is imortant because the higher degre of sketicism will also increase public' trust, but recently internal and external environments surrounding independent auditors have resulted in an eroding of professional skepticism and have threatened to weaken society's trust in auditors (Toba 2011). Hurtt (2010) and Nelson (2009), Payne and Ramsay (2005), proposed the professional skepticism scale as it was intended to measure individual characteristics can be increased or impoved by training, and knowledge. Professional skepticism is not a static scale but it is a dynamic measure that can increase or decrease in accordance to knowledge, belief or norm. Carpenter et al (2011) conducted a study to evaluate the efect of forensic accounting course on sketicism and found that the forensic accounting course raised the students' level of skepticsm Based on those argument,   I expect that giving forensic accounting training to government internal auditor and conducting forensic accounting course to accounting student will affect higher level of professional skepticism level. This hypothesis stated formally:

> ➤ H1: Forensic accounting training and/or course will be increase professional skepticism.

2.5. Professional Skepticism and Risk Assessment

Nelson (2009), defines Professional skepticism as judgments and decisions that reflect a heightened assessment of the risk that an assertion is incorrect, conditional on the information available to the auditor. SAS no 109, stated that auditor performing risk assessment procedures to obtain understanding of entity and its environment by inquiries of management and others within the entity, analytical procedures and observation and inspection. Risk assessment is one of important part of auditor task during the beginning of engagement and presenting audit report.

The two of the dimension of skepticism from Hurtt' professional skepticism is questioning mind and suspension of judgment. These two dimension is consistent with the concept of disbelieve which opposite of trust. Kerler and Killough (2009) proposed that trust about management will negatively affect perceived risk of management fraud. Payne and Ramasy (2005) indicated that auditor who have low level of skepticism anchoring low fraud risk assessment. Consistent with that studies, Kerler and Killough (2009) studies also confirm that trust about management negatively affected perceived risk of management fraud. Based on those research, I expect that respondent with higher level of professional skepticism will conduct higher risk assessment. H2 stated formally as follows:

> ➤ H2 : Professional skepticism will be positively related to risk assessment.

3. Method

This research employed two complimentary techniques, translation and validation approach, and experimental approach. The translation and validation approach is employed in beginning step of research, which intended to achieve best translation of Hurtt' professional skepticism scale in Indonesian version. This step also validate the content of Hurtt' professional skepticism scale in Indonesian version. In experimental approach, I apply on graduate student, and government internal auditor. This experimente intended to evaluate the effect of professional skepticism on risk assessment. Specially, I examine the participant that follow pre-course/training and post course/training, and compare them to one another control group of participant who are not involved in fraud course/training. I also compare the group of participant each other. Data were collected by sending a questionnaire comprises translation of Hurtt' professional skepticism scale and cases material, before and after fraud training or courses session.

3.1. Procedure

Ethical methodology, statistical and experimental procedures are employed to provide an answer to the main research question. These procedures are described as follows.

3.2. Ethical Procedure

The first step to translate the Hurtt' Scale of professional skepticism from original English into Indonesian was to obtain permission from the authors (Hurtt 2010). After I received permission from the author, then I administered the translation version in Indonesian in experimental procedures.

3.3. Translation Procedure

The translation procedure evaluation is adopted from Vallerand (1989) and Balbinotti, et al. (2006). According to Balbinotti, the translation procedure is could be conducted following alternatives:

- Employing the instruments in its original language (English in this case), but its may be achieved limited respondent because of language barriers which a lot of part of respondents is using Indonesian as first language;
- Developing e new instrument in the alternative language (in this case is Indonesian) but still have limitation in its comparability with original survey;
- Validating the original instrument in the language of population (in this case is Indonesian), according to its metrics properties.

In this paper I use third alternatives, because this method is benefited when used as international comparison (Balbinotti, et al. 2006). The method of validation is conducted in three different ways, which the first step is preparation of preliminary version, then consolidating of preliminary version, dan then testing of its content validity. The translation procedure can be described in figure 1.

The preparation of preliminary version is conducted by back translation. This technique is relies on multiple translator who working individually and an independent committee that evaluate their work.   Following the procedure conducted by Balbinotti, et al (2006), the process is starting by obtaining one or more translation of its English instrument into Indonesian, conducted by two bilingual individuals familiar, in this case is lecturer from English Department and Psychology Department. The Indonesian version then translated back to English version and evaluated by independent committee comprises of two lecturer form English Department and Psychology Department who do not have access to the English version. This process is to evaluate its faithfulness of back translation into its English version and providing any adjustments if necessary. If there is any differences in word and meaning between Indonesian version and English version, then the committee must provide changes in the Indonesian version or even require a new translation, but if not, the translation process has been successful.

The second step is consolidating of the preliminary version, which intended to obtain the most faithful English version of the original instrument (Balbinotti, et al. 2006). This process is intended to verified its wording and meaning between English version and Indonesian version. This process will be conducted by independent committee of three lecturer from Accounting Department, English Department and Psychology Department, none of whom is one of the translators. The final result will be performed by consensus

among the committee member in order to reduce individual biases, and if any difference in wording and meaning between its English version and Indonesian version, the committee member suggested modification in the Indonesian version of the questionnaire.

After the consolidation of preliminary version is completed, then the questionnaire is evaluated its content validity by a panel of judges. This technique is chosen because content validity evaluation by a panel of judges making the instrument as clear as possible. In this case we will use a panel of 25 judges consisted of five academics, five senior student and five of senior auditor member of public accounting firm, who none of whom had participated in previous part of the process. Te judge was provided with an evaluation sheet encompassing three criteria:

    a.   Clarity of the language. This criteria is used to evaluate its clarity and understandability of the questionnaire instrument. Giving the target population is accounting student and auditor, the judges were asked :" do you believe that the questions are clear enough and therefore understandable to student and auditor? To what extent?"

    b.   Practical Pertinence. This criteria is intended to evaluate the relevance of the question to perception and behavior of the average student and auditor. The judges were asked: "Do you believe that this item is pertinent to indicate the trait of skepticism of the accounting student and auditor? To what extent?".

    c.   Theoretical Dimension. The theoretical dimension assessment is to evaluate the relevance of the questions to one of the six subject matter areas that the Hurtt' questionnaire addresses (questioning mind, suspension of judgment, search for knowledge, interpersonal understanding, autonomy, and self esteem). The judges were asked: "which of following theoretical dimension do you think this question belongs to? Mark only the one that **BEST** describes the item".

The evaluation sheet sent to the judges was included a five likert scale for rating the clarity and practical pertinence. The theoretical dimension addressed is also complemented in the evaluation sheet, which allowed the judge to choose the best description of items on theoretical dimension. A space to enable the judge to make additional comment also provided. The evaluation sheet was sent to each judges along with a cover letter stating the purposes of the research, the confidentiality policy, and the return address. See Table I below for brief description of the evaluation sheet.

After the evaluation sheet completed and returned by the judge, in order to evaluate the content validity of clarity of language, and practical pertinence, following Balbinotti, et al. (2006), I employed the content validity coefficient (CVC) to measures the degree of concordance among the judges regarding each questions aw well as for the survey instruments as a whole, and its measure is completed than other method such as Cohen's Kappa (Balbinotti, et al 2006). The CVC coefficients is computed by from the average judges score of each item divided by maximum score of the item can be obtained. The average judges score of each item is computer by following equation.

$$M_x = \frac{\sum_{i=1}^{j} x_i}{J}$$

Where M_x is the average score of each item, $\sum x_i$ = The sum of the judges' score for given item and J is the number of judges that evaluated it

Based on the average score, the individual CVC for each item is computed by following equation.

$$CVC_i = \frac{M_x}{V_{max}}$$

Where M_x is the average score of each item and Vmax is maximum score that the item could achieve.

The error for each item which accounted for any possible bias of the judge is calculated as:

$$Pe_i = \left(\frac{1}{J}\right)^J$$

So the final CVC for each item (CVC_i) is

$$CVCc = CVC_i - Pe_i$$

The overall CVC for the whole instrument for both clarity of language and practical pertinence is calculated as follows:

$$CVCc = M_{CVCi} - M_{Pei}$$

Where M_{CVCi} is the average of content validity coefficients and M_{Pei} is the average of items error for each of the items in questionnaire. According to Balbinotti, et al. (2006), given the difference background for the judges (students, academics and auditors), the critical coefficients of CVC is 0.7 where a value fall short of 0.7 is deemed unsatisfactory, and value above 0.70 are judged satisfactory.

For evaluating the theoretical dimension instrument, if any classification differences among the judges, then the item is classified as ambiguous, and the adjustment is made to a similar original format to minimize difference result.

3.4. Experimental Procedure

After the content validity is obtained and satisfied, then the experimental method is conducted in two steps investigation. In the first day, prior to any instruction and training session, both trained participant and untrained participants completed a risk assessment case study and Indonesian version of Hurtt's scales of professional skepticism questionnaire. In this first step, I evaluate Hurtt' scales validity and reliability, measuring its factor loading for each construct. I also investigate the risk assessment level based on case material filled by participants. In the second day I conducting a forensic accounting course by lecturing material and fraud case study. In last session of training, the participant completed the Hurtt's questionnaire and risk assessment again. This approach is based on Carpenter et al. (2011) premise that a fraud-specific accounting course will increase risk assessment and professional skepticism. After measured skepticism using Hurtt' scales in second session, I also evaluate the validity and reliability of scales, and measuring its factor loading of each construct. In final analysis, using Analysis of Variance (ANOVA), I test whether there are any differences exist in its factor loading for each construct, and investigate the individual professional skepticism score among pre-training group, post-

training groups and control group. For additional analysis, I also investigate risk assessments respond from trained participant and untrained participant to evaluate its differences, and investigate effect of professional skepticism on trust and risk assessment.

3.5. Participant
Undergraduate students and government internal auditors participate in this study. There were trained student who enrolled in a university-provided forensic accounting courses, and a control group of student who are not yet enrolled in forensic accounting course, but have been completed audit course sequence. For government internal auditor, there will auditors who are enrolled with fraud audit training and a control group of auditors who are not participate on fraud audit training.

3.6. Case Material and Dependent Measures
The training material is adapting from various forensic accounting books, including background and circumstances whereas fraud risk increase, method of preventing and detecting in conducting fraud audit, and set of cases where fraud exist in private and public sector. The risk assessment material used in this research was adapting from Payne and Ramsay (2005). The dependent variables are truthfulness and risk assessment. Professional skepticism is measured by Hurtt's scale of professional skepticism, truthfulness and risk assessment are measured by scales of truthfulness and risk assessment from Payne and Ramsay (2005). All of instrument had been translated into Indonesian.

4. Result

4.1. Translation Procedure
At the beginning of the translation procedure, there are five translators with English education background who working individually to translate from English version into Indonesian version. This translation then compiled and filtered into one questionnaire. The Indonesian version then re-check again to evaluate its content and wordiness. After the Indonesian translation compiled, this questionnaire then administered to participant. There are twenty four respondents participated in this translation procedure, comprised lecturer form accounting department, psychology department, and English Education department. The respondent of this procedure is presented in table 2.
The evaluation form three aspect: clarity of the language, practical pertinence and theoretical dimension, were presented in table II as well as the CVC for questionnaire as a whole. The English version and Indonesian translation of the instrument as well as content validity presented in appendix 1.

4.2. Clarity of the Language
When first translation is administered, there are 14 out of 30 (46 percent) questions failed   to reach the critical value of 0,7 and therefore considered unsatisfactory (see appendix 2). Also there are, 7 (23 percent) of the clarity of the language are above the 0.8 threshold. In order to verify the overall content validity, I compute the total CVC, which its value is 0,713. Becouse many individual CVC score are fall below critical value, it suggested that translation procedure must be revised, especially for question which its CVC score fall below critical value.
After revised, then questionnaires are administered again to the same respondent with first survey. The result shows that all of the question CVC value are above the critical value (see appendix 2), with 13 (43 percent) questions are above the 0.8 threshold. Content validity verification, showing that total CVC score is 0.78. Both its value, suggested that, on whole, the questionnaires are clear enough to be administered to respondent in experimental procedures. When compared the CVC individually between first survey with second survey, I find that 21 (70 percent) of clarity language score increase. This result suggests that when administered in second time, respondent tend to more familiar with question, so he/she will answer with higher score of clarity language.

4.3. Practical Pertinence
Result of practical pertinence evaluation for first survey is consistent with clarity of the language. There are 15 (50 percent) of questions are fall below critical value 0.7, 9 (30 percents) of questions are above critical value 0.8, considered as unsatisfactory. The overall practical pertinence score is 0,711, suggested that it is unsatisfactory condition, and needed to evaluate again. Following this unsatisfactory condition, in order to reach practical pertinence borderline, I administered questionnaire again, and there are 2 (6.7 percents) of question where its score of practical pertinence fall below critical score 0.7. There are 8 (27 percents) of practical pertinence score above 0.80, indicated satisfactory condition. Overall practical pertinence score is 0.76, indicates that the judges score do not diverge by large margin suggesting that overall instrument is pertinence.

4.4. Theoretical Dimension
In order to assess the theoretical adherence of the question to the six dimension (Suspension of judgment, questioning mind, search for knowledge, interpersonal understanding, autonomy, and self esteem), judges were asked to classify each item in the instrument into one of these dimension. In the first survey, consistent with unsatisfactory result of clarity of the language and practical pertinence, there are 16 (53 percents) of questions were ambiguously classified by the judge to the theoretical dimension. In second survey, it is consistent with result from two of translation criteria, only 3 (10 percents) of question were ambiguously classified by the judges. Surprisingly, the judges were felt easy and comfortable to classify the question according to the theory. The further investigation is

necessitate in this gap, that may be coming from theory and practice of traits and state skepticism between North America and Indonesia.

4.5. Experimental Subject
After Indonesian version of Hurtt' professional skepticism instrument were validated, then its administered in experimental procedure applied to the participant. A total of 143 subject participate in this experiment. There are 67 accounting student, which 40 student where role as participant in Optional Forensic Course and 27 as control group. Participant from government internal auditor were 76, which 46 auditors are involve in forensic training and 30 auditor as control group. Three student rejected to continue in training session so dropped from analysis.   The participant in experimental procedure summarized on table 3.

4.6. Reliability
The Cronbach alpha used to assess internal consistency which coefficient of Cronbach alpha for first survey is 0.85 and was not increased by more than 0.10 if any of item deleted. In the second survey, the Cronbach alpha score is 0.754, and was not increased by more than 0.1 if any item deleted. Comprehensively, the Cronbach score for total is 0,846. This results that score of reliability is decrease from first survey and second survey, showing its instability of questionnaire. This result is inconsistent with Carpentar (2004) and Hurtt (2007), that the scores is relative stable over time.

4.7. Factor Analysis
 A descriptive analysis of professional skepticism score reveal a mean of 135.14, standard deviation of 15.78 and range from 94-171. A Kolmogorov Smirnov test suggest that the Hurtt' professional skepticism scale is normally distributed. In assessing construct validity, I use factor analysis with principal component factor analysis. In order to promote a more interpretable factor solution, a principal component analysis with varimax rotation was performed (Tabacknick 2009). Descriptive statistics analysis yielded Kaiser-Meyer-Olkin Masure of sample adequacy 0.784 (grater than 0.6) with Bartlett's Test of Sphericity Chi square 3.189 (0.00) showing that it was significant and appropriate for further factor analysis. The structure matrix yielded a 7 factors solution with Eigen value greater than 1 in rotated matrix, one more factor than Hurtt'. The result presented in table 4. Those results indicates that all of question are truly classified into determinant according to Hurtt scale, except for question no. 4 and 8.

4.8. Comparison of Contrasted Group
Comparison between effect of training on skepticism and truthfulness has been conducted in order to investigate how large the effect of training on skepticism compared with its effect on truthfulness. The ANOVA analysis with Tukey post hoc analysis was used to investigate he differences among respondent. The result of ANOVA analysis of professional skepticism is presented on table 5.
From those analysis, it is presented that there are no differences between student as control and student pre training. After forensic training is conducted, on average professional skepticism score is increase about 10.61 (0.005).   As expected, training on forensic accounting increasing student and internal auditor professional skepticism, consistent with Carpenter et al. (2011), that forensic accounting course increasing skepticism.

4.9. Correlation between Skepticism, and Truthfulness
As stated in philosophy study, skepticism is antithesis of trust. Most academic literature in professional skepticism dispose skeptical characteristics as antithesis of trust (Chusing 2000; Choo and Tan 2000; Payne and Ramsay 2005; Shaub 1996; Shaub and Lawrence 1999). Some of other studies describe a trust is only one facet of auditor skeptical disposition align with other facet as need for closure and locus of control (Hurtt 1999; Hurtt et al 2003; Rose 2007). As well as Hurtt professional skepticism, trustfulness as proposed by Payne and Ramsay (2005), was used to measure professional skepticism. To be valid, a measure must related to conceptually similar measure or having divergent validity (Campbell and Fiske 1959). In statistical, a scale that measure same thing, must have high correlation. In order to assess external validity, I using correlation analysis of Hurtt' professional skepticism and trustfulness. From statistical analysis, correlation between Hurtt' skepticism and trustfulness is -0.353 (0.00), that there is a weak negative correlation between skepticism and truthfulness. This study is indicates that although there a weak correlation, but showing that Hurtt' scale professional skepticism is consistent with Payne and Ramsay' measure of professional skepticism (Payne and Ramsay 2005).

4.10. Effect of Skepticism and Truthfulness on Risk Assessment
A correlation analysis was used to analyze effect of two measure of skepticism on risk assessment. Correlation between Hurtt' scale on risk assessment was 0.472 (0.00) and correlation between truthfulness on risk assessment is -0.519 (0.00), indicating moderate correlation between skepticism and truthfulness on risk assessment. Its result presented that skepticism as measured by truthfulness having higher correlation than skepticism as measured by Hurtt scale of professional skepticism. The higher correlation between truthfulness and risk assessment is due to different aspect of measuring skepticism where Hurtt' scale is more related with trait determinant, otherwise truthfulness is measuring skeptical action (Nelson 2009).

4.11. Additional Analysis
Further investigation about the effect of forensic training on truthfulness and risk assessment also performed. Using ANOVA analysis between student treated as control group, student before training and student after training, its result is presented on table 6.

From above table, it is show that forensic accounting course do not increase student and government internal auditor truthfulness. For risk assessment, forensic accounting course increasing student risk assessment but not for government internal auditor.

5. Conclusion

This study makes an important contribution for validation of Hurtt' scale of professional skepticism. Where those scale was developed in North America, an application of scale on other region need to translated because of any culture boundaries among subject. The translation procedure was performed by the technique of back translation as suggested by psychometric literature. By translating into mother tongue of subject, its scale validity will enhanced by assure the faithfulness oh the wording to original survey. Cross cultural field research also highlight the role of legal, institutional, sociological, and cultural framework in auditor trait and behavior. Generally, content validity of translated version of Hurtt' scale of professional skepticism for use in Indonesia is satisfactory. However, a few item in our analysis may prove to be a challenge for Indonesian auditor, especially for question number 10 and 19, its questions was dimension of autonomy which having below critical CVC score.

Result from exploratory factor analysis (EFA), a 30 item of hurtt professional skepticism emerged that goodness-of-fit psychometric properties. Internal consistency reliability estimate (Cronbach Alpha = 0.84) for overall administration exceeding the convention benchmark 0.70 (Nunnaly 1978). The pattern of associations was not conformance with the a priori nomological network, which item number 4 and 8 was having difference pattern with Hurtt scale. Item number 4 and 8 is much related with intention to learn, may polled in one dimension.

Comparison of contrasted group in order to analyze effect of training on skepticism showing significant difference between pre training and post training both for student and auditor, consistent with Carpenter et al (2011). This result corroborates for audit practice that auditor traits can be alterable (Carpenter 2004) as supported by ANOVA test that forensic training or course for student and auditor staff increasing skepticism. Future research could be focus on to what degree professional skepticism can be increased by training, so audit firm can enhance the focus on professional skepticism for example during team planning and building.

Comparison of difference measure of skepticism, showing that Hurtt scale of professional skepticism is having correlation with truthfulness, consistent with academic literature of   professional skepticism as antithesis of trust. This study findings warrant further study to investigate the relationship between skepticism and truthfulness.

Further analysis for impact of skepticism and truthfulness on risk assessment showing that Hurtt' professional skepticism having lower correlation on risk assessment than truthfulness on risk assessment. The result corroborates the expectation that Hurtt' professional skepticism scale as proxy of skeptical trait is important explanatory variable for risk assessment as proxy for skeptical judgment and decision. This research only focus on risk assessment, as impact of skepticism trait and judgment. Future research could enhance the effect of skepticism on other aspect auditor judgment and decision like size of sample selection, degree of materiality and method of analytical procedure conducted. Also the effect of culture on forensic accounting and skepticm could be investigated in future research, as Shanikat & Khan suggested to explore this factor.

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Annexure

Clarity of Language	Practical Pertinence	Theoretical Dimension
1- Very little clear 2- A little clear 3- Fairly clear 4- Mostly clear 5- Very much clear	1- Very little pertinence 2- A little pertinence 3- Fairly pertinence 4- Mostly pertinence 5- Very much pertinence	Questioning mind Suspension of judgment Search for knowledge Interpersonal understanding Autonomy Self esteem

Table 1: Evaluation sheet

Subject	Questionnaires Sent	Questionnaires Return	Questionnaires incomplete	Questionnaires Utilized
Accounting Dept	11	11	2	9
Psychology Dept	7	7	1	6
English Dept	7	7	2	5
Total	25	25	5	20

Table 2: Translation procedure judge

Participant	Pre	Post	Control
Student	40	37	27
Auditor	46	46	30
Total	86	83	57

Table 3: Survey Respondent

Rotated Component Matrix								
	Component							α = 0.84 n = 226
	1	2	3	4	5	6	7	Item
								Autonomy (α = 0.83)
q19	**0,87**	0,04	0,07	0,02	0,07	0,07	(0,06)	
q10	**0,73**	0,04	0,05	0,02	0,11	(0,05)	0,04	
q18	**0,72**	0,02	0,13	0,08	(0,03)	0,21	0,03	
q16	**0,71**	0,06	0,01	(0,02)	0,21	(0,17)	0,01	
q1	**0,69**	0,06	0,14	0,04	0,12	(0,02)	0,17	
q25	**0,65**	(0,02)	0,05	0,04	0,04	0,05	(0,15)	
								Interpersonal Understanding (α = 0.85)
q11	0,06	**0,87**	0,03	0,00	0,02	0,15	0,12	
q5	0,11	**0,86**	0,05	(0,05)	0,06	0,04	0,11	
q30	0,11	**0,84**	0,10	(0,05)	0,07	0,06	0,08	
q26	(0,01)	**0,80**	0,22	0,02	0,09	0,09	0,01	
q14	(0,15)	**0,49**	0,05	(0,00)	0,16	0,27	0,15	
								Suspension Judgment (α = 0.84)
q27	(0,01)	0,10	**0,87**	0,11	0,07	0,06	0,05	
q9	0,02	0,09	**0,85**	0,09	0,04	0,10	0,07	
q22	0,14	0,09	**0,76**	(0,03)	0,07	(0,11)	(0,16)	
q3	0,15	0,24	**0,72**	0,19	0,10	(0,02)	0,04	
q20	0,15	(0,05)	**0,62**	0,01	0,05	0,09	0,25	
								Self Esteem (α = 0.85)
q12	0,11	0,01	0,03	**0,80**	0,21	(0,01)	0,11	
q6	0,13	(0,03)	0,03	**0,77**	(0,04)	0,16	(0,05)	
q21	(0,07)	0,04	0,14	**0,75**	0,18	(0,07)	0,02	
q17	(0,14)	(0,12)	0,06	**0,66**	0,07	(0,06)	(0,05)	
q2	0,14	0,04	0,05	**0,63**	0,01	0,11	(0,11)	
								Search for Knowledge (α = 0.78)
q15	0,10	0,00	0,08	0,08	**0,86**	0,17	0,01	
q29	0,12	0,09	0,10	0,20	**0,80**	0,28	0,01	
q28	0,22	0,17	0,01	0,07	**0,79**	(0,09)	0,01	
q23	0,14	0,18	0,27	0,18	**0,62**	0,31	0,06	
								Undefined (α = 0.83)
q4	0,03	0,19	0,04	0,01	0,22	**0,83**	0,02	
q8	0,04	0,24	0,05	0,11	0,18	**0,80**	0,02	
								Questioning Mind (α = 0.62)
q13	0,07	0,14	0,05	(0,09)	0,09	0,05	**0,81**	
q7	(0,21)	0,05	0,12	(0,03)	(0,15)	0,06	**0,73**	
q24	0,18	0,36	(0,01)	0,03	0,17	(0,09)	**0,60**	

Table 4: EFA Analysis

Responden 1	Respondent 2	Mean Difference	Significance
Student (Control)	Student Pre course	0,71	1,00
Student Pre course	Student Post course	-10,61	0,005
Auditor (Control)	Auditor Pre training	5,91	0,37
Auditor Pre training	Auditor Post Training	-17	0,00

Table 5: ANOVA Analysis of Professional Skepticism

Respondent 1	Respondent 2	Mean Difference	Significance
Truthfulness			
Student Control	Student Pre Course	1,79	0,00
Student Pre Course	Student Post Course	0,42	0,79
Auditor (Control)	Auditor Pre training	0,52	0,69
Auditor Pre training	Auditor Post Training	0,7	0,23
Risk Assessment			
Student Control	Student Pre Course	-0,52	0,88
Student Pre Course	Student Post Course	-1,4	0,02
Auditor (Control)	Auditor Pre training	-0,93	0,34
Auditor Pre training	Auditor Post Training	-0,59	0,71

Table 6: ANOVA Analysis of group respondent