Global assessment of internal audit competence: Does one size fit all?

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ABSTRACT

The Certified Internal Auditor (CIA) programme is the formal globally recognised test of competence for internal auditors. However, the question is raised whether this assessment of competence has kept up with the changing demands of modern internal auditing, taking into account the fact that demands may differ from one country or region to the next. The fact that Australia, the UK & Ireland and South Africa require qualifications in addition to those of the CIA programme may be attributed to a need for a different level of competence in comparison with the Rest of the World. The objective of the study was to determine whether differences exist between the respective competency level needs for internal auditors from South Africa, the UK and Ireland, Australia and the Rest of the World. Data from the Institute of Internal Auditors' (IIA's) latest global Common Body of Knowledge (CBOK) study was used to determine and statistically analyse the perceived levels of importance of general competencies, technical skills and behavioural skills needed by internal auditors. The results indicated that globally internal auditors have similar perceptions of what competencies are most important for internal auditors, but the levels of importance differ among the regions. South Africa demanded a higher level of competence and aligned closely with the UK and Ireland, which could explain why South Africa now needs a customised competency assessment. Australia consistently indicated different perceptions of the levels of importance of competencies, which could explain Australia's need for a country-specific internal audit competency assessment. Hence one size may not fit all.

Key words: certified internal auditor, competency assessment, internal auditing, internal audit competencies, cross-country comparison.

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The internal audit profession has undergone many changes in the last two decades. This view is supported by a dramatic change in how it defines itself, at a time when the profession is attempting to address the changing landscape in which internal auditors operate (Krogstad, Ridley & Rittenberg 1999:27; PwC 2013:4; Ramamoorti 2003:10), thus creating an ongoing need for new competencies and skills for individuals. These changes have forced the Institute of Internal Auditors (IIA), both its head office in the United States of America (USA) (hereafter referred to as IIA Global), as well as the individual chapters, affiliates and regions (hereafter referred to as IIA bodies) across the globe to address this need by, for example, continuously changing the syllabus of the professional certification, namely the Certified Internal Auditor (CIA) examination (IIA 2011) and implementing new or updated continuing professional development (CPD) initiatives.

Currently, the CIA programme, consisting of the CIA examination and practical experience requirements, is the formal globally recognised assessment of competence for internal auditors (IIA 2013a); both for the profession and practice. However, the question arises whether this assessment of competence has kept up with the changing demands of modern internal auditing, taking into consideration the fact that the demands may differ from one country or region to the next, thus affecting the competency level needs.

In 2010, the IIA in the United Kingdom and Ireland (IIA-UK & Ireland) achieved chartered status (changing from certified), and became the Chartered Institute of Internal Auditors, providing for the needs of its members by developing a countryspecific professional certification programme, namely Chartered Member of the IIA (IIA-UK & Ireland 2010). It also introduced a diploma and an advanced diploma, which are the prerequisites for becoming a Chartered Internal Auditor. The IIA in Australia (IIA-Australia) followed suit and commenced with its country-specific new professional member designation, Certified Member of the IIA on 1 November 2011 (IIA-Australia 2011). It also introduced a graduate certificate, which is the prerequisite for membership and professional status. The members of the IIA in South Africa (IIA-SA) have also recognised the need for revisiting the professional pathway for internal auditors in the country. At the IIA-SA Leadership Forum held on 4 June 2012, a majority of 94.8% of South African leaders indicated that the new three-part CIA qualification did not adequately address this country's internal audit competence needs. In addition, the majority of the leaders (68.6%) voted in favour of accepting the new proposed three-part CIA certification examination, but recommended that it should be complemented by an additional fourth examination paper covering the South African internal audit context (Von Eck 2012a). The IIA-SA also introduced a formal three-year learnership (workplace learning - "articles") programme, which

became compulsory for all individuals wishing to take the CIA examination as from January 2014 (IIA-SA 2014). However, this proposal by the IIA-SA was partially rejected by the IIA Global's Professional Certification Board (IIAPCB) with regard to the CIA examination being written on completion of a learnership, although the idea of a learnership was supported (IIAPCB 2014). It can thus be assumed that the IIA Global in general will not, from this point forward, be in favour of major regional deviations from the current global route, but may accommodate certain regional preferences. Apart from the shared need to deviate from the global route, these three regions are important in terms of global IIA membership representation, with South Africa and the UK & Ireland being the second and third largest IIA bodies in the world, respectively (Von Eck 2012b).

The importance of these three regions' efforts to enhance the professional development of their members by requiring specific internal audit education and training, in addition to those of the CIA programme, may, firstly, be attributed to a need for a different level of competence compared to the rest of the world. Secondly, this need may be fuelled by the fact that the professional qualifications offered by the accountancy professions in these regions are also similar, in that all have chartered status (SAICA 2012; ICAEW 2012; ICAS 2012; CAI 2012; ICAA 2012); being perceived to have a more significant professional status (Carliner 2012:411); and chartered accountants being in direct competition with CIAs for high-level internal audit positions (Coetzee et al. 2010:12). Lastly, the inputs required to qualify as a professional internal auditor in these three regions are more formalised³ with specific internal audit education and training requirements, compared to the rest of the world, where the global route³ to qualifying as a CIA prevails. Prior internal audit competence studies focus on the identification of specific competencies and skills needed by internal auditors to perform their work with proficiency (see the literature study section). However, no studies could be found that investigate the differences in perceptions between countries in this regard.

With the above background in mind, the objective of the study, which informed this article, was to determine whether there are differences between the respective competency level needs for internal auditors from South Africa, the UK & Ireland, Australia and the Rest of the World;⁴ thus reflecting whether the IIA's current global assessment of competence, namely the CIA designation, is adequate to meet a specific country's internal audit competence needs. The rationale behind choosing only these three regions was based on the current movement by these regions to change or enhance the competence assessment, as discussed previously. To achieve this objective, the differences in perceptions (and the significance thereof) held by the IIA members of South Africa, the UK & Ireland, Australia and the Rest of the

World (hereafter referred to as the four participating regions) in respect of the levels of importance of the officially recognised *general competencies* and *technical* and *behavioural skills* needed by internal auditors to perform their work, were re-analysed on the basis of the IIA Common Body of Knowledge (CBOK) study conducted in 2010.

The primary benefit of this article is that the results of this study could be an indication to IIA bodies that a standard method of assessing competence may not be adequate for all. This could result in the IIA Global allowing various countries to change or enhance the assessment of competence. For the IIA-SA, the results may support its decision either to implement different methods for assessing competence or to maintain the *status quo*. For the industry, this could result in competent internal auditors in the context of the services and role of internal auditing, as required in a specific country. The rest of this article is structured as follows: a discussion of the literature and hypothesis formulation, the research method, the analyses and presentation of the results, and the conclusions and recommendations based on the results.

Literature review

The development of competencies in professions has been addressed extensively in the literature (Cheetam & Chivers 2005:1–337; Gonczi 1994:1–16; Gonczi, Hager & Oliver 1990:1–70) with the notion of competence being defined as the capabilities, skills or traits needed to perform a job or task (IFAC 2014); mostly linked to a specific profession or discipline (Garavan & McGuire 2001:144; Hoffmann 2010:639–645; Markowitsch & Plaimauer 2009:817). Since the formalisation of the internal audit profession in the USA in 1941, numerous studies have been conducted on the specific competencies needed by internal auditors to perform their work – some more generalised, such as the various CBOK studies conducted by the IIA Research Foundation (1972; 1985; 1999; 2007; 2010), and others more specific, such as the impact on an effective internal audit function (Arena & Azzone 2009; Miller & Smith 2011:20).

Although the role of an internal auditor in the organisation is not a new phenomenon, the standing of and demand for the internal audit function are new. In global surveys among users of internal audit services, PricewaterhouseCoopers (PwC 2013:5) and the IIA Research Foundation (Miller & Smith 2011:7), as well as a survey performed in South Africa (Coetzee *et al.* 2010:5), concluded that internal auditors are confronted by the challenge of adapting to a changing and increasingly challenging business environment (Groenewegen 2000) that demands greater value, together

with an increased focus on strategic and operational risks. These expectations from a variety of stakeholders necessitate an expanded set of skills and competencies from internal auditors to ensure that they stay abreast of the rapid changes and increasing complexity in operations (Seol, Sarkis & Lefley 2011:229).

It would seem that the IIA, as the governing body of the profession, has not shied away from this challenge and requires, through the IIA Standards, that internal auditors should be competent and keep abreast of the changing environment (IIA 2013b), and has subsequently developed the Internal Auditor Competency Framework (IACF). The IACF was compiled by a task force consisting of subject specialists and volunteers from around the globe and highlights the ten core competencies that professional internal auditors should possess (IIA 2013c). However, the IACF is the only guidance provided by the IIA Global with regard to the competencies needed by professional internal auditors. This is in contrast to the majority of other professional accounting and auditing bodies which, as members of the International Federation of Accountants (IFAC) and the Global Accounting Alliance (GAA), adhere to the requirements as set out in the international education standards published by IFAC (GAA 2015). These education standards emphasise the importance of competencybased professional development in the accounting and auditing professions (IFAC 2014), which includes not only a competency framework, but also detailed guidance on, inter alia, the practical experience requirements and the assessment of competence. Although the IIA Global is affiliated to the IFAC, it does not meet IFAC's membership criteria (IFAC 2015). Furthermore, no evidence could be obtained indicating that the IACF and CIA programmes are linked. These two aspects could probably have been the motivating factors for the IIA in the UK & Ireland (IIA-UK & Ireland 2010) and in Australia (IIA-Australia 2011) to develop tailor-made professional education programmes for their members.

As mentioned previously, internal audit competence is currently assessed through a process of certification, with the CIA designation being "the only globally accepted certification for internal auditors and remains the standard by which individuals demonstrate their competence and professionalism in the internal auditing field" (IIA 2013a). The questions to be posed are whether the current process of certification of the IIA addresses the changing environment in which internal auditors operate; whether the specific countries' environments in which internal auditors operate differ; and if so whether the competencies required of internal auditors may differ, reflecting in different competency assessments for different countries. A study performed by Selim, Allegrini, D'Onza, Koutoupis and Melville (2014) on the global trends of internal auditing suggests that internal auditing in regions differs, such as the difference in the environment of developing and developed countries

(Sarens & Abdolmohammadi 2011), including the competencies needed (Selim *et al.* 2014:27–28). This difference in internal audit environments and competencies is further supported by studies in other disciplines, such as the accounting field (World Bank Group 2014; Karreman & Needles 2013; Inglis, Shelly, Morley & De Lange 2011; Coe & Delaney 2008) and healthcare environment (Van Riemsdijk 2013), supporting the current variety of competency assessment in different countries in these fields. However, a thorough search of studies investigating the effect of rolling out one competency assessment for an international recognised professional body, such as the Chartered Institute of Management Accountants (CIMA) or Information Systems Audit and Control Association (ISACA), delivered no results. This study could thus further benefit other professions in investigating whether a "one size fits all" approach would be the most effective assessment method.

To determine whether the three regions' current challenge against the IIA Global competence assessment is because of the changed environments and competency requirements in these regions, the following were analysed and used to measure the different perceptions of internal audit competencies needed: 11 general competencies essential to perform certain tasks; 15 behavioural skills relating to an individual managing his or her own actions towards others; and 18 technical skills, consisting of the application of a specific field's terminology or methodology, included in the two most recent global CBOK studies (IIARF 2007; 2010) on the competencies needed by internal auditors to perform their work.. In the context of the literature above, the research method and design of this study were based on the following hypotheses:

- H_{0(la-lk)}: The perceptions of the four participating IIA regions on the perceived levels of importance of general competencies do not diff (see annexure I).
- H_{I(Ia-Ik)}: Differences exist between the perceptions of the four participating IIA regions on the perceived levels of importance of general competencies (see annexure I).
- H_{0(2a-2o)}: The perceptions of the four participating IIA regions on the perceived levels of importance of behavioural skills do not diff (see annexure II).
- H_{1(2a-2o)}: Differences exist between the perceptions of the four participating IIA regions on the perceived levels of importance of behavioural skills (see annexure II).
- H_{0(3a-3r)}: The perceptions of the four participating IIA regions on the perceived levels of importance of technical skills do not differ (see annexure III).
- $H_{I(3a-3r)}$: Differences exist between the perceptions of the four participating IIA regions on the perceived levels of importance of technical skills (see annexure III).

The research method applied in this research study is explained below.

Research method

To achieve the research objective, a literature study was conducted to contextualise the differences in the internal audit environment, competency requirements and the assessment of professional competence in various regions. The specific IIA bodies in South Africa, the UK & Ireland and Australia have challenged the *status quo* by either establishing different certification requirements, or being in the process of doing so; indicating a possible need for the expansion of the competencies and skills needed by internal audit professionals, and the guidance provided by the IIA Global in this regard.

The data in the IIA's latest global CBOK study⁵ (IIARF 2010) was used, initially to determine and then to statistically analyse the perceived levels of importance of the general competencies, technical skills and behavioural skills needed by internal auditors. In addition, the significant differences in perceptions among the respondents from the four participating regions were determined in order to test the hypotheses of the study. Internal auditors (only staff level practitioners and service provider nonpartners were included) were requested to indicate on a four-point Likert-type scale (ranging from 1 = unimportant to 4 = very important) the importance of certain competencies and skills deemed necessary to perform their work. Globally, 13 582 internal auditors participated in the overall survey, including 294 respondents from South Africa, 657 from the UK & Ireland, and 206 from Australia. For the questions on competencies and skills, the potential South African responses were 199, answered by all the respondents (100%), 479 answered by 475 (99%) from the UK & Ireland, and 111 answered by all (100%) from Australia. This should be seen in the light of the fact that 29% of respondents in the CBOK study were from the USA and Canada, 25% from Western Europe (including the UK & Ireland), 17% from Asia Pacific (including Australia), 12% from Latin America and Caribbean, 9% from Europe and Central Asia, 5% from Africa (including South Africa) and 3% from the Middle East (Alkafaji, Hussain, Khallaf & Majdalawieh 2010:5). All three regions used in this study were fairly represented in their specific continents.

To understand the context of the CBOK data used to obtain evidence pertaining to the competencies and skills required by internal auditors to perform their work, the profile of the respondents from the three selected regions who contributed to the CBOK 2010 data, is presented. Three criteria were used, namely formal qualifications (focusing only on bachelor's degrees, master's degrees or PhDs), professional certification (focusing only on CIA/MIIA, CA/CPA and CISA) and the position in the organisation (either an in-house staff level practitioner or a non-partner service provider). The summary of the results is provided in table 1.

Total respondents

Indicator	Category	South	Africa	UK &	Ireland	Aus	tralia
Formal	Bachelor's /higher diploma	143	71.8%	239	50.3%	62	55.8%
qualification	Master's	51	25.6%	152	32%	47	42.3%
	PhD	0	0	1	0.2%	0	0
	CIA/MIIA	87	43.7%	291	61.2%	53	47.7%
Professional gualification	CA/CPA	9	4.5%	72	15.1%	52	46.8%
1	CISA	11	5.5%	51	10.7%	18	16.2%
De sitie es in	In-house practitioner	195	•	470		100	
Position in organisation	Non-partner service provider	4		5		11	

Table 1: Profile of the respondents from the three regions

The respondents used in this study were internal audit functionaries and it is evident from table 1 that in terms of academic and professional qualifications, they formed a proper basis to provide credible data for the purpose of this article.

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The non-parametric Kruskal-Wallis test was conducted to obtain evidence on the three hypotheses (p < 0.05). After exploring the boxplots for each question across the four regions, the assumption of identically shaped and scaled distributions for all countries could be made, with the Kruskal-Wallis test performed to test for differences in the medians of each region. The Kruskal-Wallis test is a rank-based non-parametric test that can be used to determine whether there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable (Laerd 2013); in this instance, the data existed on an ordinal scale. No diagnostic test results were included because ordinary data are not suitable for parametric tests. The chi-square statistical test was used for the Kruskal-Wallis test to determine the level of statistical significance at a 5% level. The Mann-Whitney post hoc test was subsequently performed on all possible pairwise comparisons to determine, for each competency or skill, whether statistical significant differences existed between paired regions.

The limitations imposed on the research on which this article was based were, firstly, that the response rates generated by the 2010 CBOK study for South Africa, the UK & Ireland and Australia were low compared to the total IIA membership for these three regions, although each region fairly represented the continent in which it is situated. Secondly, the possibility exists that IIA bodies in other regions are also currently developing (or considering developing) unique internal audit competence

development initiatives. Further research could include a larger number of regions with affiliated IIA bodies in the analysis. Also, this study was limited to determining whether differences in competencies and skills existed among the selected regions and did not investigate the reasons for possible differences. This would a possible area for future research.

Results

The results emerging from the research are discussed below. The results of the Kruskal-Wallis tests and the Mann Whitney tests are discussed and presented as follows: general competencies (see annexure 1 and table 2); behavioural skills (see annexure 2 and table 3); and technical skills (see annexure 3 and table 4).

General competencies

With regard to the comparison of all the general competencies (see annexure 1, columns A and B), the general competencies for all four participating regions with the highest mean rating (from the Likert scale) of importance were *communication skills* (most important), while the competency with the lowest rating was *cultural fluency and foreign language skills* (least important). Although the region-specific ratings differed, the second through sixth most important general competencies were the same, namely *ability to promote the value of the internal audit activity within the organisation*", *keeping up to date with industry and regulatory changes and professional standards*, *organisational skills*, *problem identification and solution skills*" and *conflict resolution/negotiation skills*.

The non-parametric Kruskal-Wallis test revealed statistically significant differences at the 5% level (p < 0.05), among the perceptions of the levels of importance of each of the general competencies for internal auditors to perform their work. For the first set of hypotheses, there was sufficient sample evidence at the 5% level of significance to reject $H_{0(la-k)}$ in favour of $H_{1(la-k)}$. It can thus be concluded, that for all the general competencies listed, there was a statistically significant difference between at least two of the four participating IIA regions on the perceived levels of importance of each competency, with the level of statistically significant differences being the highest, relating to cultural fluency and foreign language skills" and competency with accounting framework, tools and techniques".

Based on the mean ranking (see annexure 1A), all 11 general competencies tended to receive a higher importance ranking by the South African respondents, compared to the respondents from the other regions, in respect of the internal

auditors' perceptions of their level of importance in the workplace. Furthermore, six of the 11 general competencies tended to receive a higher importance ranking from Australia, thus indicating that Australia tends to perceive these general competencies as more important than the UK & Ireland and Rest of the World, but less important than South Africa.

To obtain evidence of the differences between each possible combination of regions, Mann-Whitney tests were performed for general competencies. The results are presented in table 2. Note that only the number of general competencies (from a possible total of 11) that differed statistical significantly (p < 0.05) were recorded (annexure 1B).

	Rest of the World	South	Africa	UK &	Ireland	Aus	tralia
Rest of the World		9	81.8%	9	81.8%	11	100%
South Africa				4	36.3%	11	100%
UK & Ireland						11	100%

Table 2: Significant differences of general competencies among the regions

From the above, it is evident that Australia differed consistently from all the other regions. Furthermore, South Africa and the UK & Ireland had similar perceptions of the general competencies required by internal auditors, with seven of the 11 competencies not statistically significantly different. The statistically significant differences were in relation to *language*, *IT*, *accounting* and *training*, whereas the insignificant differences were in relation to soft skills (the first seven in annexure 1B).

Behavioural skills

With regard to the comparison of all the behavioural skills (see annexure 2), the three behavioural skills with the highest mean rating of importance as reported by all four participating regions' respondents were: *confidentiality*, *objectivity* and *communication*, with South Africa, Australia and the Rest of the World having the same sequence. This tendency was also applicable to the lowest rated behavioural skill, namely *change catalyst*.

The non-parametric Kruskal-Wallis test revealed statistically significant differences at the 5% level (p < 0.05), among the regions with regard to their perceptions of the level of importance of each one behavioural skill, namely *change catalyst*. For the second set of hypotheses, there was sufficient sample evidence at the

5% level of significance to reject $H_{0(2a-2g,2i-2o)}$ in favour of $H_{1(2a-2g,2i-2o)}$. It can thus be concluded that for all the behavioural skills listed, except for *change catalyst*, there was a statistically significant difference between at least two of the four participating IIA regions on the perceived level of importance of each skill, with the highest level of statistically significant differences relating to *influence*, *leadership* and *relationship building*.

Based on the mean ranking (see Annexure 2A), 10 of the 15 behavioural skills tended to receive a higher importance rating from the South African respondents, compared to other regions, in respect of the internal auditors' perceptions of their level of importance in the workplace. Furthermore, five of the 15 behavioural skills tended to receive the second highest importance ranking from the UK & Ireland, compared to four of the 15 behavioural skills for both Australia and the Rest of the World.

To obtain evidence of differences between each possible combination of regions, Mann-Whitney tests were performed for behavioural competencies. The results are presented in table 3. Note that only the number of behavioural skills (from a possible total of 15) that differed statistical significantly (p < 0.05) were recorded (annexure 2B).

 Table 3: Significant differences of behavioural skills among the regions

	Rest of the World	South	Africa	UK &	lreland	Aust	ralia
Rest of the World		10	66.6%	11	73.3%	12	80%
South Africa				4	26.6%	14	93%
UK & Ireland						15	100%

From the above, it is evident that, once again, Australia differed from the other regions. Furthermore, South Africa and the UK & Ireland had similar perceptions of behavioural skills required by internal auditors, with 11 of the 15 skills not being statistically significantly different. The statistically significant differences related to *staff management*, *leadership*, *judgement* and *influence*, whereas the non-significant differences related to the remainder of the skills (see annexure 2B).

Technical skills

With regard to the comparison of all the technical skills (see annexure 3), the mean ratings indicated that three regions' respondents rated *understanding the business* as the most important technical skill required, whereas South Africa rated *risk analysis and control assessment techniques* as the most important technical skill,

with understanding the business as the second most important. The technical skill, governance, risks and control techniques, was rated third by three of the regions, excluding the Rest of the World. The technical skills that were rated the lowest by all four regions were forecasting, ISO/quality knowledge, total quality management and balanced scorecard.

The non-parametric Kruskal-Wallis test revealed statistically significant differences at the 5% level (p < 0.05) among the regions with regard to their perceptions of the level of importance of each of the technical skills for internal auditors to perform their work. For the third set of hypotheses, there was sufficient sample evidence at the 5% level of significance to reject $H_{0(3a-r)}$ in favour of $H_{1(3a-r)}$. It can thus be concluded that, for all the technical skills listed, there was a statistically significant difference between at least two of the four participating IIA regions on the perceived level of importance of each skill, with the most statistically significant differences relating to *negotiating*, *forecasting* and *total quality management*.

Based on the mean ranking (see annexure 3A), similar to the general competencies, all 18 technical skills tended to receive a higher importance ranking from the South African respondents, compared to those from the other regions, in respect of the internal auditors' perceptions of the level of importance in the workplace. Furthermore, 11 of the 18 technical skills tended to receive the second highest importance from the Rest of the World, thus indicating that the Rest of the World tended to perceive these skills as being more important than the UK & Ireland and Australia, but less important than South Africa.

To obtain evidence of differences between each combination of regions, Mann-Whitney tests were performed for technical skills. The results are presented in table 4. Note that only the number of technical skills (from a possible total of 18) that differed statistically significantly (p < 0.05) were recorded (annexure 3B).

	Rest of the World	Sout	h Africa	UK &	Ireland	Aus	tralia
Rest of the World		14	77.7%	8	44.4%	15	83%
South Africa				6	33.3%	18	100%
UK & Ireland						18	100%

Table 4: Significant differences of technical skills among the regions

From the above, it is evident that Australia consistently differed the most from the other regions. South Africa and the UK & Ireland did not differ statistically significantly on 12 of the 18 technical skills, whereas the UK & Ireland and the Rest of the World did not differ statistically significantly on 10 of the 18 technical skills.

South Africa and the Rest of the World did not differ statistically significantly on four of the 18 skills. Furthermore, Australia's perceptions of technical skills needed by internal auditors, differed with regard to all 18 skills from both South Africa and the UK & Ireland.

Conclusions and recommendations

The objective of this article was to determine whether differences exist among the respective competency level needs for internal auditors from South Africa, the UK & Ireland, Australia and the Rest of the World, thus reflecting whether the IIA's current global assessment of competence, namely the CIA programme, is adequate to meet a specific country's internal audit competency needs. The rationale for choosing these specific regions was that South Africa, the UK and Ireland and Australia had previously or were currently challenging the IIA Global on whether the CIA programme is adequate to measure the needed competence levels of internal auditors in these regions, based on the changing environments in which they operate. The literature supports the need for a diverse set of competencies and skills in different countries, both in the internal audit and other professions. Subsequently, it appears that a global professional assessment for a specific country could be inadequate. However, no support could be found for the impact of different competence assessments on one globally recognised profession – both on the professional bodies, the members and the perceptions of all other stakeholders.

To achieve the objective of the study, data that had been gathered by means of the 2010 IIA CBOK study on the competencies and skills requirements were analysed and interpreted by means of statistical techniques. The results of the study indicated that there were similarities among the perceptions of the respondents from all four participating regions in terms of the most important competencies and skills listed. However, statistically significant differences existed in terms of the levels of importance, between at least two of the four participating regions. Australia consistently differed from the other regions (86% of the competencies and skills differed statistically significantly from the Rest of the World, 97% from South Africa and 100% from the UK & Ireland). South Africa (measuring statistical differences of 75% with the Rest of the World and only 31% with the UK & Ireland) and UK & Ireland (measuring a 63% difference with the Rest of the World) were consistently in closest agreement with South Africa, while the UK & Ireland had similar perceptions on the competency needs of internal auditors. South Africa also consistently rated the level of importance of listed competencies and skills higher than the other regions.

It can thus be inferred that although globally internal auditors have the same perceptions of what competencies are the most important for internal auditors to perform their duties in the workplace, the levels of importance differ among the regions, with South Africa demanding a higher level of competency if measured by the rated level of importance. Also, since South Africa's closest alignment is with the UK & Ireland, which changed their professional development, demands in 2010 to a perceived higher status, this could explain why South Africa now indicates the same need for change. With Australia consistently indicating a statistically significant different perception of the levels of importance of the competencies and skills from the other participating regions, this could again explain Australia's need for a country-specific internal audit competency assessment.

Based on the results of this study, it is recommended that the IIA should consider the specific competency needs in different regions by including flexibility in professional development initiatives. It is clear from the results that one size does not fit all and that the IIA should consider making the assessment of the global CIA designation locally relevant. This study should also contribute to the body of knowledge on professional competencies in a global environment. Furthermore, the effective assessment of internal audit competence could enhance the status of internal audit professionals in the industry. It is recommended that a qualitative study should be conducted to gain more in-depth knowledge of why the competency needs in countries or regions differ in order to provide professional bodies with a broader platform to improve their initiatives to serve their members and other stakeholders.

Endnotes

- 1. The global route to qualify as a CIA includes the completion of any bachelor's degree (prior to sitting for the CIA examination) as well as the completion of two years' relevant practical experience prior to using the CIA designation. The relevance of work experience is assessed by the IIA and ranges from experience gained while working, inter alia, as an accountant, external auditor, management accountant and consultant (IIA 2013). Although the IIA Global would consider regional preferences, these may not affect a candidate's eligibility to write the CIA examination.
- 2. The word "competence" for the purposes of this study refers to the total level of knowledge, skills and behaviour of a professional individual, whereas the word "competency/ies" refers to individual capabilities (Ennis 2008:7). However, the literature supports the interchangeable use of these terms.
- 3. These regions have specific bachelor's degrees and diplomas focusing on internal auditing. They also have specific practical experience requirements (monitored by local IIA bodies) to be met before qualifying as a CIA.

- 4. The Rest of the World was treated as a region for the purposes of this study and includes all other countries that participated in the CBOK 2010 survey, apart from South Africa, Australia and the UK & Ireland.
- 5. The study was conducted by the IIA Research Foundation to establish the core competencies required by internal auditors (Bailey 2010).

References

- Alkafaji, Y., Hussain, S., Khallaf, A. & Majdalawieh, M.A. 2010. *Characteristics of an internal audit activity*. Altamonte Springs, Fla: The Institute of Internal Auditors Research Foundation.
- Arena, M. & Azzone, G. 2009. Identifying organizational drivers of internal audit effectiveness. *International Journal of Auditing*, 13:43–60.
- Bailey, J.A. 2010. *Core competencies for today's internal auditor.* Altamonte Springs, Fla: The Institute of Internal Auditors Research Foundation.
- CAI, vide Chartered Accountants Ireland.
- Carliner, S. 2012. Certification and the branding of HRD. *Human Resource Development Quarterly*, 23(3):411–419.
- Chartered Accountants Ireland. 2012. *Become a chartered accountant*. [Online] Available from: http://www.charteredaccountants.ie/General/About-Us/Chartered-Accountancy-/Becoming-a-Chartered-Accountant/. [Accessed: 07 August 2012].
- Cheetam, G. & Chivers, G. 2005. *Professions, competence and informal learning*. United Kingdom: Edward Elgar Publishing.
- Coe, M. & Delaney, J. 2008. The impact of certification on accounting education. *Strategic Finance*, July:47–51.
- Coetzee, P., Barac, K., Erasmus, L., Fourie, H., Motubatse, N., Plant, K., Steyn, B. & Van Staden, M. 2010. *The standing of and demand for internal auditing in South African listed companies*. [Online] Available from: http://web.up.ac.za/sitefiles/file/40/484/iKUTU%-20Report%2016%20Sept%202010.pdf. [Accessed 14 March 2013].
- Ennis, M. R. 2008. Competency models: a review of the literature and the role of the employment and training administration (ETA). Office of Policy Development and Research, Employment and Training Administration, US Department of Labour.
- Garavan, T. & McGuire, D. 2001. Competencies and workplace learning: some reflections on the rhetoric and the reality. *Journal of Workplace Learning*, 13(4):144–164.
- Gonczi, A. 1994. Competency based assessment in the professions in Australia. *Assessment in Education: Principles, Policy and Practice*, 1:1–16.
- Gonczi, A., Hager, P. & Oliver, L. 1990. *Establishing competency-based standards within professions*. Canberra: Australian Government Publishing Service.
- Groenewegen, J. 2000. European integration and changing corporate governance structures: the case of France. *Journal of Economic Issues*, XXXIV(2):471–479.

Hoffmann, M.H.W. 2010. Knowledge, skills and competences: descriptors for engineering education. *Proceedings of the International Education Engineering Conference*, Spain. The International Engineering Education Council, April:639–645.

ICAA, vide Institute of Chartered Accountants of Australia.

ICAEW, vide Institute of Chartered Accountants in England and Wales.

ICAS, vide Institute of Chartered Accountants of Scotland.

IFAC, vide International Federation of Accountants.

IIA, vide Institute of Internal Auditors.

IIAPCB, vide Institute of Internal Auditors Professional Certification Board.

IIARF, vide Institute of Internal Auditors Research Foundation.

IIA-SA, vide Institute of Internal Auditors South Africa.

Inglis, R., Shelly, M., Morley, C. & De Lange, P. 2011. A collective, undifferentiated accounting profession: an Australian study. *Accounting and Finance*, 51:711–731.

Institute of Chartered Accountants in England and Wales. 2012. *Become a chartered accountant*. [Online] Available from: http://www.icaew.com/en/qualifications-and-programmes/aca. [Accessed 7 August 2012].

Institute of Chartered Accountants of Australia. 2012. *Become a chartered accountant for a rewarding career.* [Online] Available from: http://www.chartered-accountants.com. au/Cha-rtered-Accountants/Become-a-Chartered-Accountant/Bene-fits-and-a-rewarding-career. [Accessed 7 August 2012].

Institute of Chartered Accountants of Scotland. 2012. *The CA qualification explained*. [Online] Available from: http://icas.org.uk/TheCAqualificationexplained/. [Accessed 7 August 2012].

Institute of Internal Auditors. 2013a. *Certification*. [Online] Available from: https://na.theiia.org-/certification/CIA-Certification/Pages/CIA. [Accessed 21 November 2013].

Institute of Internal Auditors. 2013b. *International Professional Practices Framework*, Altamonte Springs, Fla: IIA.

Institute of Internal Auditors. 2013c. *Internal auditor competency framework.* [Online] Available from: https://na.theiia.org/about-us/about-ia/Pages/Competency Framework. aspx. [Accessed 19 February 2015].

Institute of Internal Auditors. 2011. *CIA changes*. [Online] Available from: http://www.theiia.org/certification/certified-internal-auditor/2013-cia-changes/index. [Accessed 11 September 2012].

Institute of Internal Auditors Australia. 2011. CMIIA: new professional member designation. [Online] Available from: http://www.iia.org.au/announcements/11-10-25/CMIIA-%C2%AE_New_Professional_Member_designation.aspx. [Accessed 14 August 2012].

Institute of Internal Auditors Professional Certification Board. 2014. (reno.deschaine@theiia.org) Discussion of dual system in South Africa. [E-mail to:] Von Eck, C. (claudelle@iiasa.org.za). 7 June 2014.

Institute of Internal Auditors Research Foundation. 1972. *The Common Body of Knowledge*. Altamonte Springs, Fla: IIARF.

- Institute of Internal Auditors Research Foundation. 1985. *The Common Body of Knowledge*. Altamonte Springs, Fla: IIARF.
- Institute of Internal Auditors Research Foundation. 1999. *The Common Body of Knowledge*. Altamonte Springs, Fla: IIARF.
- Institute of Internal Auditors Research Foundation. 2007. *The Common Body of Knowledge*. Altamonte Springs, Fla: IIARF.
- Institute of Internal Auditors Research Foundation. 2010. *The Common Body of Knowledge*. [Online] Available from: http://www.theiia.org/research/common-body-of-knowledge/. [Accessed 17 January 2011].
- Institute of Internal Auditors South Africa. 2014. *Professional training programmes*. [Online] Available from: http://www.iiasa.org.za/?page=PPT intro. [Accessed 24 March 2014].
- Institute of Internal Auditors South Africa. 2012. *CPD*. [Online] Available from: http://www.iiasa.org.za/?page=CIA_Main. [Accessed 4 December 2013].
- Institute of Internal Auditors UK & Ireland. 2010. *IIA-UK & Ireland achieve chartered status*. [Online] Available from: http://www.theiia.org/recent-iia-news/index.cfm?i=12724. [Accessed 14 August 2012].
- International Federation of Accountants. 2015. *Membership*. [Online] Available from: http://www.ifac.org/about- ifac/membership. [Accessed 19 February 2015].
- International Federation of Accountants. 2014. *International Education Standards for Professional Accountants*. [Online] Available from: https://www.ifac.org/Store/Details. tmpl?SID=12182289131134223&Cart=12397974161227968. [Accessed 28 February 2015].
- Karreman, G.H. & Needles, B.E. 2013. Global accountancy education recognition study: 2012. [Online] Available from: http://nasba.org/files/2013/08/GAER_2012_Study_Final.pdf. [Accessed 28 February 2015].
- Krogstad, J.L., Ridley, A.J. & Rittenberg, L.E. 1999. Where we're going? *Internal Auditor*, 56(5):27–33.
- Laerd, S. 2013. Kruskal Wallis test. [Online] Available from: Statistics https://statistics.laerd. com/spss-tutorials/kruskal-wallis-h-test-using-spss-statistics.php. [Accessed 2 March 2015].
- Markowitsch, J. & Plaimauer, C. 2009. Descriptors for competence: towards an international standard classification for skills and competences. *Journal of European* Industrial Training, 33(8/9):817–837.
- Miller, P. & Smith, T. 2011. *Insight: delivering value to internal audit stakeholders.* Institute of Internal Auditors Research Foundation. [Online] Available from: http://www.theiia.org/research/research. [Accessed 29 November 2013].
- PwC, vide PricewaterhouseCoopers.
- PricewaterhouseCoopers. 2013. Reaching greater heights: are you prepared for the journey: state of the internal audit profession study. [Online] Available from: http://www.pwc.com/en_US/us/risk-assurance-services/publications-/assets/pwc-2013-state-of-internal-audit-profession-study.pdf. [Accessed 10 October 2013].

- Ramamoorti, S. 2003. *Internal auditing: history, evolution, and prospects: research opportunities in internal auditing*. Altamonte Springs, Fla: IIARF.
- SAICA, vide South African Institute of Chartered Accountants.
- Sarens, G. & Abdolmohammadi, M.J. 2011. Factors associated with convergence of internal auditing practices: emerging vs developing countries. *Journal of Accounting in Emerging Economics*, 1(2):104–122.
- Selim, G.M., Allegrini, M., D'Onza, G., Koutoupis, A.G. & Melville, R. 2014. *Internal audit around the world: a perspective on global regions*. Altamonte Springs, Fla: IIARF.
- Seol, I., Sarkis, J. & Lefley, F. 2011. Factor structure of the competency framework for internal auditing (CFIA) skills for entering level internal auditors. *International Journal of Auditing*, 15:217–230.
- South African Institute of Chartered Accountants. 2012. *Becoming a CA*. [Online] Available from: https://www.saica.co.za/Training/BecomingaCA/tabid/157/language/en-ZA/De-fault.aspx. [Accessed 7 August 2012].
- Van Riemsdijk, M. 2013. Obstacles to the free movement of professionals: mutual recognition of professional qualifications in the European Union. *European Journal of Migration and Law*, 15:47–68.
- Von Eck, C. 2012a. (Claudelle@iiasa.org.za), Discussion of IIA-SA leadership forum outcome and polling results. E-mailed to: hfourie@nmmu.ac.za.
- Von Eck, C. 2012b. (Claudelle@iiasa.org.za), Discussion of membership numbers. E-mailed to: erasmuslj@tut.ac.za.
- World Bank Group. 2014. Current status of the accounting and auditing profession in Asian countries. [Online] Available from: http://www.aseanaccountants.org/files_council/AFA%20report-printed%20version.pdf. [Accessed 28 February 2015].

Annexure 1: General competencies: comparing the four regions

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General competencies	_* ən	7,2	Rest of the World N = 8071	st of the World = 8071	South Africa N = 199	th Africa = 199	UK & Ireland N = 475	reland 475	Australia N = 111	alia 111			Pairwis	Pairwise P-values	les	
	lsv-9		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	SA/ Aus	SA/ UK&I	SA/ RoW	Aus/ UK&I	Aus/ RoW	UK&I / RoW
Ability to promote the value of internal audit activity within organisation	000.	36.199	4412.23	3.50	5315.49	3.74	4309.23	3.52	4531.61	3.58	000	680.	000.	000.	010.	.003
Keep up-to-date with industry and regulatory changes and professional standards	000	36.777	4415.19	3.48	5329.56	3.71	4318.4	3.51	4251.76	3.48	000	980.	000	000.	.002	.002
Organisational skills (incl. project and time management)	000.	23.231	4402.89	3.46	5128.15	3.67	4532.75	3.56	4590.30	3.56	000	.626	.002	000.	.017	000.
Communication skills (incl. oral, written, report writing, presentation)	000.	29.417	4398.77	3.72	4824.51	3.81	4690.67	3.84	4758.71	3.85	.003	.323	.026	000	.035	000.
Problem identification & solution skills (incl. critical, conceptual, and analytical thinking skills)	.002	15.218	4433.54	3.67	4758.90	3.72	4184.30	3.66	4514.41	3.71	.001	727.	.068	000.	.007	.018
Conflict resolution/negotiation skills	000.	24.801	4398.53	3.37	5140.37	3.58	4569.93	3.49	4726.45	3.52	100.	.681	.002	000	.043	000.
Change management skills	000:	26.766	4420.53	3.12	5211.13	3.36	4200.22	3.12	4582.05	3.23	000	101.	.001	.001	.020	.013
Cultural fluency and foreign language skills	0000	217.437	4521.41	2.62	4817.38	2.75	2860.27	1.90	3686.33	2.26	000	000	860.	.017	0000	000.
Staff training and development	000	70.093	4455.53	3.15	5227.71	3.40	3697.52	2.91	4158.33	3.05	000	.003	.002	.001	.001	898.
Competency with IT/ICT frameworks, tools and techniques	000.	52.064	4431.26	2.95	5462.06	3.32	4018.32	2.86	4129.90	2.84	000	.003	000.	000.	.001	.117
Competency with accounting frameworks, tools and techniques	000.	147.141	4477.42	3.12	5388.89	3.41	3296.59	2.75	3993.14	2.97	000	000.	000	700.	000.	.027
(*) P-value = significant differences at the 5% level	e 5% lev	Jə.					Total si	gnifica	Total significant differences	suces	11	4	6	11	-	6

Annexure 2: Behavioural skills: comparing the four regions

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Behavioural skills	*ənle	χ,	Rest of the World N = 8071	st of the World = 8071	South Africa N = 199	Africa 199	UK & Ireland N = 475	reland 475	Australia N = 111	stralia = 111		Pa	irwise	Pairwise P-values	es	
	v-q		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	SA/ Aus	SA/ UK&I	SA/ RoW	Aus/ UK&I	Aus/ RoW	UK&I /RoW
Confidentiality	000	21.570	4407.70	3.79	4814.27	3.90	4596.50	3.89	4530.63	3.88	.001	.486	.025	000.	800.	000
Facilitation	.003	14.035	4444.64	3.25	4485.29	3.28	4062.80	3.22	4717.85	3.43	.029	.933	.332	900.	.044	.083
Governance and ethics sensitivity	000.	25.039	4418.79	3.51	5134.15	3.74	4284.05	3.56	4487.69	3.61	000.	.195	.002	000.	600.	.003
Influence	000.	110.007	4350.58	3.29	4910.78	3.51	5319.05	3.64	5418.65	3.70	990.	.014	700.	000	.718	000.
Communication	000.	34.888	4396.67	3.72	4733.10	3.82	4808.46	3.88	4570.73	3.86	.002	.100	.046	000	.014	000.
Staff management	000.	39.637	4421.98	3.13	5398.56	3.46	4157.35	3.07	4323.54	3.14	000.	.019	000.	000.	.004	.034
Leadership	000.	52.355	4427.22	3.32	5425.89	3.62	4020.41	3.21	4480.08	3.41	000	900.	000	.002	.010	.153
Change catalyst	.163	5.121	4429.25	3.06	4618.04	3.11	4267.63	3.07	4722.33	3.25	.020	.754	.186	.002	.052	700.
Objectivity	600.	11.669	4411.06	3.75	4686.92	3.81	4587.55	3.86	4552.92	3.85	.002	.264	620.	000	600°	000.
Judgement	.023	9.527	4411.57	3.63	4428.16	3.64	4660.56	3.77	4667.07	3.77	.020	.038	.352	000	970.	000
Relationship building	000.	51.125	4374.98	3.37	4995.89	3.57	4969.33	3.63	4988.27	3.62	.007	.239	.005	000	.168	000.
Team player	000.	26.049	4450.58	3.50	4736.42	3.54	3991.15	3.42	4142.72	3.47	000	.415	760.	000	.001	.211
Team building	000	28.819	4443.38	3.33	4974.34	3.51	4015.42	3.24	4135.66	3.27	000	.125	.013	000	100.	.173
Work independently	.001	16.395	4404.83	3.37	5021.40	3.55	4568.40	3.49	4488.23	3.47	000	.884	900	000	.012	000.
Work well with all management levels	000	42.380	4388.75	3.61	5032.99	3.79	4821.41	3.78	4553.52	3.71	000	.512	.003	000	.015	000

(*) P-value = significant differences at the 5% level

Annexure 3: Technical skills: comparing the four regions

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Technical skills	*ənle	γ2	Rest of the World N = 8071	f the id 071	South Africa N = 199	th Africa = 199	UK & Ireland N = 475	eland .75	Australia N = 111	alia 11		-	Pairwise	Pairwise P-values	S	
	^-d	:	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	SA/ Aus	SA/ UK&I	SA/ RoW	Aus/ UK&I	Aus/ RoW	UK&I / RoW
Operational and management research skills	000	27.410	4454.22	3.32	4625.68	3.37	3900.96	3.23	4482.28	3.37	.004	479	171.	.002	600.	.347
Forecasting	000	98.025	4491.00	2.73	4685.29	2.79	3467.06	2.39	3537.80	2.4	000	.035	176	000	000	.120
Project management	000	45.313	4445.94	3.14	5116.03	3.36	3851.74	3.03	4396.29	3.17	000	.020	.003	.003	900:	.488
Business process analysis	000	40.474	4455.08	3.37	4828.02	3.45	3832.48	3.23	4329.80	3.38	.001	.141	.054	.002	.003	.612
Understanding business	000	35.333	4391.83	3.53	5116.38	3.70	4680.00	3.71	4785.21	3.68	.001	.972	.002	000	.053	000.
ISO/quality knowledge	000	25.999	4427.98	2.51	5192.79	2.78	4158.03	2.45	4253.68	2.47	000.	060:	.003	000	.003	.025
Total quality management	000	90.733	4454.78	2.54	5496.25	2.92	3705.57	2.27	3697.21	2.27	000	000	000	000	000	.876
Balanced scorecard	000	40.627	4434.35	2.45	5304.65	2.78	4100.09	2.36	3837.58	2.24	000.	.029	.001	000	000	.054
Risk analysis and control assessment techniques	000	20.914	4401.46	3.52	4988.80	3.72	4634.36	3.68	4509.23	3.64	000	608	900.	000	.014	000.
Identifying types of controls	000	19.990	4399.59	3.47	4964.46	3.65	4639.02	3.63	4688.86	3.55	.001	.740	600	000	.023	000.
Governance, risks and control techniques	000	83.161	4362.25	3.37	5314.40	3.66	4999.63	3.64	5213.06	3.67	.003	7.62	000	000	.344	000.
Data collection and analysis tools and techniques	000	39.223	4449.37	3.32	4984.99	3.46	3894.34	3.24	4199.13	3.26	000.	.075	.015	000	.00	.361
Statistical sampling	000	57.041	4475.90	2.96	4628.57	2.96	3703.93	2.72	3723.71	2.69	000	.270	.256	000	000	962.
Financial analysis tools and techniques	000	56.246	4464.34	3.00	4941.50	3.15	3757.38	2.81	3774.95	2.80	000	.042	.026	000	000.	.903
Forensic skills/fraud awareness	000	43.455	4450.30	3.08	5047.26	3.29	3841.17	2.93	4247.38	3.06	000	870.	700.	.001	.003	.531
Problem-solving tools and techniques	000	27.040	4420.95	3.23	5173.99	3.47	4183.41	3.21	4690.08	3.39	000.	.111	.002	.002	.038	.019
Negotiating	000	122.085	4342.60	3.12	5361.76	3.46	5360.83	3.53	5011.89	3.41	.001	.242	000.	.000	.221	000.
Use of IT/ICT and technology-based audit techniques	000	20.270	4433.38	2.97	5032.80	3.17	4131.52	2.94	4261.28	2.95	000.	.211	.011	.000	.003	.033
(*) P-value = significant differences at the 5% level							Total sign	ificant	Total significant differences		18	9	14	18	15	α