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DOI: [10.22219/jrak.v12i3.22782](https://doi.org/10.22219/jrak.v12i3.22782)

Citation:

Setyaningrum, D., Mita, A, F., & Rosdini, D (2022). Internal Auditor Competency Gap: Perception of Students, Academics And Practitioners. *Jurnal Reviu Akuntansi Dan Keuangan*, 12(3), 696-710.

Article Process

Submitted:

September 28, 2022

Reviewed:

October 19, 2022

Revised:

December 25, 2022

Accepted:

December 27, 2022

Published:

December 31, 2022

Office:

Department of Accounting
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GKB 2 Floor 3.
Jalan Raya Tlogomas 246,
Malang, East Java,
Indonesia

P-ISSN: 2615-2223

E-ISSN: 2088-0685

Article Type: Research Paper

INTERNAL AUDITOR COMPETENCY GAP: PERCEPTION OF STUDENTS, ACADEMICS AND PRACTITIONERS

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ABSTRACT

The purpose of this study is to investigate internal auditor competency gap by comparing the perceptions between students, academics, and practitioner. Questionnaires were sent to 1009 respondents who meet the criteria using google form. The questionnaire was divided into two parts. The first part, we ask respondents' perception related with hard skill needed by internal auditor, the second part discussed soft skill required to prepare agile and adaptive internal auditor. This study found two main gaps between three groups of respondents. First, there are competency gap related to technology and emerging risk. Internal auditor must update with agile audit methodologies and data analytics. The universities must enrich the internal audit course with current audit method and data analytic skills. Second, all respondents put emphasis on soft skill more than hard skill, therefore important soft skill for auditor should embedded in curricula. Academics and practitioners agree that hard skill competencies specially related with performance standards as mentioned on international standards is important knowledge that should possessed by internal auditor to performed internal audit role comprehensively.

KEYWORDS: Academics; Competency Gap; Internal Auditor; Practitioners; Students.

ABSTRAK

Tujuan dari penelitian ini adalah untuk mengetahui kesenjangan kompetensi auditor internal dengan membandingkan persepsi antara mahasiswa, akademisi,

dan praktisi. Kuesioner dikirimkan kepada 1009 responden yang memenuhi kriteria dengan menggunakan google form. Kuesioner dibagi menjadi dua bagian. Bagian pertama, kami menanyakan persepsi responden terkait hard skill yang dibutuhkan auditor internal, bagian kedua membahas soft skill yang dibutuhkan untuk menyiapkan auditor internal yang agile dan adaptif. Studi ini menemukan dua kesenjangan utama antara tiga kelompok responden. Pertama, adanya gap kompetensi terkait teknologi dan risiko yang muncul. Auditor internal harus memperbarui dengan metodologi audit yang gesit dan analitik data. Perguruan tinggi harus memperkaya mata kuliah audit internal dengan metode audit terkini dan kemampuan analitik data. Kedua, semua responden lebih menekankan pada soft skill daripada hard skill, oleh karena itu soft skill penting bagi auditor harus tertanam dalam kurikulum. Para akademisi dan praktisi sepakat bahwa kompetensi hard skill khususnya yang terkait dengan standar kinerja sebagaimana disebutkan dalam standar internasional merupakan pengetahuan penting yang harus dimiliki auditor internal untuk menjalankan peran audit internal secara komprehensif.

KATA KUNCI: Akademisi; Auditor Internal; Kesenjangan Kompetensi, Mahasiswa; Praktisi.

INTRODUCTION

According to The Future of Jobs Report 2020 by the World Economic Forum (Forum, 2020), accountants and auditors are ranked number four on the list of “jobs with decreasing demand,” grouped with other roles being displaced by new technologies and identified as increasingly redundant by 2025. However, while more traditional jobs will be replaced, new roles will be created. Practitioners who are well-versed in third-party risk management, data analysis, business analysis, and information security will become even more important. Meanwhile, organizations will continue to need people with business acumen who understand the importance of controls and who can provide valuable, strategic advice.

The Institute of Internal Auditors (IIA) has The IIA’s Competency Framework which provides a professional development guide for internal auditors at every stage of their career. The framework defines four knowledge areas focusing on key skills with three different competency levels, from initial awareness to expert practitioner. The four competency areas are Professionalism, Performance, Environment, and Leadership & Communication. The framework defines the knowledge and skills required to direct a career in internal auditing with a focus on best practices and practical applications. This framework can also be a reference for orientation tools, continuous training plans and can help identify and fill skills gaps in the internal auditor function

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The internal audit function’s assurance over governance, risk, and control processes, its objectivity, and—most importantly—its insight and foresight are needed now more than ever. Internal auditors need to embrace with these technological changes by developing new

competencies and new methods for getting the job done. Finally, internal auditors must not only communicate to the organization the risks and opportunities on the horizon, but they must also make plan to the organization the value of the internal audit function on this journey. In short, to help organizations adapt and thrive in the face of change, internal auditors need to be future ready. More research is needed to explore the interrelationship between curricula, students, academics, and practitioners in various settings, to increase interdisciplinary integration in the field of accounting (Apostolou et al., 2017). Previous research found different emphasis on what is considered important by academics and practitioners in preparing internal auditors work-ready graduates. Entry level internal auditors require adaptability, communication, critical thinking, time management, self-management, and teamwork skills (Howcroft, 2017) and (Chaffer & Webb, 2017). For hard skills, previous research agrees that topics related to understanding competency standards are the main knowledge that must be mastered by internal auditors. Even though previous research has conducted a survey on the competency gap of internal auditors, but exploring different perceptions between students, academics and practitioners is still relevant in current situation because of the changing role of internal auditors, along with advancement in information, communication, and technology in the digital era.

Education research in internal auditing is not as pervasive as it is in the accounting field. Some studies examine the expectation gap between internal audit education and practice and found expectation gap thus call for increased research in developing work-ready internal audit graduates and more insights into practice could beneficially inform education programmes (Apostolou et al., 2017). However, (Howcroft, 2017), (Chaffer & Webb, 2017) and (Plant et al., 2019) investigated the specific competencies needed by internal auditors. These studies indicate the increasing importance of soft skills (such as communication and personal skills) and both call for educators, industry, and professional bodies to collaborate in developing these skills. The adaptability, communication, critical thinking, time management, self-management and teamwork skills are needed to alleviate pressures relating to the challenges for early-career internal auditors (Plant et al., 2019). These insights cast light on the context in which roles and tasks are performed and could increase educators' appreciation of soft skills development as part of their teaching practices.

The focus of this study is in internal audit area because of several reasons. First, the internal audit profession is evolving. Survey by (PWC, 2017), stakeholders reporting that Internal Audit adds significant value dropped from 54% in 2016 to only 44% in 2017, reaching its lowest level in the five years we've been tracking this metric. Adding pressure to the situation is that half of stakeholders who already receive significant value from Internal Audit indicate that they still expect more value than they are currently receiving. Second, there is still a huge demand of internal audit professions to become trusted advisors to the business. To enable agile internal audit function to effectively lead in the disruptive environment, the two important key traits is prepared and adaptive (PWC, 2017). This raises the question of what competencies must be possessed by an internal auditor to meet the prepared and adaptive requirements.

The demands for high competence and pressure on internal auditors are increasing during the pandemic. The Covid 19 pandemic banned internal audit activities due to restrictions on in-person meetings and field visits. The restriction that lasted for more than 2 years obliged the internal auditors to no longer be able to perform their audit plans using traditional audit methodologies. Internal auditor shifted to performing remote audit, which defined as audit activities that has different location with the auditee using information and communication technology (Eulerich et al., 2022). Computer assisted audit techniques are urgently needed

because they can reduce the impact of social distancing on the audit process. By using computer assisted auditing techniques it can facilitate online work, which in turn, internal auditors can perform their audit tasks in a different location (Al-Okaily et al., 2022). However, the use of computer-based audit techniques certainly requires the auditor's information computer technology competence.

The importance of Information and Communication Technologies (ICT) is stressed by (<https://www.ifac.org>, 2019) in International Education Standards and need to be included in the accounting curricula, especially the use of ICT to analyse data and information for decision making. However, many colleges and universities do not have enough space in their accounting curriculum to offer internal audit course. In undergraduate program, internal audit course mostly is an elective subject and in postgraduate program this internal audit subject is specific concentration subject. Given the limited space for the school to teach internal auditing, it is important to determine if the appropriate topic is being taught. Internal auditors are expected to prepare themselves by having the ability to adapt to changes that occur.

Several studies compare the competence of an auditor according to groups of practitioners itself (Howcroft, 2017), (Chaffer & Webb, 2017), and (Plant et al., 2019) or between groups of academics and practitioners. In this study we would like to compare the competence of an auditor according to groups of students (as a person who needs to be prepared), academics (as the one who teaches), and practitioners (as an experienced person in an audit environment). This study is expected to provide information on what competencies are important for an auditor to have from three points of view. This study will also complement previous research on auditor competence in the context of a changing work environment in terms of the urgent need for ICT to perform the audit procedures in the after-pandemic era.

Internal audit research mapping from 2016-2018 found that the literature related to internal audit has not significantly contributed to the knowledge of the internal audit function and the factors that contribute to make the impact of internal audit practices effective and measurable are also still evolving (Kotb et al., 2020). Previous research asking stakeholder perceptions mainly discussed the role and effectiveness of internal audit. The novelty of this research is analysing the differences in perceptions between students, academics, and practitioners to answer what to teach to prepare work-ready graduates in the field of internal audit. Internal auditor nowadays is expected to be adaptive in facing opportunities, risks, and internal audit challenges, especially in the digital era (Lois et al., 2020). In addition, this study also analyses the internal auditor's competency gap both hard skills and soft skills. The challenge related to hard skills in the digital era is not only understanding competency standards but also how to adapt to new methodologies, such as conducting remote audits. In the area of soft skills, (Plant et al., 2019) say that certain soft skills are needed by internal auditors and must be included in the curriculum at both the university level and continuing professional education.

There are two research problems in this study. First, to investigate degree of importance of hard skill and soft skill required in internal auditing area by comparing the perceptions between students, academics, and practitioner. Second, to give recommendation to universities to refine their curricula of internal audit course to make it relevant with the current needs.

METHOD

Data collection was carried out online via google form with a filling period starting from September 24, 2021, to October 1, 2021. The target respondents were lecturers, students, and practitioners. Participants from each group were selected with certain criteria. For groups of lecturers/students, questionnaires were distributed to lecturers/students of undergraduate and post graduate Accounting Programs who teach/have taken Auditing or Internal Audit or Governance and Risk Management courses at Universitas Indonesia and Universitas Padjadjaran. For groups of practitioners, questionnaires were distributed through the social media group of the internal auditor professional association.

The questionnaire was divided into two main sections. The first section focuses on internal audit competencies (hard skill) derived from Institute of Internal Auditors (IIA) and taught in an internal auditing course in college. The first section consists of 15 questions of topical coverage from IPPF (International Standards for the Professional Practice of Internal Auditing), consists of audit program, risk assessment and ethics. The second section consists of 10 questions focusing on internal auditor soft skill. The list of soft skills is taken from previous studies that already identified specific skills needed by internal auditors and has referred to curriculum content in undergraduate and post graduate programs. The list of the questions in the questionnaire is adopted from (PWC, 2017), (Plant et al., 2019); and (Wright, 2021). A copy of the survey instruments is illustrated in Appendix 1. Respondents were asked to evaluate the importance of each topic, using 6-point scale, with 6 indicating the topic is very important and 1 is very unimportant.

Before distributed to the respondent, we sent the questionnaire to 10 persons as pilot test, to get input related with the validity and reliability of the questionnaire and to make sure that issues discussed is relevant and the wording is understandable. The validity test is conducted to determine the validity of the questionnaire. In other words, this test measures whether the questions in the questionnaire describe what we want to measure (Ghozali, 2018). We use SPSS 25 to test the validity and the results show that all questions in the questionnaire that reflect the competence of internal auditors (hard skill and soft skill) are valid, by looking at the significance of the correlation between each question and the total score. A questionnaire is reliable if a respondent's answer to a question is consistent or stable over time. The questionnaire used in this study consisted of 25 questions. Based on the results of reliability tests using SPSS 25, the questionnaire is reliable because the value of Cronbach's alpha which is higher than 0.7.

To answer the first research problem, we will rank the perceived importance of hard skill and soft skill needed by internal auditor based on highest mean from each category. First, we calculate the overall ranking, then we compare the perceived importance of topic between students, academics and practitioners using a mean difference test. Before conducting a mean difference test, we perform a normality test to determine the appropriate test. Using the significance level of 1%, the result shows all competencies are not normally distributed, so the appropriate method to test the mean difference is using the Mann-Whitney U Test. Based on the findings from first research question, we will elaborate the answer to give recommendation to refine the curricula of internal audit course to the universities.

RESULTS AND DISCUSSION

Descriptive Statistic

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Table 1 shows the number of questionnaires distributed and the number of respondents used in this study. Of all the questionnaires distributed, 55% of the sample can be used for analysis. Non-usable response is due to failure of the respondents meets the criteria as mentioned on the methodology.

As can be seen in figure 1, from the usable sample the highest number of samples are students (69%), followed by practitioners (26%) and lecturers (4%).

Table 2 shows the demographics of each group of respondents. In the student group, the number of student respondents was greater, but in the academic and practitioner groups, the number of male respondents was greater. Based on the study program, there are more undergraduate students than postgraduate students, while for academics and practitioners, the number of respondents with postgraduate backgrounds is greater. Specifically for practitioners, work experience in the field of internal audit is mostly in the range of 1-10 years.

| No | Categories | Total Questionnaire Distributed | Usable Sample | Percentage |
|----|---------------|---------------------------------|---------------|------------|
| 1 | Students | 1372 | 698 | 51% |
| 2 | Academics | 60 | 45 | 75% |
| 3 | Practitioners | 403 | 266 | 66% |
| | Total | 1835 | 1009 | 55% |

Table 1.
Number of Respondents

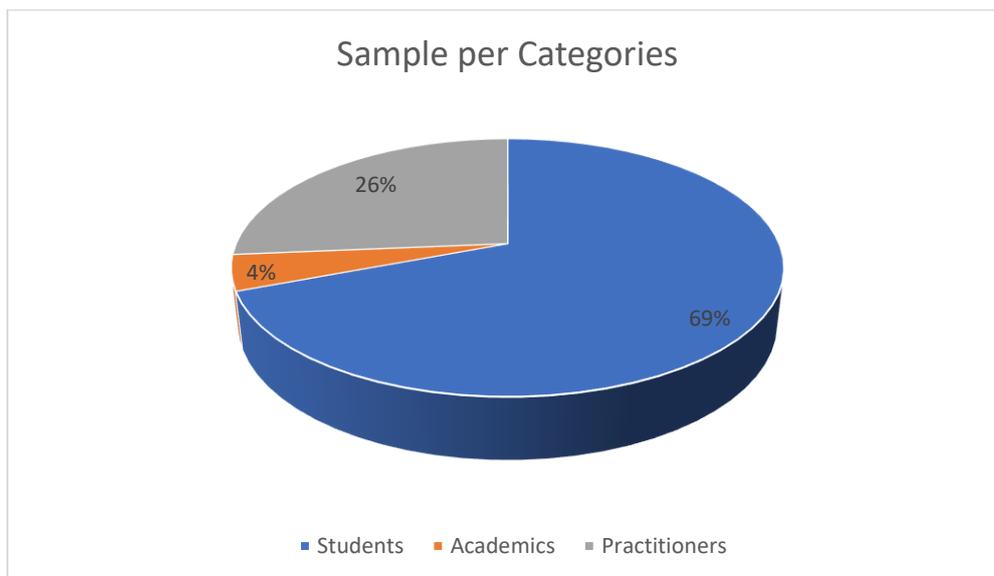


Figure 1.
Frequency Distribution by categories

| | Students | Academics | Practitioners |
|------------------------------------|----------|-----------|---------------|
| Sex | | | |
| Male | 24% | 58% | 52% |
| Female | 76% | 42% | 48% |
| Study Program/Education Background | | | |
| Undergraduate | 80% | 4% | 43% |
| Postgraduate | 20% | 96% | 57% |
| Experience in Internal Audit | | | |
| 1-5 years | | | 48% |
| 6-10 years | | | 20% |
| > 10 years | | | 32% |

Table 2.
Respondent
Demographic

Importance of topics – overall ranking

The average ranking in this study was conducted to determine the perceived importance of internal auditor competencies (hard skill and soft skill). The higher the mean shows the competencies is perceived to be highly important compared to the smaller mean value. The results of the overall ranking are presented in Table 3a and 3b.

In term of hard skill, the most important competence possessed by an auditor is the preliminary survey: planning, interviews, goals, standards, controls, and risk assessments. This result conforms with first performance standard by International Standards for the Professional Practice of Internal Auditing (Theiia, 2017). The chief audit executive must establish a risk-based plan to determine the priorities of internal audit activity. The risk-based plan requires an understanding of organization's strategies, key business objectives, associated risks and risk management processes.

The most valuable soft skill perceived as most important is the ability to collaborate with others. The audit cannot be completed by a single person, team collaboration assistance is needed to maximize audits, collaborative assistance from the audited party related to evidence collection, as well as building good relationships with other related parties. This result is aligned with (Wright, 2021) mentioning that relationship building is one of the critical skill internal auditors need to possess. In IPPF section 2050, the need for collaboration mentioned in relation with coordination and reliance, because internal auditor needs also rely on the work of internal and external assurance.

In table 3a, we can see that the least important competence possessed by an auditor is related to computer auditing. Based Premier Global Research Study conducted by IIA (Theiia, 2021), there are six critical areas related to technology and innovation skills and capabilities that need be increased (in order of importance) which are business continuity and crisis management, dynamic risk assessment, cybersecurity, extended enterprise risk management (ERM), cloud and virtual computing environments, and disruptive technologies. According to International Education Standard (IFAC, 2019), accountant need to have Information and Communication Technologies (ICT) competence. The results shown in this study have not

shown the awareness from the three groups of the importance of an internal auditor to have this competence. This is in line with (Modisane, 2019) who found the evidence regarding the need for improvement of the current internal audit education programme, specifically around IT knowledge and skills.

Importance of topics – comparison of students, academics, and practitioners

We will compare the ranks and mean between students, academics, and practitioners. We will compare using 3 groups: Students vs Academics, Students vs Practitioners; Academics vs Practitioners. The result of comparison is presented in table 4, 5 and 6. We combine the hard skill and soft skill and present only competencies that statistically different based on the result of Mann Whitney U-Test. Not only mean, but we also include rank from each competence tested to comprehend which area that each group give emphasis.

| Questions | All Respondents | | Rank | | | Mean | | |
|--|-----------------|------|----------|-----------|---------------|----------|-----------|---------------|
| | Rank | Mean | Students | Educators | Practitioners | Students | Academics | Practitioners |
| Preliminary Surveys: planning, interviews, goals, standards, controls, and risk assessments. | 1 | 5,62 | 4 | 1 | 4 | 5,56 | 5,89 | 5,73 |
| Field Work: objectively collecting information to support audit opinions. | 2 | 5,62 | 5 | 3 | 2 | 5,56 | 5,80 | 5,75 |
| Code of Ethics of Internal Auditor: understanding of ethical conduct and the need for and their implementations. | 3 | 5,60 | 6 | 2 | 1 | 5,53 | 5,84 | 5,76 |
| Audit Program: operating vs. audit objectives, guidelines, and criteria for audit program | 4 | 5,59 | 8 | 4 | 3 | 5,51 | 5,80 | 5,74 |
| Risk management: COSO, the importance of risk assessment, and audit risk and its components | 5 | 5,54 | 9 | 8 | 7 | 5,50 | 5,73 | 5,62 |
| Internal Audit Reports: the need to get management's attention and the philosophy of reporting. | 6 | 5,49 | 14 | 19 | 15 | 5,46 | 5,56 | 5,55 |

| Questions | All Respondents | | | Rank | | | Mean | | |
|---|-----------------|------|----------|-----------|---------------|----------|-----------|---------------|--|
| | Rank | Mean | Students | Educators | Practitioners | Students | Academics | Practitioners | |
| Employee and management fraud: the nature of fraud, conditions that invite fraud, and the law. | 7 | 5,49 | 17 | 11 | 11 | 5,44 | 5,71 | 5,58 | |
| Data Analytics: use of data analytics in making decisions | 8 | 5,48 | 18 | 15 | 9 | 5,44 | 5,60 | 5,59 | |
| Analytical methods: the steps in analytical review and various analytical auditing procedures | 9 | 5,46 | 19 | 24 | 16 | 5,44 | 5,47 | 5,53 | |
| Working papers: elements of working papers including basic indexing of papers. | 10 | 5,46 | 23 | 20 | 8 | 5,40 | 5,56 | 5,61 | |
| Audit findings: findings of deficiencies and the setting or application of standards | 11 | 5,46 | 20 | 9 | 14 | 5,40 | 5,73 | 5,55 | |
| Sampling: presenting a simplified statement of sampling theory. | 12 | 5,42 | 25 | 23 | 19 | 5,39 | 5,47 | 5,49 | |
| Reviews of draft reports with clients: assessing the adequacy of replies to the final reports | 13 | 5,42 | 24 | 22 | 21 | 5,39 | 5,51 | 5,47 | |
| Agile Internal Audit Functions: think ahead about potential disruptions and prepare accordingly | 14 | 5,41 | 21 | 21 | 23 | 5,40 | 5,53 | 5,41 | |
| Computer auditing: the auditor's responsibility for information systems and systems controls | 15 | 5,39 | 22 | 25 | 25 | 5,40 | 5,42 | 5,35 | |

Table 3a.
Mean and Rankings of the Internal Auditors' Competencies – Hard Skill

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| Questions | All Respondents | | | | Rank | | Mean | | |
|--|-----------------|------|----------|-----------|---------------|----------|-----------|---------------|--|
| | Rank | Mean | Students | Educators | Practitioners | Students | Academics | Practitioners | |
| Collaborate with others | 1 | 5,64 | 1 | 5 | 5 | 5,62 | 5,80 | 5,68 | |
| Use data analysis to reach meaningful conclusions | 2 | 5,60 | 2 | 6 | 6 | 5,58 | 5,78 | 5,62 | |
| Apply problem-solving techniques to address issues | 3 | 5,58 | 3 | 7 | 10 | 5,57 | 5,76 | 5,58 | |
| Demonstrate leadership | 4 | 5,53 | 7 | 13 | 17 | 5,52 | 5,69 | 5,52 | |
| Oral Communication Skills: use verbal communication skills effectively | 5 | 5,52 | 12 | 18 | 12 | 5,49 | 5,58 | 5,57 | |
| Listening Skills: use listening communication skills effectively | 6 | 5,51 | 13 | 12 | 13 | 5,48 | 5,69 | 5,56 | |
| Use appropriate data collection tools to create audit efficiency | 7 | 5,50 | 10 | 10 | 20 | 5,50 | 5,71 | 5,47 | |
| Build relationships | 8 | 5,47 | 11 | 14 | 24 | 5,50 | 5,62 | 5,39 | |
| Written Communication Skills: use written communication skills effectively | 9 | 5,47 | 16 | 17 | 18 | 5,45 | 5,60 | 5,52 | |
| Persuade and build consensus | 10 | 5,46 | 15 | 16 | 22 | 5,45 | 5,60 | 5,45 | |

Table 3b.
Mean and Rankings of the Internal Auditors' Competencies – Soft Skill

Importance of topics - Students vs Academics

In Table 4, there are 8 significant differences with alpha < 5% about perceived importance of competence according to students and academics. Compared to the academic group, students place greater importance on soft skills related to data analysis. Students nowadays are very prone to technological disruption and adapt easily to changing environments. The use of data analytics has become a critical competence gap between students and academics because in general academics who don't serve as practitioner maybe have some lag to adapt with current issues in using data analytics on internal audit role.

Meanwhile, student perceived that hard skill competencies such as planning and risk assessment, audit programs, field work, audit findings, risk management, fraud risk assessment and the internal auditor's code of ethics are less important for an internal auditor. In other words, the academic group considers that this competence is more important to be possessed by an internal auditor. As an academic, this is in line with the university's goal to provide students with a well-raised education. This competence is included in the performance standard in accordance with the International Standard for Professional Practice of Internal Auditing.

| Questions | Rank | | Mean | | Sig |
|--|----------|-----------|----------|-----------|-------|
| | Students | Academics | Students | Academics | |
| <i>Competencies for which students preferred more emphasis:</i> | | | | | |
| Use data analysis to reach meaningful conclusions | 2 | 6 | 5.58 | 5.78 | 0.051 |
| <i>Competencies for which students preferred less emphasis:</i> | | | | | |
| Preliminary Surveys: planning, interviews, goals, standards, controls, and risk assessments. | 4 | 1 | 5.56 | 5.89 | 0.000 |
| Audit Program: operating vs. audit objectives, guidelines, and criteria for audit program | 8 | 4 | 5.51 | 5.80 | 0.005 |
| Field Work: objectively collecting information to support audit opinions. | 5 | 3 | 5.56 | 5.80 | 0.030 |
| Audit findings: findings of deficiencies and the setting or application of standards | 20 | 9 | 5.40 | 5.73 | 0.008 |
| Risk management: COSO, the importance of risk assessment, and audit risk and its components | 9 | 8 | 5.50 | 5.73 | 0.021 |
| Employee and management fraud: the nature of fraud, conditions that invite fraud, and the law. | 17 | 11 | 5.44 | 5.71 | 0.034 |
| Code of Ethics of Internal Auditor: understanding of ethical conduct and the need for and their implementations. | 6 | 2 | 5.53 | 5.84 | 0.002 |

Table 4.
Competencies
for which
students and
academics
differed

Importance of topics - Students vs Practitioners

The results of the Mann-Whitney U test for students' vs practitioners are shown in Table 5. There are 9 significant differences with alpha <5% according to students and practitioners. Compared to the group of practitioners, students are more concerned with competencies such as networking skills to be possessed by an internal auditor. According to (Plant et al., 2019), building relationships or teamwork is important especially in the early stage of the auditor career. Regular interaction between junior auditor with their seniors gave them in depth perspective and contributed to learning experiences.

On the contrary, students consider competencies related to audit programs, field work, audit findings, working papers, risk management, use of analytical data, fraud risk assessment and internal auditor's code of ethics to be less important for an internal auditor. In other words, practitioner considers that this competence is more important for an internal auditor to have. Similar with academics, practitioners expect an internal auditor to understand and comprehend performance standards as written in International Standard for Professional Practice of Internal Auditing. Surprisingly, compared to students, practitioners consider the most important understanding and competence of an internal auditor to be related to the code of ethics. For practitioners competencies related to codes of ethics, professional

abilities, and attitudes are the most important things compared to knowledge. Because it is related to integrity which is one of the fundamental values for an auditor.

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| Questions | Rank | | Mean | | Sig |
|--|----------|--------------|----------|--------------|-------|
| | Students | Practitioner | Students | Practitioner | |
| <i>Competencies for which students preferred more emphasis:</i> | | | | | |
| Build relationships | 11 | 24 | 5.50 | 5.39 | 0.014 |
| <i>Competencies for which students preferred less emphasis:</i> | | | | | |
| Audit Program: operating vs. audit objectives. guidelines. and criteria for audit program | 8 | 3 | 5.51 | 5.74 | 0.000 |
| Field Work: objectively collecting information to support audit opinions. | 5 | 2 | 5.56 | 5.75 | 0.000 |
| Audit findings: findings of deficiencies and the setting or application of standards | 20 | 14 | 5.40 | 5.55 | 0.006 |
| Working Paper: working paper elements/componen ts | 23 | 8 | 5.40 | 5.61 | 0.000 |
| Risk management: COSO. the importance of risk assessment. and audit risk and its components | 9 | 7 | 5.50 | 5.62 | 0.007 |
| Use of Analytical Data in Decision Making | 18 | 9 | 5.44 | 5.59 | 0.029 |
| Fraud Risk Assessment | 17 | 11 | 5.44 | 5.58 | 0.033 |
| Code of Ethics of Internal Auditor: understanding of ethical conduct and the need for and their implementations. | 6 | 1 | 5.53 | 5.76 | 0.000 |

Table 5.
Competencies
for which
students' and
practitioners
differed

| Questions | Rank | | Mean | | Sig |
|--|-----------|---------------|-----------|---------------|-------|
| | Academics | Practitioners | Academics | Practitioners | |
| <i>Competencies for which academics preferred more emphasis:</i> | | | | | |
| Preliminary Surveys: planning, interviews, goals, standards, controls, and risk assessments. | 1 | 4 | 5.89 | 5.73 | 0.049 |
| Build relationships | 14 | 24 | 5.62 | 5.39 | 0.046 |
| Use appropriate data collection tools to create audit efficiency | 10 | 20 | 5.71 | 5.47 | 0.019 |
| Apply problem-solving techniques to address issues | 7 | 10 | 5.76 | 5.58 | 0.051 |

Table 6. Competencies for which academics and practitioners differed

Importance of topics - Academics vs Practitioners

The comparison of perceived importance of internal auditor competence between academics and practitioner can be seen in table 6. In Table 6, there are 4 significant differences with $\alpha < 5\%$ regarding perceived importance ranking between academics and practitioners. Compared to the practitioners' group, the academic group considers that competencies related to risk planning and assessment, network building skills, using data collection tools, and skills in applying problem solving techniques are more important competencies to be possessed by an internal auditor. Main concern of academics is more on hard skill, while the practitioners put more emphasis on soft skill. For practitioners compared to academics, an auditor is certainly expected to have these understanding about the standard, but for an experienced auditors' personal characteristics such as attitude, integrity, and professionalism are more important than knowledge.

Recommendation for refining internal audit curricula

Based on the findings on the comparison of perceived importance of 3 groups, there two main recommendations given to university to refine internal audit course to stay relevant with current condition:

1. **Competency related to critical technologies and emerging risks needs to be added to curricula.** When comparing students' vs academics, we found a gap related with the use of data analytics. Premiere Global Survey by IIA (Theiia, 2021) also revealed competency gaps in the technology areas of Information Technology (IT) Control Frameworks, Data Analytics, Security and Privacy, and Agile Auditing Methodologies. To close this gap, agile auditing methodologies should be included in the syllabus.

Academics can invite the practitioners to explain this special topic, so students have broader experience with current practice.

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Embedded soft skill development as part of academics teaching practices. When comparing students' vs practitioners, and academics vs practitioners; we found that students and practitioners put more emphasis on soft skills than hard skills. There are six soft skills that is important for early-career internal auditors which are: adaptability, communication, critical thinking, time management, self-management, and teamwork skills (Plant et al., 2019). This soft skill developed via cases, projects, problems, or internship. These require collaborative effort by employers, educators, and the professional body.

CONCLUSION

This study investigated degree of importance of hard skill and soft skill required in internal auditing area by comparing the perceptions between students, academics, and practitioner. Moreover, this study will propose recommendations to universities to refine their curricula of internal audit course to stay relevant with the current practice. Questionnaires were sent to 1009 respondents who meet the criteria using google form. The questionnaire was divided into two parts. The first part, we ask respondents' perception related with hard skill needed by internal auditor, the second part discussed soft skill required to prepare agile and adaptive internal auditor

This study shows two main findings. First, there are competency gap related to technology and emerging risk. Internal auditor must update with agile audit methodologies and data analytics. The universities must enrich the internal audit course with current audit method and data analytic skills. International Education Standards for professional accounting required that accountant need to possess technical competence in Information, Communication and Technologies (IFAC, 2019). The content of data analytic course can enhance ICT skills that are valuable for internal auditors. Second, all respondents put emphasis on soft skill more than hard skill, therefore important soft skill for auditor should embedded in curricula. Academics and practitioners agree that hard skill competencies specially related with performance standards as mentioned on international standards is important knowledge that should possessed by internal auditor to performed internal audit role comprehensively (Theiia, 2021). The universities must make sure that the content of internal audit course always keep update with the standards.

Limitation of this study is the number of respondents for each group was unbalanced, especially for academics' respondents who were too few compared to students and practitioners. Further study can develop by clustering respondents with a balanced number and may be able to provide different results and conclusions. Further study can also enrich the analysis with triangulation method by conducting interviews or focus group discussion with practitioners and academics to formulate update content in the internal audit syllabus.

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