WORK-READINESS OF UNIVERSITY GRADUATES: AN INTERNAL AUDIT EDUCATIONAL EXPECTATION GAP IN SOUTH AFRICA

by

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ABSTRACT

The research for this study was guided by the question whether an internal audit educational expectation gap exists between the level of work-readiness skills expected by employers in internal audit practice, and the actual level of capability of these skills transferred through the formal internal audit educational programmes offered by universities in the Republic of South Africa. An extensive literature study substantiated the research question.

The research methodology used for this study consists of a descriptive, quantitative method and various statistical analysis techniques. An electronic internet-based research questionnaire was distributed to the members on the database of the Institute of Internal Auditors (South Africa). The responses were automatically recorded, after which these were exported to an electronic spread sheet. At this point statistical analysis software was used for statistical analysis and interpretation of the data.

The results of the statistical analysis revealed that a large internal audit educational expectation gap exists between the expected and actual levels of skills capabilities of entering trainee internal auditors. The largest gap is perceived in respect of the Institute of Internal Auditors' Internal Audit Standards and Practice Advisories. On average, employers expect a significantly higher level of skills capability where behavioural skills are concerned than what they expect in respect of technical skills capability levels. In addition, the results revealed that entering trainee internal auditors are perceived to be sensitised insofar as cultural differences are concerned.

REFERENCING METHOD

The referencing method used in this thesis is based on the Harvard method as prescribed in Appendix 11 of the University of Pretoria's *Research Guide* (UP 2013a:65-67).

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Abbreviation/ acronym	Description
APA	The Auditing Professions Act, 2005 (Act No. 26 of 2005)
ARC	Academic Relations Committee
CAATs	Computer Assisted Auditing Techniques
CA (RSA)	Chartered Accountant (South Africa)
CAE	Chief Audit Executive
CBOK	Common Body of Knowledge
CE	Cooperative Education
CEA	Cooperative Education Association
CHE	Commission for Higher Education
CHESA	Commission for Higher Education South Africa
CIA	Certified Internal Auditor
CPD	Continuous Professional Development
CPUT	Cape Peninsula University of Technology
DHET	Department of Higher Education and Training
EDCOM	Education and Training Committee
Fasset	Finance and Accounting Services Sector Education and Training Authority
HEQC	Higher Education Quality Committee
HEQF	Higher Education Qualifications Framework
HEQSF	Higher Education Qualifications Sub-framework
IAA	Internal Audit Activity
IAEP	Internal Auditing Education Partner
IAPS	International Auditing Practices Statements
IFAC	The International Federation of Accountants
IACF	Internal Auditor Competency Framework
IIA	The Institute of Internal Auditors
IIA (Global)	The Institute of Internal Auditors – Global

Abbreviation/ acronym	Description
IIA (SA)	The Institute of Internal Auditors South Africa
IIARF	The Institute of Internal Auditors Research Foundation
IOD	The Institute of Directors
IRBA	Independent Regulatory Board for Auditors
ISA	International Standards on Auditing
IPPF	International Professional Practices Framework
ISRE	International Standards on Review Engagements
ISRS	International Standards on Related Services
LSU	Louisiana State University
LSUCIA	Louisiana State University Centre for Internal Auditing
MFMA	Municipal Finance Management Act, 2003 (Act No. 56 of 2003)
NMMU	The Nelson Mandela Metropolitan University
NQF	National Qualifications Framework
NRF	National Research Foundation
NWU	North West University
PFMA	Public Finance Management Act, 1999 (Act No. 1 of 1999)
PTP	Professional Training Programme
RSA	Republic of South Africa
SAAPS	South African Auditing Practices Statements
SAICA	South African Institute of Chartered Accountants
SAQA	The South African Qualifications Authority
SPPIA	Standards for the Professional Practice of Internal Auditing
TUT	Tshwane University of Technology
UJ	University of Johannesburg
UKZN	University of Kwazulu-Natal
UNISA	University of South Africa
UoT	University of Technology
UP	University of Pretoria
URL	Unique Resource Locator
US	University of Stellenbosch
Wits University	University of the Witwatersrand

CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY

Table 2 includes a description of the abbreviations and acronyms used in this chapter.

Table 2: Abbreviations and acronyms used in Chapter 1

Acronym	Description
ASCPA	Australian Society of Certified Practicing Accountants
CA (SA)	Chartered Accountant (South Africa)
CAE	Chief Audit Executive
CBOK	Common Body of Knowledge
CHE	Council on Higher Education
CIA	Certified Internal Auditor
CPD	Continuous Professional Development
EDCOM	Education and Training Committee
Fasset	Finance and Accounting Services Sector Education and Training Authority
HEQC	Higher Education Quality Committee
HEQF	Higher Education Qualifications Framework
HEQSF	Higher Education Qualifications Sub-framework
IAA	Internal Audit Activity
IAEP	Internal Auditing Education Partner
ICAA	Institute of Chartered Accountants Australia
IIA	Institute of Internal Auditors
IIA (Global)	Institute of Internal Auditors – Global
IIA (SA)	Institute of Internal Auditors – South Africa
IIARF	Institute of Internal Auditors Research Foundation
IOD	Institute of Directors
NRF	National Research Foundation
RSA	Republic of South Africa
SAICA	South African Institute of Chartered Accountants
SAQA	South African Qualifications Authority
UNISA	University of South Africa

1.1 BACKGROUND AND INTRODUCTION

The internal audit profession, both globally and in the Republic of South Africa (RSA), has in recent years experienced substantial growth in membership numbers (Erasmus 2009; Johnson 2009; Ttappous 2009; Steyn & Plant 2010:19-26;). The growth of the internal audit profession in the RSA is largely attributable to the mandatory requirement in South African public sector legislation (RSA 2000; RSA 2003) that each public sector entity and department has an internal audit activity (IAA). In respect of the private sector, this growth is due to similar recommendations that are contained in the three King Reports on Governance issued by the Institute of Directors (IOD) (IOD 1994; IOD 2002; IOD 2009).

The rapid growth in the profession has prompted the Institute of Internal Auditors (IIA), the international body concerned with the continuing professional development of the individual internal auditor as well as the governing of the internal audit profession globally, to regularly review the internal auditing guidance pronouncements it publishes (Coetzee & Du Bruyn 2001:62). This process of reviews has led to the development of the International Professional Practice Framework (hereafter referred to as the *Standards*). The *Standards* are regularly revised and updated to keep the profession informed on and abreast of the latest technological developments, as well as the changing demands and needs of the internal audit engagement clients (Cooper, Leung & Wong 2006:822-827; IIA (SA) 2009:1-2).

A recent review and update of the *Standards* now requires internal auditors to perform activities in respect of risk management, fraud detection and prevention, and governance and related matters (IIA (SA) 2009:3-4). The primary objective of internal auditing is to "… improve organisational performance by providing opinions on the quality of unit managers' control systems and/or the quality of their units' performance and getting to correct performance problems" (Barlow, Helberg, Large & Le Roux 2000:281; IIA (SA) 2009:xxix).

The above expectations concerning the role that internal auditors should play emphasise that they should not only be highly trained academically in a variety of interrelated disciplines. The expectations show that they should also be in possession of superior technical and behavioural skills, especially when they are expected to express their professional opinions on the performance, quality, governance and control of an organisation. According to Bailey (2010:11, 17) behavioural skills "… *consist of managing one's own actions toward others assessed by commonly used standards*" and technical skills "… *consist of applying subject matter or terminology in a particular field"*.

Dittenhofer, Ramamoorti, Ziegenfuss and Evans (2010:1; 5-10) echoed the view of Barlow et al above by asserting that "[i]ntegrity and credibility are foundational to the concept of behavioural dimensions of internal auditing". They further assert that in order for internal auditors to do their job and to do justice to the definition of internal auditing – to add value to their organisations in terms of "… *reputation, effectiveness, efficiency, and compliance with laws, regulations, policies and procedures*" (Dittenhofer et al 2010:5-10) – internal auditors should also have both integrity and credibility.

The current definition of internal auditing was approved and introduced by the IIA in 1999. The definition quoted below was developed to provide for all possible dimensions of the internal audit profession in all its global manifestations (IIA (SA) 2009:2).

> "Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes."

The growing internal audit profession therefore requires of institutions of academic higher education (hereafter referred to as universities) that they provide it with entering trainee internal auditors who are already adequately possessed of appropriate skills – in other words, trainee internal auditors that are work-ready (Hills, Robertson, Walker, Adey & Nixon 2003:212).

Universities in the RSA are autonomous and follow their own teaching frameworks within the parameters laid out in the Higher Education Qualifications Framework (HEQF), the Higher Education Qualifications Sub-framework (HEQSF), the Higher Education Act, 1997 (Act No. 101 of 1997) and the directives of the South African Qualifications Authority (SAQA) (RSA 1997; Gallacher 2006:1-11; Isaacs 2006:12-16; RSA 2013). South African legislation pertaining to higher education, the HEQF, HEQSF, and the process of developing academic programmes are discussed in Chapter 4.

In addition, the Higher Education Act, 1997 (Act No. 101 of 1997) has given rise to the Higher Education Quality Committee (HEQC) of the Council on Higher Education (CHE), the responsibilities of which include the monitoring of quality through institutional audits and the accreditation of educational programmes (RSA 1997; National Research Foundation (NRF) 2009:4). None of the abovementioned legislative and administrative parameters have a direct influence on the design of the curricula of formal educational programmes developed by universities in the RSA, nor do they dictate the technical contents. Universities develop their courses in cooperation with, and in response to, influential input from the internal audit profession (the users of the "product" of internal audit educational services). Through advisory committees and the IIA, the design and content of new (and the redesign of existing) formal internal audit educational programmes are formalised and brought into lecture rooms.

The IIA provides curriculum guidance to universities aspiring to be endorsed as having complied with the requirements of the IIA's Internal Auditing Educational Partnership (IAEP) programme (IIA 2010a), but those who do not fully qualify, or who do not desire endorsement as having entered into

an IAEP with the IIA, could still follow their own educational frameworks to teach aspirant internal auditors. Apart from the IAEP guidelines, the IIA (SA) also coordinates and guides internal audit education through its Education and Training Committee (EDCOM), a committee reporting to the board of the IIA (SA).

The EDCOM consists of members drawn from the IIA (SA) board, current internal audit practitioners, and representatives from universities in the RSA. Neither the IIA (SA) nor its EDCOM has statutory authority to regulate the internal audit profession, nor can it prescribe the curriculum content of formal higher education programmes in the RSA.

In addition to the IAEP requirements, the IIA Research Foundation (IIARF) regularly conducts research to identify the knowledge, competencies and skills requirements of internal auditors on all professional levels (IIARF 2007:279-289). The 2006 and 2010 Common Body of Knowledge (CBOK) studies were conducted globally, and have provided the IIARF with scientific evidence of the global knowledge requirements and needs of the internal audit profession (IIARF 2007:279-289; IIARF 2010).

The 2006 CBOK study has led to the development of the Internal Auditor Competency Framework (IACF). This framework is currently under review, but is available in draft form as it is being updated with the information obtained from the 2006 and 2010 CBOK studies (IIARF 2007:279-289; IIARF 2010; Steyn & Plant 2010). A recent publication by the IIARF, the *Behavioural dimensions of internal auditing: a practical guide to professional relations in internal auditing* (Dittenhofer et al 2010:1) provides guidance to internal auditors on aspects of:

- behavioural foundations;
- behavioural skills; and
- behavioural dimensions as applicable to internal audit practice.

The above research publications and the guidance provided by the IIARF concerning the curricula of academic programmes emphasise the importance that the profession places on the competencies and skills-sets that internal auditors are required to possess (Hills et al 2003:212). A further important factor that plays a significant role when universities design their curricula for internal audit educational programmes is the internationally recognised professional certification programme of the internal audit profession, the Certified Internal Auditor (CIA) programme (Shellard 2010; Steyn & Plant 2010:19-26; IIA (SA) 2010a).

Entrance requirements to write the CIA examination are also not prescribed in detail, which enables universities themselves to decide on the content or design of their internal audit curricula. Universities do however attempt to align their internal audit qualification programmes with the syllabus of the CIA programme. In the RSA, an IIA member holding a three year bachelor's degree, or equivalent, qualifies to register for the CIA examinations (Steyn & Plant 2010:19-26; IIA (SA) 2010a).

Standardisation of internal audit curricula in the RSA can thus not be enforced upon the providers of internal audit educational programmes (universities), as the internal audit profession is not regulated in the manner that, for example, the external audit profession in the RSA is regulated (Steyn & Plant, 2010:19-26).

The external audit profession in the RSA is regulated and guided by the following statutory and regulatory codes (Jackson & Stent 2010:1/13; Jackson & Stent 2012:1/16):

- The Auditing Professions Act, 2005 (Act No. 26 of 2005);
- The Companies Act, 2008 (Act No. 71 of 2008);
- The Constitution and By-laws of the South African Institute of Chartered Accountants;

- The International Federation of Accountants' Code of Ethics for Professional Accountants;
- The code of conduct and disciplinary rules of the Independent Regulatory Board for Auditors;
- International Standards on Auditing;
- International Standards on Review Engagements;
- International Standards on Related Services;
- International Auditing Practices Statements; and
- South African Auditing Practices Statements.

The legislation, standards and statements listed above, enable the external audit profession, through the South African Institute of Chartered Accountants' process of accreditation of the curricula of universities teaching aspirant chartered accountants, to prescribe and monitor the standard of the curriculum content of academic programmes (SAICA 2010). SAICA-accredited universities have to comply with certain criteria, especially in respect of curriculum design (SAICA 2010), in order for their students to be eligible to write the qualifying examinations for the Chartered Accountant (South Africa) (CA (SA)) designation. This process shares similarities with that of the IAEP programme of the internal audit profession mentioned above.

Such an expectation gap could effectively be addressed by the IIA (SA) through establishing a formal framework that universities can use as a benchmarking tool for their undergraduate programmes. This would result in prospective internal auditors being far closer to being "work-ready" after graduating from their respective universities, and would thus enable them to join the profession as competent trainee internal auditors. In implementing such a framework, universities would be far closer to fulfilling the expectations of the internal audit practice than appears to be the situation at present. Such interaction between the IIA and universities would also enable the universities to respond more effectively and rapidly to the developments

and frequent changes in the internal audit profession, as explained in section 1.2 of this chapter (Picket 2000:267-268; Steyn & Plant 2010:19-26).

The internal audit profession, and especially the environment in which it operates, is constantly changing. Chapter 3 provides a discussion of the history and development of the training of aspirant internal auditors. The following section provides a brief discussion of the current changes influencing and affecting the internal audit profession, and the consequences thereof for the education of internal auditors in the RSA.

1.2 THE CHANGING ENVIRONMENT AND THE DIVERSITY WITHIN THE INTERNAL AUDIT PROFESSION

Anecdotal evidence suggests there are as many models of what constitutes an IAA as there are economic sectors, industries, companies and individual users of internal audit services. More structured research into perceptions of what constitutes an effective IAA suggests that individuals are typically affected by their responses to some or all of the factors listed below, and by how these factors could possibly impact on their organisations, either directly or indirectly (Spencer 2000:267-276; Hermanson & Rittenberg 2003:38-39;; Spencer, Ritchie, Lewis & Dillon 2003:22-37; Dimma 2006:13-22; Coetzee 2012a:2-8):

- corporate scandals and the increasing need for guidance on corporate governance, rules and regulations;
- economic meltdown;
- ethical and legal pressure;
- financial responsibility, social responsibility and sustainability (corporate governance);
- fraud and corruption;
- globalisation;
- organisational (internal) and environmental (external) disasters;

- re-structuring and changes in organisational ownership;
- skills shortages;
- technological developments; and
- the continuous drive to reduce costs and still improve quality.

The diversity of the changes brought about (either directly or indirectly) by these factors makes it difficult for universities to ensure that their internal audit educational programmes stay abreast of new trends. Apart from an environment of constant change, universities have to address the diversity of the skills needed by the full spectrum of economic sectors that could employ their newly graduated trainee internal auditors. This is a significant challenge to internal audit educators: the competencies and skills internal auditors require in specific industries differ vastly from one another.

Internal auditors entering, for example, the banking industry might well need a different set of skills and competencies than those of internal auditors entering the mining or the manufacturing industries. Universities thus have no option other than to follow a generic, *one-size-fits-all* approach to course structure and content, in an attempt to satisfy the full spectrum of stakeholders' needs and expectations regarding new recruits to the internal audit profession (Shellard 2010; Steyn & Plant 2010:19-26).

The knowledge and skills aspects of the training of internal auditors, and the course content and process of educating internal audit students in the RSA, have to stay abreast of the changing business and organisational environment within which the profession operates. It is largely as a result of the ongoing developments and changes in the internal audit profession that the IIA (Global) places a particularly high premium on continuing professional development (CPD) for all internal auditors, including experienced internal auditors (Spencer 2000:267-276; IIA (SA) 2008). The following section provides details of the typical skills a competent internal auditor should have.

1.3 INTERNAL AUDIT KNOWLEDGE, SKILLS AND TRAINING REQUIREMENTS

The ongoing growth in the ambit of the internal audit profession, as noted above, fuels the need for internal auditors to demonstrate an increasingly wide range of skills, attributes and competencies (Steyn & Plant 2010:19-26; Ziekenfuss & Ramamoorti 2004). The introduction and implementation of the recommendations contained in the King III Report on Governance (IOD 2009) has led to heightened expectations for internal auditors to play a more substantial role in the improvement of governance in their organisations (Weingardt 2001; Steyn & Plant 2010:19-26).

It can thus be deduced that internal auditors are increasingly being regarded as *corporate governance partners* to the management of their respective organisations. As such, an internal auditor is expected to be more involved with discussions on governance matters, and is inevitably being required to provide senior management with advice (as consultants) on best practices in respect of the assessment of risk and other matters of corporate concern.

In order for internal auditors to provide a professional service to management, they have to possess appropriate behavioural skills apart from their essential technical skills. The IIARF has conducted studies (IIARF 2007; IIARF 2010; Bailey 2010), which solicited responses from all the members of the IIA globally, to determine what the profession perceives as being an appropriate body of knowledge that internal auditors should possess. The categorisation and classification of internal auditors' knowledge, skills and competencies into either behavioural or technical skills, as referred to in this study, is the same as that used in the CBOK 2006 and 2010 studies, the Fasset Work-readiness Programme, the syllabus of the CIA programme, and the Internal Auditor Competency Framework (IIARF 2007; IIARF 2010; IIA (Global) 2013a:1; Fasset 2013).

During the IIA (SA)'s January 2008 Leaders' Forum (IIA (SA) 2008) attendees revealed that junior internal auditors just entering the profession were not adequately equipped with the skills required in the workplace. The leadership forum was attended by approximately 180 Chief Audit Executives (CAEs) from every business sector in the RSA. These CAEs raised the following key issues (among others) with regard to the "… [s]evere shortage of competent internal auditors" (IIA (SA) 2008):

- "[We are being asked to employ] CIAs [entry level] who cannot perform their work" (lack of practical experience);
- "Quality of people in internal audit[ing] [is] generally low";
- "They tend to be too theory-orientated with little practical experience – [it is] mostly graduates [directly from universities] [that] lack practical experience";
- "They have not been exposed to [many] different types of audits";
- "Even the students coming through the universities [entering trainee internal auditors] are not skilled enough"; and
- "[There is a] [s]kills shortage in the market. It is difficult to recruit skilled people."

In respect of the shortage, both in numbers and work-readiness, of entering trainee internal auditors required by the profession (IIA (SA) 2008), the participating CAEs suggested the following:

- that the pool or supply of trainee internal auditors be increased; and
- that they should have gained an element of practical experience prior to qualifying as a CIA.

It can thus be concluded that, from the point of view of employers of recently graduated (trainee) internal auditors, the content of the curricula of internal audit educational programmes in the RSA is deficient, and should include a substantially larger amount of appropriate technical and behavioural skills training in order to provide entering trainee internal auditors with all the

capabilities that are required and expected of them by the internal audit profession.

The absence of any of the essential skills listed by the CBOK 2006 and 2010 studies, or offered at an inadequately low level of capability in the curricula of any internal audit educational programme, could highlight the existence of an internal audit educational expectation gap. The expectation gap could be outlined as the gap between what is expected by the internal audit profession and what is actually included in the internal audit curricula of universities in the RSA. Such a gap between the skills taught in the curricula of internal audit educational programmes and the needs of employers of internal auditors should be obvious from the small percentage of IAA staff complements occupied by junior level employees (refer to Figure 1 on page 13).

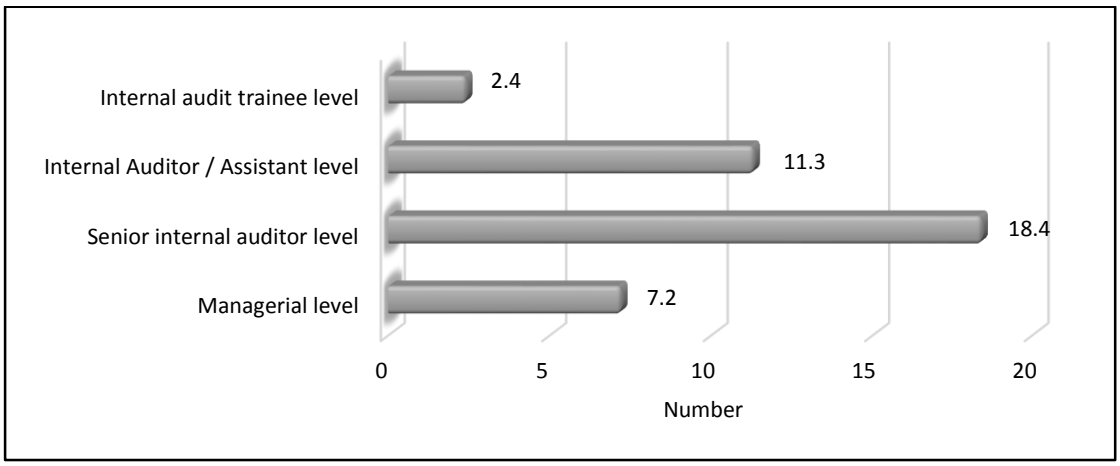
The main reason why employers are reluctant to employ recently graduated trainee internal auditors could be that these internal auditors do not possess adequate behavioural and technical competencies and skills, and are thus not immediately useful to their employers. The existence of an expectation gap (refer to Figure 3 on page 20) is supported by the comments offered by attendees of the IIA (SA) Leaders' Forum in January 2008 (IIA (SA) 2008).

1.3.1 Composition of an average Internal Audit Activity

The composition of IAAs could be indicative of the trust that the internal audit practice places on the work-readiness of entering trainee internal auditors. Presently the average staff complement of a typical IAA of large listed companies in South Africa is as follows (Barac et al 2010:93):

- Managerial level – 7.2
- Senior Internal Auditor level – 18.4
- Internal Auditor / Assistant level – 11.3
- Internal Audit Trainee level – 2.4

Figure 1 graphically illustrates the staff composition of an average IAA as presented in *The current status and demand for internal auditing in South African listed companies,* a study of large South African listed companies conducted by Barac, Coetzee, Erasmus, Fourie, Plant, Motubatse, Steyn & Van Staden (2010:93). The results of their study prove that IAAs of these companies are 'top heavy', with significantly more senior level internal auditors than there are trainee or entry level internal auditors. An average IAA of a large South African listed company consists of 39.3 internal auditors of which only 6.1% (2.4 individuals) are trainee internal auditors (see section 1.3 above).



(Source: Barac et al 2010:93)

Figure 1: Composition of an average IAA in large listed companies in the RSA

The average number of trainee internal auditors (2.4) recorded in the research of Barac et al (2010:93) (refer to Figure 1) can be regarded as low when viewed against the discussion in sections 1.1 and 1.2 that identifies the internal audit profession as an emerging profession desperately in need of additional competent members. This low average number could be indicative of an unwillingness or reluctance on the part of employer organisations to appoint trainee internal auditors. This reluctance could possibly be in response to their dissatisfaction with the capabilities of trainee internal auditors, manifesting as a lack of technical and behavioural skills,

which in turn indicates a shortcoming in the courses offered by undergraduate programmes at universities.

1.3.2 Recruiting of entering trainee internal auditors

The results of the CBOK 2010 study reveal that worldwide, only 30% of organisations recruit newly graduated university students into their internal audit activities (Alkafaji, Hussain, Khallaf & Majdalawich 2010:18-19). In addition, Alkafaji et al (2010:19) assert that, of the sources preferred by organisations when recruiting internal auditors, only approximately 24% of entry-level internal auditors are recruited from universities.

This low percentage of companies using universities as their source of new internal auditors is possibly indicative of the measure of their dissatisfaction with the capabilities of entering trainee internal auditors. In addition, these figures emphasise the importance that the internal audit profession places on *work-readiness* (and the premium it is prepared to pay for it) – i.e., the appropriate technical and behavioural skills that entry-level internal auditors should possess, and be immediately capable of using – and furthermore indicates that universities possibly do not provide appropriately skilled graduates (Alkafaji et al 2010:18).

It can thus be argued that the internal audit profession could have a higher expectation of work-readiness – in terms of skills and competence requirements – than what universities are currently providing. Universities could thus be expected to produce graduates with a higher level of *work-readiness*. Employers of internal audit graduates also have expectations in respect of work-readiness when they recruit entering trainee internal auditors.

1.3.3 Recruiting of trainee internal auditors

When recruiting from universities, employers all request interviews with “the best” students in the class. Educators can at that stage only use the

academic performance records, based on the students' knowledge of the theoretical content of the curricula, to identify so-called "good" students. These academic records only reveal the degree to which students have achieved outcomes in respect of theoretical knowledge based on classroom teaching.

Evidence of the students' abilities to apply theoretical knowledge in a practical environment, or the achievement of the critical cross-field outcomes required by SAQA (SAQA 2000:18), was not available and has possibly neither been taught or assessed as part of formal internal audit educational programmes. Evidence of students' behavioural (soft) skills and technical competencies – work-readiness – is simply not available to recruiters who are then not able to assess the work-readiness of potential employees. This could be considered a factor contributing to the existence of an expectation gap between what the internal audit profession needs and the skills the universities are able to provide their undergraduates with.

According to Seol and Sarkis (2005:876), "... the recruitment, selection and hiring of quality internal auditors is critical for any organisation ..." From the discussions in this chapter it seems evident that universities do not include adequate or appropriate behavioural and technical skills content in their internal audit educational programmes – skills that would be needed to fully equip students to function effectively as 'work-ready' entering trainee internal auditors.

1.3.4 Summary

From the above arguments it can be assumed that a possible gap (the extent of which is not yet clear) exists between what the internal audit profession expects of universities and their internal audit graduates (i.e., to be appropriately skilled and work-ready) and what universities actually provide.

The following section briefly outlines the formal tertiary education programmes of some universities currently teaching internal auditing in the RSA.

1.4 THE *STATUS QUO* IN INTERNAL AUDIT EDUCATION IN THE REPUBLIC OF SOUTH AFRICA

In order to obtain a better understanding of the internal audit educational environment in the RSA this section provides an explanation of the aspects guiding the providers of internal audit educational services in designing the curricula of formal internal audit educational programmes.

Only two universities in the RSA are currently endorsed by the IIA as complying with the terms of their IAEP programmes. These universities are the University of Pretoria (a traditional residential university) that has been endorsed as being at the level of a 'Centre for Internal Audit Excellence', the highest IAEP level; and UNISA (a distance learning comprehensive university) that has IIA endorsement as an IAEP 'Partner', which represents the IIA's second level (IIA 2010a; Shellard 2010). The IIA has specific requirements that a university must comply with in order to be granted IAEP status. The core requirements needed in order to gain this recognition are (IIA 2010b):

- departmental and college/university support – the educational institution is required to indicate its support, in writing, to the IAEP, and the educational institution must prove that it has sufficient capacity to teach internal auditing;
- accreditation and an international reputation – the educational institution is required to indicate in the application whether it has an appropriate accreditation or quality assurance programme in place;

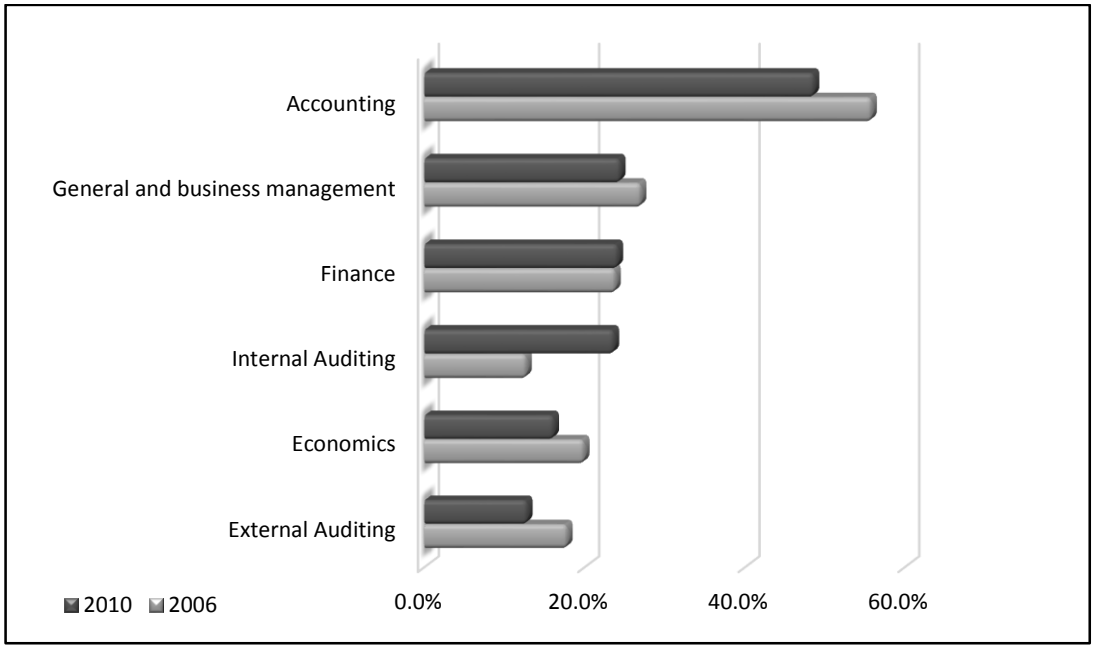
- IIA chapter/affiliate support – the educational institution is required to obtain the written confirmation from the local affiliate (IIA (SA)) that the internal audit programme or IAEP has its support;
- an educational institution must have an advisory board;
- students must be members of the local IIA Chapter or affiliate; and
- students should have opportunities to take part in full-time or part-time internship programmes.

The two universities mentioned above are not the only universities teaching internal auditing in the RSA. All the Universities of Technology, and a number of the traditional and comprehensive universities (for example, the University of Johannesburg, the Nelson Mandela Metropolitan University, the Northwest University and Wits University) offer internal audit educational programmes (refer to Table 7 on page 64 for a complete list) (Chetty 2011).

The CBOK studies by the IIARF have gathered information in respect of the skills and competencies possessed by and required of internal auditors. Participants in these studies were requested to provide their opinions on the content of internal audit curricula in an effort to determine the nature and levels of skills and competencies transferred through these educational programmes.

Figure 2 illustrates the top six major academic subjects of educational programmes taught by universities in the RSA as identified by the CBOK 2006 and 2010 studies (IIARF 2007:73; Marais, Burnaby, Hass, Sadler & Fourie 2009:883-898; Alkafaji et al 2010:8). More than 45% of the CBOK respondents chose the 'Accounting' option when they were asked to indicate the major courses in their qualifications. The top six courses identified here are all of a technical nature. These technical and theoretical courses do not sufficiently prepare students for real life: they do not provide on-the-job experiences, nor do they impart the *behavioural skills* needed in order to be considered an employable and work-ready entering trainee internal auditor.

The fact that none of the behavioural skills (nor any components thereof) are represented in the top six majors indicated in Figure 2 is a further illustration of the relevance and importance of this research. The perceived "highly important" status of the 'Accounting' option is salutary. It could in fact be more indicative of the state of educators' knowledge, skills and competency concerning internal audit matters than it is about the expectations that internal audit practitioners have of students emerging from formal internal audit educational programmes.



(Source: IIARF 2007:73; Marais et al 2009:883-898; Alkafaji et al 2010:8)

Figure 2: The top six academic majors offered by RSA universities - from CBOK 2006 and 2010

This ignorance and lack of knowledge in respect of the expectations of internal audit practice on the part of universities could be the reason why there is a deficiency in behavioural skills (also referred to as pervasive-type skills) content in their internal audit educational programmes, and is the underlying reason for the expectation gap being investigated in this research. The lack of a skill or category of skills (behavioural skills or technical skills, for example), in the education of internal audit students could be the reason why these students are considered as not being adequately

prepared to fulfil the *work-readiness expectations* the profession has of entering trainee internal auditors.

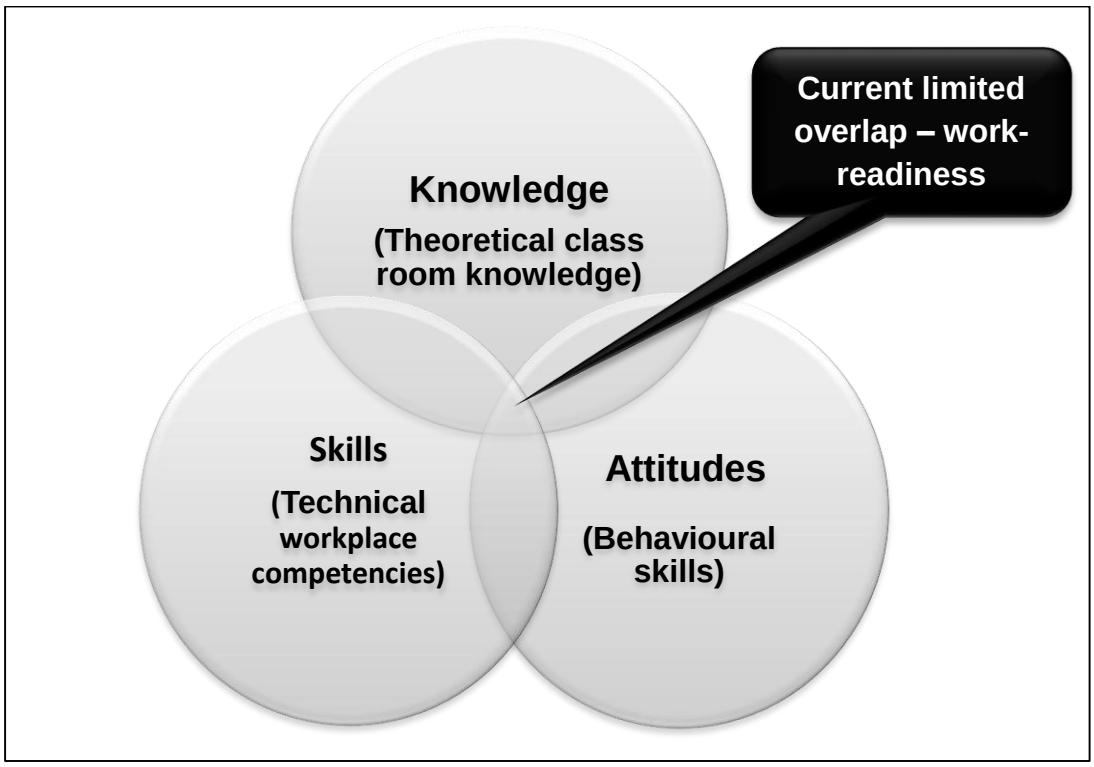
The above information makes it clear that the current internal audit educational system in the RSA provides graduates with a fair amount of classroom accountancy-type knowledge, but only a limited amount of workplace-based exposure to practical and behavioural skills (refer to sections 1.3 and 1.4). Evidence of compliance with the SAQA requirement to integrate the critical cross-field outcomes (referred to as Critical Outcomes) in the curricula of formal educational programmes could not be obtained (refer to section 2.2.2).

The Critical Outcomes "… are deemed critical for the development of the capacity for life-long learning" (SAQA 2000:18). The apparent ideal internal audit educational programme would equip a student with sufficient and appropriate theoretical knowledge, as well as technical and behavioural skills – a sound balance of classroom- and workplace-based education, inculcating the Critical Outcomes.

The Critical Outcomes adopted by SAQA (SAQA 2000:18) are:

- "Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made.
- Work effectively with others as a member of a team, group, organisation, community.
- Organise and manage oneself and one's activities responsibly and effectively.
- Collect, analyse, organise and critically evaluate information.
- Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation.
- Use science and technology effectively and critically, showing responsibility towards the environment and health of others."

Figure 3 (on page 20) provides an illustration of the current situation, with its very limited overlap of the three major types of skills and/or knowledge that entering trainee internal auditors are equipped with by the time they graduate from universities. Ideally, this overlap should be substantially bigger in order for entering trainee internal auditors to be more work-ready when graduating from university.



(Source: Own compilation)

Figure 3: Graphic illustration of the current limited overlap of the required technical and behavioural skills (including attitudes) in the teaching of entering trainee internal auditors

In order to determine the training needs of entering trainee internal auditors, an evaluation of the expected levels of competencies and the types of tasks that are typically required of trainees, should be done. The IIA (SA) has developed a skills competency matrix as an annexure to its guidance publications used to recruit internal auditors (IIA (SA) 2008:10-11). This document provides a list of such required skills, and also indicates the level of competence required for each level of internal auditor, ranging from 'entry

level' internal auditor (with two years' relevant work place experience) to 'CAE Level'.

A factor contributing to the possible existence of an expectation gap, as described above, is that this guidance document does not provide the required skills and competence levels for *entering* trainee internal auditors, which is the primary focus level of this study. The absence of specific guidance for universities in the published guidance documents of the IIA is a possible reason why universities do not adequately address all the technical and behavioural skills needed by entering trainee internal auditors in order to be work-ready by the time they first enter the formal work environment.

One should also note that the academic environment within which technical knowledge is obtained is different from the workplace or internal audit practice environment where the practical experience (technical and behavioural skills) is gained. An ideal situation would be attained if these different environments could be linked or blended in such a manner that entering trainee internal auditors could move effortlessly from the academic environment to the internal audit work place.

Entry into the formal workplace environment when not work-ready places an additional burden on employers of such entering trainee internal auditors. Supervisors are required to ensure that they are progressively exposed to tasks and duties of increasing complexity in order to equip them with all the required technical and behavioural skills. This would render them work-ready and would enable them to work increasingly independently and to progress to the next level of competence.

The following section explains the research problem that the study focuses on.

1.5 RESEARCH PROBLEM

The preceding sections provided evidence that universities in the RSA are not teaching aspirant internal auditors sufficient and appropriate technical and behavioural skills before they enter the business world as trainee internal auditors. Internal audit educators might also not be aware of the full extent of the expectations the employers of their graduates hold regarding these graduates' grasp of industry-required behavioural skills.

Apart from the typical classroom-taught technical skills (essentially accountancy-based) provided by a university education, employers of entering trainee internal auditors also expect their new employees to possess specific behavioural skills (including characteristics and attitudes) appropriate for work-ready entering trainee internal auditors (Bui & Porter 2008:23-50; Fourie 2008:67; Greenawalt & Foster-Stinnett 1992:8).

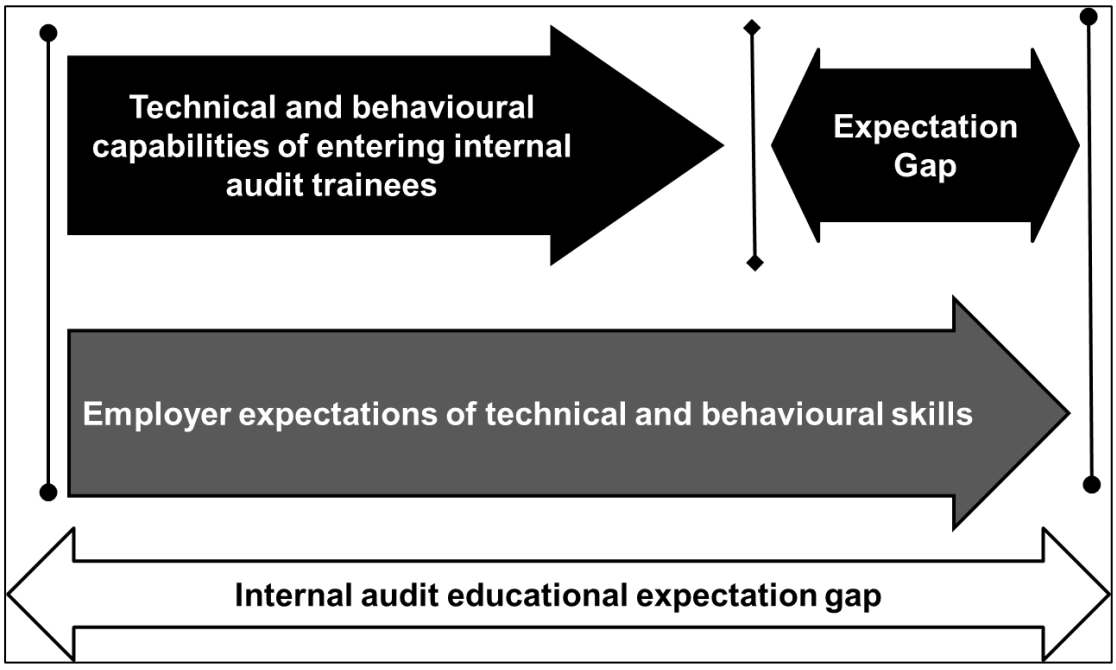
Studies published by the Institute of Chartered Accountants of Australia (ICAA) in 1994, and the Australian Society of Certified Practicing Accountants (ASCPA) in 1995 reveal practicing accountants' perceptions of the strengths and weaknesses of accounting graduates, and identify deficiencies that relate mostly to behavioural skills (Bui & Porter 2008:27; Gammie, Cargil & Hamilton 2010; Crawford Helliar & Monk 2011). The findings reported in these studies reveal gaps which are similar to those being investigated in this study of the internal audit education and employment situation in the RSA.

Clearly defined information in respect of the existence of an expectation gap between internal audit education and employer requirements, the extent thereof, and the reasons why it exists, would provide universities with valuable information to enable them to redesign the curricula of their formal internal audit educational programmes so as to address the expectations of the employers of their internal audit graduates.

Based on the discussions above, the research question (problem) of this study is the following:

> **Does an internal audit educational expectation gap exist between the level of capability regarding technical and behavioural skills expected by employers (in internal audit practice) and the actual level of capability of these skills transferred through the formal internal audit educational programmes offered by universities in the RSA?**

The structure of the research problem is illustrated in Figure 4. The graphic illustration of the research problem formed the basis of the study.



(Source: adapted from Bui & Porter 2008:31)

Figure 4: Graphic illustration of the structure of the internal audit educational expectation gap (to be determined)

1.6 RESEARCH OBJECTIVE

Arising from the discussions above, there appear to be two specific issues that relate to the apparent expectation gap: firstly, there is a need to understand what the expected level of capability is for a work-ready entering trainee internal auditor; and secondly, what the actual levels of capability possessed are. These issues need to be determined or quantified. This study's research objective is therefore the following:

To determine whether a gap exists between what universities in the RSA provide and what employers expect from entering trainee internal auditors, and to obtain an understanding of the nature and extent of this presumed expectation gap in respect of the technical and behavioural skills capabilities of entering trainee internal auditors.

1.7 SECONDARY RESEARCH OBJECTIVES

Based on the objective of this study, the research is guided by the following secondary research objectives:

- to conceptualise work-readiness in the context of the research problem and the objective of this study (refer to Chapter 2);
- to examine the history and development of the internal audit profession to get a better understanding of a possible internal audit educational expectation gap (refer to Chapter 3);
- to obtain an understanding of the developments of the educational system and the *status quo* in internal audit education in the RSA (refer to Chapter 4);
- to examine and evaluate the nature of existing internal audit educational programmes (to determine the existing knowledge and skills content), in

order to assist in the design of the research questionnaire (refer to Chapter 4); and

- to obtain internal audit managers' views and perceptions of the technical and behavioural skills expectations they have of recently graduated entering trainee internal auditors (refer to Chapter 7)

The following section provides a brief explanation of the research methods adopted in order to address these questions.

1.8 RESEARCH DESIGN AND METHODS

The literature review in the preceding sections provides brief descriptions of the internal audit skills requirements, the *status quo* in internal audit education in the RSA, and how these aspects relate to the research problem underpinning this study. A quantitative descriptive research methodology is used to achieve the objectives of this research (refer to Chapter 5 for a detailed description of the research methodology).

1.9 RELEVANCE OF THE RESEARCH

The results of this research would be useful to the IIA in re-designing its guidelines for the compilation of internal audit educational curricula guidance. In addition, the results of the research might be useful to educational institutions in the RSA, in that it provides them with scientifically obtained information to better align their formal internal audit educational programmes with the needs of the industry their graduates are about to enter.

1.10 RESEARCH ETHICS

During the planning of the research project the researcher ensured that the way the research was designed was both methodologically sound and morally defensible (Saunders, Lewis & Thornhill 2007:178), as research ethics relate to all questions embodied and implicit in the research topic, in the research design, and in the manner in which the research findings are reported. Annexure A comprises the official approval of the application for ethical clearance granted by the Research Ethics Committee of the University of Pretoria's Faculty of Economic and Management Sciences.

The following section provides an overview of the chapters of the study and how they are integrated in order to achieve the objectives of the study.

1.11 STRUCTURE OF THE RESEARCH

This section presents an overview of the contents of each of the chapters in this dissertation.

Chapter 1: Introduction and background to the study

In the first chapter, background information pertaining to the study is discussed, the research problem (question) is then formulated from that information, and the research objective is identified. Finally, reference is made to the research method.

Chapter 2: Work-readiness

In Chapter 2 literature pertaining to work-readiness is contemplated in order to clearly define the concept. In addition, the chapter presents explanations and concepts of work-readiness in the context of the research problem and the associated objectives of the study.

Chapter 3: The history and development of internal audit education and training

In order to obtain a better understanding of the evolution of the internal audit profession this chapter contains a description of the global development of the professional training of internal auditors. In addition, it explains the effect of these international developments on the internal audit profession in the RSA, and traces the changing role of the internal auditor in the work environment.

In light of the information obtained through the literature review, this chapter provides guidance in respect of the development and design of the research questionnaire.

Chapter 4: The internal audit educational system in the RSA

This chapter provides a discussion of the development of the South African higher education environment, the legislation pertaining to formal education, and the *status quo* as it applies to internal audit education in the RSA.

The design of the research questionnaire is guided by the information obtained in this chapter.

Chapter 5: Research methodology

The chapter contains a discussion of the research methodology, with reference to statistical analysis techniques. In addition, the research instrument used to collect data for the research is outlined.

Chapter 6: Administering of the questionnaire and description of responses

This chapter explains the process of administering the questionnaire, followed by a description of the respondents and the representativeness of the responses received in the survey.

Chapter 7: Research findings

Chapter 7 comprises a discussion of the responses obtained from respondents with regard to their expectations of the *technical and behavioural skills* capabilities of work-ready entering trainee internal auditors. In addition to these expectations, the actual levels of technical and behavioural skills capability of entering trainee internal auditors already in employment are analysed. The differences between expected and actual levels of capability are determined, analysed and interpreted.

Chapter 8: Conclusions and recommendations

Based on the findings of the analysis and interpretation presented in Chapters 7 and 8, this chapter concludes the study. The analysis provide a partial solution to the research problem and address the objective and secondary research objectives of the research. Conclusions and recommendations, based on the research findings, are discussed.

Figure 5 provides a graphic illustration of the structure of the research.

Figure 5: Structure of the study

1.12 SUMMARY AND CONCLUSION REGARDING CHAPTER 1

This chapter provides a motivation for the study, defines the research problem (question), the research objective and related secondary objectives, and refers to the methodology used in the research component.

This chapter further focuses on obtaining a detailed understanding of the existence and nature of the expectation gap as it relates to the needs of employers with respect to the competencies and skills possessed by recently graduated entering trainee internal auditors.

The results of this research would be useful to the IIA should it wish to re-design its guidelines for internal audit educational curricula. In addition, the results of the research might be useful to educational institutions in the RSA, in that it provides them with scientifically obtained information to better align

their formal internal audit educational programmes with the needs of the industry their graduates are about to enter.

The following chapter provides an understanding of the *work-readiness* concept in relation to the research question (problem) addressed by study.

CHAPTER 2: WORK-READINESS

2.1 INTRODUCTION

Chapter 1 provided arguments emphasising the need for and value of the research based on the research problem and associated research objectives (refer to sections 1.5, 1.6 and 1.7). The core of this research study is to determine the existence and extent of an expectation gap concerning *work-readiness* held by employers with respect to *entering trainee internal auditors*.

The objective of this chapter is to conceptualise *work-readiness* in the context of the study's research question (problem) and its associated research objectives. It is important to conceptualise 'work-readiness' as it forms the basis of the empirical component of the research study. The design and development of the research questionnaire was based on the theoretical background of the study and context and the concepts of this chapter.

The following sections of this chapter investigate and analyse published literature on 'work-readiness'. In addition, the concept of work-readiness is defined, firstly in the context of the expectations held by employers of entering trainee internal auditors, and subsequently, by taking into account the guidance pronouncements of the IIA regarding capability.

Figure 6 shows the relationship of this chapter (the black box) to the rest of the study.

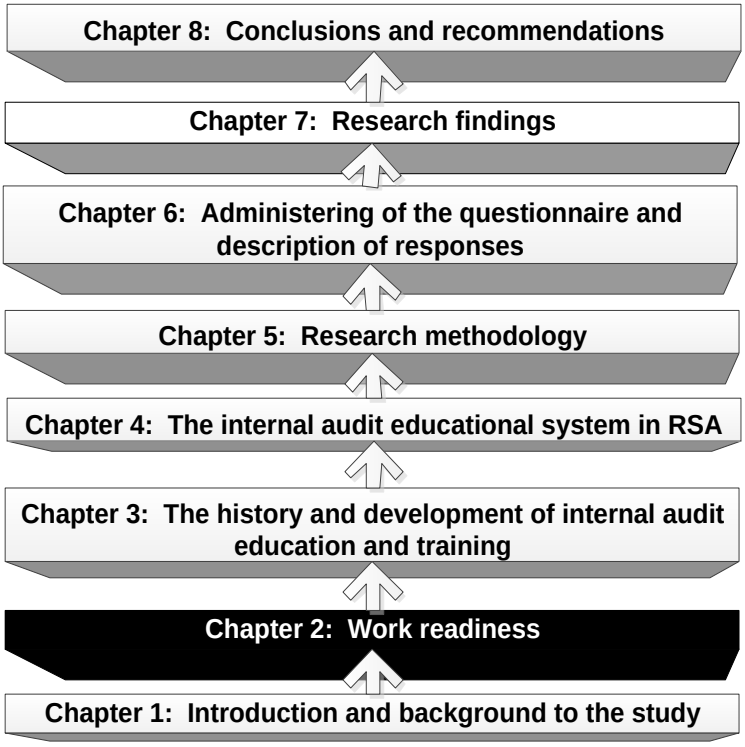


Figure 6: Chapter 2 in relation to the rest of the study

Table 3 includes a description of the abbreviations and acronyms used in this chapter.

Table 3: Abbreviations and acronyms used in Chapter 2

Acronym	Description
CBOK	Common Body of Knowledge
DHET	Department of Higher Education and Training
Fasset	Finance and Accounting Services Sector Education and Training Authority
HEQC	Higher Education Quality Committee
IACF	Internal Auditor Competency Framework
IIA (Global)	Institute of Internal Auditors (Global)
IIA	Institute of Internal Auditors
IIARF	Institute of Internal Auditors Research Foundation
RSA	Republic of South Africa
SAQA	South African Qualifications Authority
SETA	Sector Education and Training Authority
UK	United Kingdom

In order to give effect to the objective of this chapter, the following section contextualises work-readiness in the context of this research.

2.2 WORK-READINESS CONTEXTUALISED

Through-out the world accounting expectation gaps are reported by researchers (Bui & Porter 2008; Gammie et al 2010; Crawford et al 2011). According to Crawford et al (2011:116) the International Education Standard (IES 3) – *Professional skills and General Education* – states that:

> "Appropriate skills enable the professional accountant to make successful use of the knowledge gained through general education. These skills are not always acquired from specific courses devoted to them, but, rather, from the total effect of the programme of professional accounting education as well as practical experience, and further development through lifelong learning…. Relevant skills can give professional accountants a competitive edge in the market place and are useful throughout an individual's career."

Crawford et al (2011:116) further asserts that in more than 100 countries in the world it is only possible to be fully qualified [registered] as a professional accountant or auditor after completion of a minimum period of practical work experience. In addition, Crawford et al (2011:116) states that criticism of [internal and external] assurance providers [auditors] proves that they are not work-ready when entering their profession as entering trainee accountants and auditors.

The concerns in respect of work-readiness mentioned above, the developments within the internal audit profession and the on-going collapses of business organisations, have resulted in exceptional burdens and expectations being placed on assurance providers. Internal auditing, as one such assurance provider, has not been exempt from these heightened expectations, with the result that entering trainee internal auditors are

increasingly expected to be closer to being work-ready (able to perform with minimal supervision) by the time they join the internal audit profession.

Globally, most professions have had to provide for a similarly increased demand for competencies and skills (Fourie 2005:3-10) from their entry level (entering) employees. According to Schreuder and Theron (2002:171-190), the competitive sustainability of most organisations depends on the quality and capabilities of adequately skilled and competent staff. Similar requirements exist for internal auditors, as internal auditing is one of the four critical role players in the combined assurance arena (Deloitte 2011:1-5).

Educational expectations in respect of the work-readiness of internal audit graduates are increasing. Zinser (2003:405-410) asserts that emphasis should be placed on "… better preparing graduates for the workplace", and that graduates require basic career skills in order to function effectively in the workplace. The following section explains the interventions implemented by the South African Government with regard to the improvement of the work-readiness of graduates.

2.2.1 Sector Education and Training Authorities

In an attempt to improve the work-readiness of graduates, the South African Government promulgated legislation that led to the establishment of Sector Education and Training Authorities (SETAs). These SETAs were instituted in terms of the Skills Development Act, 1988 (Act No. 97 of 1988) and the Skills Development Levies Act, 1999 (Act No. 9 of 1999). SETAs are required to oversee and facilitate skills and competence development within a particular business or economic sector (RSA 1998; RSA 1999; Fasset 2013).

The Finance and Accounting Services Sector Education and Training Authority (Fasset) is the SETA for Finance, Accounting, Management Consulting and other Financial Services (Fasset 2013). The vision statement of Fasset (quoted in full below) emphasises its role in respect of

promoting the work-readiness capabilities of entering trainee internal auditors (Fasset 2013):

“To influence the effective operation of the labour market, through effective skills development, so as to ensure the appropriate supply of competent labour necessary to compete in the global economy."

In order to give effect to the above vision statement, Fasset (in accordance with the Skills Development Act, 1998 (Act No. 97 of 1998) undertook to perform the following activities (Fasset 2013):

- “Develop a sector skills plan within the framework of the national skills development strategy for Fasset.
- Implement a sector skills plan.
- Promote learnerships.
- Liaise with the National Skills Authority as well as other SETAs.
- Report to the Director General of Labour on the implementation of its sector skills plan, its income and expenditure.
- Liaise with the employment services of the Department of Labour and education councils and other regulatory bodies in terms of education laws of South Africa in order to improve the quality of information.
- Facilitate the involvement of the relevant government departments in the activities of Fasset.”

As a result of the above activities, Fasset developed and introduced a Work-readiness Programme. Further initiatives and interventions by the RSA government are outlined in the following section.

2.2.2 A national objective to enhance graduate work-readiness

With its national objective being to enhance the employability (work-readiness) of university graduates in the RSA, the Department of Higher Education and Training (DHET) has established requirements in respect of

the content of educational programmes. These requirements include certain critical and exit level outcomes.

Critical outcomes are generic competencies which were designed to enable and underpin the development of specific generic skills in all academic programme qualifications registered with SAQA (Carmichael & Stacey 2006). The intention of the inclusion of these critical outcomes is to provide students with a foundation for "… lifelong learning; personal growth; honest business acumen; critical, creative thinking; and aesthetic appreciation" (Isaacs 2006; Carmichael & Stacey 2006). According to the results of the IIA's Common Body of Knowledge (CBOK) 2010 study, these abilities are important for internal auditors on all levels to possess (Bailey 2010). Curricula of educational programmes are required to include these critical outcomes (RSA 1995; RSA 1997; RSA 1998; SAQA 2000:18-19). Examples of critical outcomes are (IIARF 2007):

- to identify and solve problems;
- to be able to collect, analyse, organise and critically evaluate information; and
- an ability to reflect on and explore a variety of strategies to learn more effectively.

With regard to the prescribed exit level outcomes, the following outcomes have specific relevance to the research problem and to the research objective of this study (IIARF 2007):

- the ability to apply fundamental and specialist knowledge;
- the ability to perform scientific assignments; to embrace lifelong learning; to analyse and draw conclusions from case studies; and
- to achieve an understanding of – and to cultivate an ability to apply – professional ethics and practices.

Similar to the critical outcomes listed above, the exit level outcomes also comprise an important part of the competencies included in the IIA's Internal Auditor Competency Framework (IACF) (IIA (Global) 2013a) (the IACF is discussed in detail in section 3.2.5).

2.3 GRADUATENESS AND WORK-READINESS OF UNIVERSITY GRADUATES

The importance of the 'graduateness' and 'employability' of university students is becoming increasingly recognised in this fast-paced, technology-driven age (Coetzee 2012b; Griesel & Parker 2009:4-5; Noe, Tews & Dachner 2010:279-315). University graduates are faced with a number of divergent challenges, ranging from declining employment opportunities and decreasing job security, to an accelerating rate of technological change. These challenges are offset by an increasingly urgent need for graduates to accept personal responsibility for staying abreast of these changes, and for the quality of their professional capabilities, through up-skilling programmes, work-readiness training, and by embracing the idea of lifelong learning (Marock 2008:5-9; Pool & Sewell 2007:278, 280, 282,286-287). The inculcation of these capabilities that form the 'armour' of a university graduate is an important outcome of formal educational programmes, and define 'graduateness' (Barrie 2004:262).

2.3.1 Graduateness

Recognising graduateness as an essential attribute of students graduating from universities is not a new phenomenon. Since 1996 the government of the United Kingdom (UK) has invested time and money in developing interventions to improve the graduateness of students (Glover, Law & Youngman 2002:294). According to Glover, Law and Youngman (2002:294-295) graduateness can be defined as "… the effect on knowledge, skills and attitudes, of having undertaken an undergraduate degree", while employability (work-readiness) is defined as "… [an] enhanced capacity to

ensure employment". According to the Library Association (1996), graduateness can be seen as "… a set of transferable skills including planning, gathering, selecting, appraising, organising and recording achievements".

The London Guildhall University (1997) responded to the UK Higher Education Quality Council (HEQC) survey by providing a set of standards which expresses its understanding of graduateness. According to Glover et al (2002:296) these standards are:

- "The ability to research, analyse and present information coherently.
- Breadth of vision – the ability to continue learning; the ability to relate to a wide range of subjects; a command of a foreign language; a curiosity about other subjects; a breadth of knowledge.
- Expertise in their chosen field; the ability to achieve a balanced view; an open and flexible mind.
- A good knowledge of the English language – the ability to write and spell.
- Impetus to reach a goal in a disciplined manner."

Apart from programme-specific knowledge and technical skills, graduateness is achieved when students demonstrate an ability to employ work-appropriate technical and behavioural skills. The demonstration of capabilities in respect of these technical and behavioural skills is generally regarded as indicative of work-readiness in university graduates (Clanchy & Ballard 1995:155-166; Coetzee 2012b; Rigby, Wood, Clark-Murphy, Daly, Dixon, Kavanagh, Leveson, Petocz & Thomas 2009). These technical and behavioural skills form the foundation of personal growth and "… intellectual development cultivated by university education" (Steur, Jansen & Hoffman 2012).

According to Barrie (2004:262), Coetzee (2012b), and Steur et al (2012), the formative function of universities develops graduateness in three distinct domains:

- scholarship (students' attitude or stance towards knowledge);
- global and moral citizenship (students' attitude towards the world and their communities); and
- lifelong learning (students' attitude towards themselves).

Evaluating students against the criteria provided above enables one to ascertain the level of graduateness of those completing a university programme. It does not, however, imply that they are immediately work-ready, and it is the work-readiness of university graduates that forms the basis of this study, as was explained in sections 1.5 and 1.6.

2.3.2 Work-readiness

Work-readiness as a component of the graduateness of a student (Coetzee 2012b) refers to a sense of "self-directedness", or an ability to recognise one's "personal agency" in obtaining and keeping employment (refer to the definition of work-readiness in section 2.3.1). These elements are based on a collection of personal and career-related attitudes and attributes which, if essentially positive, can also provide a sense of job security (Rothwell, Jewell & Hardie 2009:152-161; Schreuder & Coetzee 2011:281-294). These attitudes and attributes include "… career self-management, career resilience, proactivity, emotional literacy and cultural competence" (Bezuidenhout 2010).

According to De la Harpe, Radloff & Wyber (2000:232-233), graduates who are currently entering the workplace do not have sufficient employability (work-readiness) skills. Fallows and Steven (2000:75-82) assert that universities play an important, if not key, role in transferring the technical and behavioural skills graduates require in order to be work-ready. The work-readiness of entering trainee internal auditors has become an increasingly important expectation and requirement by their employers. These increasing expectations have become a concern and a challenge for universities

offering formal internal audit educational programmes (Cox & King 2006:262; Griesel & Parker 2009:4-5).

According to Atkins (1999:274), universities should move away from focusing only on so-called work-readiness components and skills included in the curricula of their educational programmes. She asserts that a functional framework should be developed which reflects the likely characteristics of the future working life (the workplace) of graduates.

A functional framework is probably needed in the RSA, but in order to develop such a framework it is imperative to first identify and define the expectations and desires of the employers of university graduates – entering trainee internal auditors – in the context of this research. In addition, the likely characteristics of the future work environment that graduates will be faced with need to be identified and defined. The attempts to address these work-place characteristics could then form the basis for the development of such a framework.

2.4 SUMMARY AND CONCLUSIONS

In the context of the above theoretical background, the work-readiness concept is analysed in relation to the research objective. This theoretical background is further applied in the design of the research questionnaire (refer to Annexure D), which was used to obtain data for the empirical component of this research.

This chapter provided a clearer understanding of the importance of work-readiness in the context of the research problem and the associated objectives of the study.

Work-readiness interventions put in place by the RSA government endorse the importance of this research, stressing the fundamental role that universities should be fulfilling regarding the transfer of knowledge and skills to graduates.

The work-readiness of entering trainee internal auditors now appears to refer to their capability to apply the technical and behavioural skills that are needed in order to perform ‘entry level’ tasks. Employers expect these work-readiness skills to be provided by universities through their formal educational programmes.

The following chapter will analyse the evolution of the internal audit profession.

CHAPTER 3: THE HISTORY AND DEVELOPMENT OF INTERNAL AUDIT EDUCATION AND TRAINING

3.1 INTRODUCTION

The previous chapter conceptualised work-readiness in the context of the research problem and objectives of this study.

The objective of this chapter is to obtain a better understanding of the evolution of the internal audit profession regarding the global development of the professional training of internal auditors. In addition, this chapter will be used to explain the effect of these international developments on the internal audit profession in the RSA, and to assist in the design of the research questionnaire.

The conceptualisation and discussion of the development of education and training (referred to in the above paragraph) is important as it will provide a better understanding of what employer work-readiness expectations could be in the context of the research problem addressed by this study (refer to section 1.5).

With regard to the research objective and secondary questions (objectives) of the study (refer to sections 1.6 and 1.7), this chapter also examines the developments in the education and training of internal auditors in relation to the skills and competence requirements contained in the formal IIA guidance pronouncements.

The investigation of the education and training developments in the internal audit profession could well identify a need for the revision of internal audit educational guidance, globally and in the RSA. The revision of guidance that might be needed is important in order for the internal audit professional bodies (globally and in the RSA) to remain relevant, and could result in

heightened expectations on the part of employers in respect of the capabilities of the internal auditors they employ.

Figure 7 provides an illustration of the relation of this chapter (the black box) to the reset of the study.

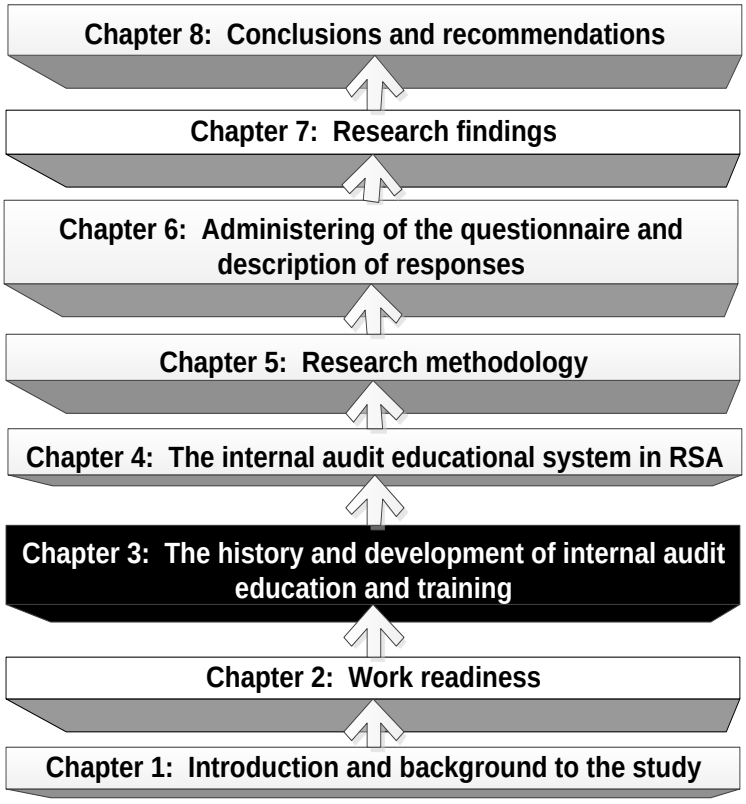


Figure 7: Chapter 3 in relation to the rest of the study

Table 4 includes a description of the abbreviations and acronyms used in this chapter.

Table 4: Abbreviations and acronyms used in Chapter 3

Acronym	Description
ARC	Academic Relations Committee
BTech	Bachelor of Technology
CAE	Chief Audit Executive
CBOK	Common Body of Knowledge
CEO	Chief Executive Officer

Acronym	Description
CFIA	Competency Framework for Internal Auditors
CHESA	Commission for Higher Education South Africa
CIA	Certified Internal Auditor
CPD	Continued Professional Development
CPUT	Cape Peninsula University of Technology
CURC	College and University Relations Committee
CUT	Central University of Technology
D Tech	Doctorate of Technology
DHET	Department of Higher Education and Training
DUT	Durban University of Technology
EDCOM	Education and Training Committee
GIA	General internal Auditor
HEQC	Higher Education Quality Committee
HEQF	Higher Education Qualifications Framework
HEQSF	Higher Education Qualifications Sub-framework
IACF	Internal Auditor Competency Framework
IAEP	Internal Auditing Educational Partnership
IAT	Internal Audit Technician
IIA	The Institute of Internal Auditors
IIA (Global)	The Institute of Internal Auditors – Global
IIA (SA)	The Institute of Internal Auditors - South Africa
IIARF	The Institute of Internal Auditors Research Foundation
IPPF	International Professional Practices Framework
IS	Information Systems
LSU	Louisiana State University
LSUCIA	Louisiana State University Centre for Internal Auditing
M Tech	Master of Technology
MFMA	Municipal Finance Management Act, 2003 (Act 56 of 2003)
ND	National Diploma
NMMU	The Nelson Mandela Metropolitan University
NQF	National Qualifications Framework
NWU	North West University
PFMA	Public Finance Management Act, 1999 (Act 1 of 1999)

Acronym	Description
PTP	Professional Training Programme
RSA	Republic of South Africa
SAICA	South African Institute of Chartered Accountants
SAQA	The South African Qualifications Authority
SOX	Sarbanes Oxley Act of 2002
SPPIA	Standards for the Professional Practice of Internal Auditing
TUT	Tshwane University of Technology
UJ	University of Johannesburg
UKZN	University of Kwazulu-Natal
UNISA	University of South Africa
UOT	University of Technology
UP	University of Pretoria
URL	Unique Resource Locator
US	University of Stellenbosch
VUT	Vaal University of Technology
Wits University	University of the Witwatersrand
WSU	Walter Sisulu University

The fact that internal auditing is a relatively young profession in comparison to other professions, and disregarding the debate on whether internal auditing is a profession (refer to section 1.1), means that there is limited information available in respect of education and training programmes insofar as they relate to users' expectations of the technical and behavioural skills reputedly transferred to graduates by universities through their formal internal audit educational programmes.

The following section provides a discussion of the available published information regarding the development of education and training.

3.2 THE GLOBAL HISTORY AND DEVELOPMENT OF INTERNAL AUDIT EDUCATION AND TRAINING

Since the early days of the internal audit profession, and particularly since its formal inception in 1941 (Ramamoorti 2003; Ziegenfuss & Ramamoorti 2004), education and training have been issues that have increasingly received attention. From the start, the IIA has had as an objective the promotion of the profession to colleges and universities (Ramamoorti 2003; Ziegenfuss & Ramamoorti 2004), aiming thereby to grow the internal audit profession. The process was most successful in the period between 1950 and 1960. However, according to Ziegenfuss and Ramamoorti (2004), the success rate dropped dramatically during the 1960s and 1970s.

The development of internal audit education, with the participation of the IIA in university-related activities, has experienced both prosperous and lean times: at a certain stage in the 1960s the times were so lean that internal audit education came to an almost complete stand-still. The development of internal audit education can be divided into four distinct phases or time frames (Ramamoorti 2003; Ziegenfuss & Ramamoorti 2004):

- 1941 to 1959 – a boom period with substantial activity;
- A slow-down period with almost no development activity: 1960 to 1972;
- Renewed interest in the development and promotion of internal audit education: 1973 to 1980; and
- A second boom period in internal audit education: 1981 to the present.

In the following sections the significant developments in internal auditing as a profession, and in the development of teaching methods for internal auditing that occurred during the above four time periods, will be discussed.

3.2.1 1941 to 1959 – a boom period with substantial activity

It was one of the founding objectives of the IIA to get the internal audit profession recognised as such by universities and colleges. At this stage the main focus of the IIA was to emphasise (for the benefit of the universities' image of being the nurturers of intellectualism) the ideas and concepts (knowledge) to be taught at universities. This occurred at the expense of practical technical and behavioural skills and training *per se,* which were seen as belonging in trade apprenticeships and to articles of clerkship programmes.

According to Ziegenfuss and Ramamoorti (2004) William H. Garbade, the IIA's President from 1943 to 1944, recognised that there was an urgent need for an educational committee. Garbade however also indicated that the establishment of such a committee should be postponed until the end of World War II. However, during 1944 and 1945 the *first educational committee* was established. The establishment of this educational committee was the only remarkable development during this period.

During 1947 the IIA's newly elected president, Earle Cunningham, noted that during his term of office the IIA would be entering a new period which he identified as the "educational period" (Ziegenfuss & Ramamoorti 2004; Swinkels 2012:27-28). The first four universities identified by the IIA to develop internal auditing programmes were the University of Toronto, the University of Dayton, the University of Miami, and McGill University in Montreal. The internal auditing course offered at McGill in Montreal was regarded as the most successful, more than 70 students enrolling in the first academic year.

During 1950 the IIA approved a special (discounted) membership subscription rate for educators in an attempt to have more educators join its ranks. At this stage there was still a divide between the internal audit educators and the internal audit profession. As a result, in 1952 an internal

audit education survey was conducted by Van Voorhis (1952:484-489). The results of this survey indicated that in the United States of America (USA) 16 universities were teaching internal audit courses. A further 13 universities indicated that they were planning to offer internal audit courses in the then near future (Van Voorhis 1952:484-489).

An interesting finding by Van Voorhis's research was that of the 16 universities that offered internal auditing courses, 50% made use of full-time university personnel, while the other half made use of part time lecturers, drawn from local internal audit activities, and involved in public practice, to teach internal auditing (Meigs 1951:518-523; Van Voorhis 1952:484-489; Ramamoorti 2003). During 1953 another survey of internal audit education was conducted: this revealed that now 25 universities were offering internal audit courses and that 18 more were aspiring to do so (Van Voorhis 1952:484-489; Ziegenfuss & Ramamoorti 2004; Swinkels 2012:27-28).

This decade of internal audit education (1951-59) ended with the IIA still being very active in the development of and support for internal audit education. By 1959 more than 30 universities or colleges offered internal audit courses. One can thus conclude that the foundation for internal audit education had been effectively laid during the decade of the 1950s, and that the educational basis underpinning internal auditing as a profession was thereby formalised (Ramamoorti 2003; Swinkels 2012:27-28).

3.2.2 A slow-down period with almost no development activity: 1960 to 1972

According to Ziegenfuss and Ramamoorti (2004), the main activities of the IIA's educational committee during this period were focused on matters pertaining to the development of individual internal auditors. Close to the end of this slow-down period, Neumann (1979:464) conducted a survey in order to determine how many universities and colleges were still offering internal auditing in the USA. His survey revealed that only two schools were offering internal audit courses (Neumann 1979:464).

Reasons provided for this drastic decline in the number of universities and colleges teaching internal auditing were: (a) that public accounting represented the primary job market; (b) that too few internal audit instructors (teachers/lecturers) had internal audit experience, and (c) that financial auditing was a sufficient basis upon which to practice internal auditing (Ramamoorti 2003; Ziegenfuss & Ramamoorti 2004).

From the decline in formal teaching activities during this period one can deduce that unless the IIA as a professional body remains focused on and involved with the development of and support for internal audit education at universities and colleges, there will be no successful and sustainable development and growth of the internal audit profession. Towards the end of this period, as a positive contrast with declining enrolment numbers, a common body of knowledge was developed which was to become the basis for the development of the professional standards of the IIA.

3.2.3 Renewed interest in the development and promotion of internal audit education: 1973 to 1980

The CBOK developed during 1972 led to the development of the CIA programme and its associated examination. Apart from the development of the professional certification programme, the passing of the Foreign Corrupt Practices Act of 1977 in the USA re-established the internal audit profession as a valuable participant in the business environment (Ramamoorti 2003; Ziegenfuss & Ramamoorti 2004; Johnson 2011), which in turn gave rise to another period during which the internal audit profession experienced substantial growth.

3.2.4 A second boom period in internal audit education: 1981 to the present

Re-starting in 1981, the IIA, through its educational committees and sub-committees, renewed its efforts to assist with the education of internal auditing at universities and colleges, engaging in the development of internal audit curricula and course syllabi. The IIA, in cooperation with the Louisiana State University (LSU), launched a pilot programme in 1984 for the teaching of internal auditing (Ramamoorti 2003; Ziegenfuss & Ramamoorti 2004).

One of the most profound commitments to internal audit education by the IIA came into effect during 1984 when Dr Glenn Sumners, the Director of the Louisiana State University's Centre for Internal Auditing (LSUCIA), was instrumental in the endorsement of the university's internal audit programme by the IIA (Ramamoorti 2003; Ziegenfuss & Ramamoorti 2004; Johnson 2011). Today, the LSUCIA's internal audit programme is one of the leading programmes in internal audit education on offer globally and is endorsed as a Centre of Internal Audit Excellence in terms of the IIA's IAEP programme.

The curriculum of the LSUCIA's internal audit programme was developed to include the transfer of theoretical knowledge (traditional university learning and a part of the IIA's Common Body of Knowledge) as well as *on-the-job training* encouraging internal audit practitioners to participate in internship programmes (Ramamoorti 2003; Ziegenfuss & Ramamoorti 2004, Johnson 2011). This activity, for the first time, emphasised the IIA's view of concerning the importance of practical skills (technical and behavioural) – in addition to those obtained through classroom-based internal audit educational programmes offered by universities and colleges – and its commitment to transferring these skills successfully.

The 1984 endorsement of the LSUCIA's internal audit programme was regarded as one of the IIA's biggest commitments to internal audit education yet. From this point onwards the IIA continuously increased its contributions and commitments to internal audit education. This expanding commitment is

further demonstrated by the IIA's developing of materials and publishing of textbooks: for example, two textbooks were published, with *The Practice of Modern Internal Auditing* by Sawyer (Sawyer & Dittenhofer 1996) being regarded as a "very useful textbook" for teaching internal auditing and lately known as *Sawyer's Internal Auditing.* More textbook publications followed, and universities and colleges were then able to teach internal auditing from reputable resources.

More proof of the IIA's commitment included the organisation of internal auditor education and training colloquiums, hosted by the IIA's then College and University Relations Committee (CURC), now known as the Academic Relations Committee (ARC). In addition, the IIA demonstrated its support for and commitment to internal audit education by making doctorate dissertation grants to one academic per annum (Ramamoorti 2003; Johnson 2011; Ziegenfuss & Ramamoorti 2004; Swinkels 2012:27-28).

During 1986 the prestigious IIA 'Educator of the Year Award' was introduced. This award continues to be made to a single educator who has made a substantial contribution to internal audit education. It is presented, and the recipient honoured, during the annual International Conference of the IIA (Ramamoorti 2003; Johnson 2011; IIA 2011a).

The literature cited above illustrates that the IIA now regards internal audit education as one of the most important factors necessary to sustain the existence of the internal audit profession. In addition to its involvement in formal tertiary education, the IIA introduced a separate mark of excellence, the achievement of which allows easy recognition of internal auditors' professional competence (Johnson 2011; IIA 2011a). The Certified Internal Auditor (CIA) programme was launched by the IIA in 1974.

The profession now had a professional designation, a code of ethics, professional standards and an active professional body – key attributes associated with a globally recognised profession (IIA 2011a). As stated by Sawyer (1999:6), certification is "… an important element in validating the status and prestige of internal auditing". The first CIA examination took place in August 1974, and 122 candidates passed all its four parts to become the internal audit profession's first CIAs (Neumann 1979:464; Sawyer 1999:6).

Following the successful outcome of the 1972 CBOK study, the IIA embarked on a continuous CBOK research programme which is currently managed by the IIA Research Foundation (IIARF). The main aim of the CBOK research programme is to expand the IIA's understanding of the way in which internal auditing is practiced internationally (IIARF 2007:1). The CBOK studies that have been conducted since 1972 are listed in Table 5. The growing number of participating countries indicates the progress towards globalisation of internal audit research.

Table 5: CBOK studies conducted by the IIARF.

CBOK study number	Year of the CBOK study	Number of participating countries	Number of respondents
I	1972	1	75
II	1985	1	340
III	1991	2	1163
IV	1999	21	136
V	2006	91	9366
VI	2010	107	13582

(Source: IIARF 2007:4; Bailey 2010:xii)

A significant shift in perspective took place after 1991, with the globalisation of the profession being rapidly recognised. Up to and including the 1991 CBOK study, only respondents from the USA and Canada were involved, while the CBOK 2006 study was the first commissioned by the IIARF that invited the IIA's entire international membership to participate.

As indicated in Table 5, respondents from more than 90 countries participated in the survey, generating more than 9000 useable responses. Participation continued to increase with the CBOK 2010 study generating more than 13 000 responses from participants from more than 100 countries (IIARF 2007:4; Bailey 2010:xii). This was the biggest ever CBOK study undertaken by the IIA.

According to the IIARF (2007:3-4), the 2006 CBOK study brought the following specific issues to the attention of the internal audit profession and its members:

- The CBOK 2006 study highlighted the diversity of the environments within which internal auditors work;
- the CBOK 2006 results indicated the need for educational material; and
- the CBOK 2006 study contributed to the process of development of appropriate and applicable professional standards.

The second point above recognises the significance of the CBOK 2006 study with regard to identifying the need to develop education and training materials and processes for the internal audit profession. Table 5 (on page 52) also shows the rapid growth the IIA has experienced since 1991, with the number of countries that participated in the subsequent CBOK studies, increasing from 21 in CBOK 1999 to 107 in CBOK 2010, and responses rising from a mere 136 in CBOK 1999 to more than 9 000 in CBOK 2006 and 13 000 in CBOK 2010 – confirming the rapid growth and globalisation trend that the IIA has experienced since 1991.

The results of the above CBOK studies led to the development of the Internal Auditor Competency Framework (IACF), which was initially referred to as the 'Competency Framework for Internal Auditors' (CFIA). The following section briefly outlines the importance of the IACF in respect of the development of education and training in the internal audit profession.

3.2.5 The Internal Auditor Competency Framework

The IIA's IACF has been compiled and developed by internal audit specialists using information obtained from the continuing programme of CBOK studies (refer to Table 5 on page 52). The aim of the IIA's competency framework is to define the fundamental competencies required to be successful in internal auditing.

The IIA states that a competency is "… the ability of an individual to perform a job or task properly, being a set of defined knowledge, skills and behaviour" (IIA (Global) 2013a:1). There are two specific deficiencies in the IIA's Internal Auditor Competency Framework, which have jointly prompted this study. Firstly, provision is made for only three broad levels of internal auditor, namely: internal audit staff, internal audit management, and the chief audit executive (CAE); and secondly, the framework focuses on providing guidance in respect of *output* and not of *input*.

A framework aligned with *input* instead of output could result in internal audit educators placing too high a value on such a framework, resulting in it being used as a benchmarking tool when developing and updating the curricula of their formal internal audit educational programmes. No provision is made for an *entering internal audit trainee* level, or its level-appropriate competencies. In spite of this deficiency, the IIA maintains (IIA (Global) 2013a:1) that the IACF is designed to be used by:

- Internal audit practitioners;

- developers of internal audit educational programme and training courses;
- employers of internal auditors;
- the IIA (Global), and its country-specific institutes;
- internal audit students;
- internal audit educators; and
- recruiters and human resource practitioners.

This deficiency in the IACF could well have been the reason why universities are believed to be omitting (or not offering on appropriate capability levels) important work-readiness skills and competencies (technical and behavioural skills) from their formal internal audit educational programmes. This in turn introduces the possibility of a gap between the expectations of the internal audit profession – the employers of the entering trainee internal auditors – and what the educators of these first year trainees believe to be necessary to achieve graduateness and thus successful employment. Table 6 lists the 10 core competencies highlighted by the IIA's global IACF (IIA (Global) 2013a:1).

Table 6: The IIA's ten core competencies

Competency area	**Limited detail**
Professional ethics	• Promotes and applies professional ethics
Internal audit management	• Develops and manages the internal audit function
IPPF	• Applies the International Professional Practices Framework
Governance, risk and control	• Applies a thorough understanding of governance, risk and control appropriate to the organisation
Business acumen	• Maintains expertise of the business environment, industry practices and organisational factors
Communication	• Communicates with impact
Persuasion and collaboration	• Persuades and motivates others through collaboration and cooperation
Critical thinking	• Applies process analysis, business intelligence and problem solving techniques
Internal audit delivery	• Delivers internal audit engagements
Improvement and innovation	• Embraces change and drives improvement and innovation

(Source: IIA (Global) 2013a:1)

Figure 8 illustrates the structure of the IIA's IACF, specifically indicating the relation of the ten core competencies to specific competency areas. A clear distinction is made between personal [behavioural] and technical skills (behavioural and technical skills in the context of this study). Personal skills include communication, persuasion and collaboration, and critical thinking. The technical skills category includes knowledge of the IPPF, governance, risk and control, and business acumen.

(Source: IIA (Global) 2013a:2)

Figure 8: Structure of the IIA Competency Framework

The CBOK 2010 survey identified common core competencies. These are the competencies that were ranked amongst the top five 'most important' for each of the three levels of professional position used in the CBOK 2010 survey. The survey categorised internal auditor competencies under 'general competencies', 'behavioural skills', and 'technical skills'. The common core competencies for each of the three categories, according to the CBOK 2010 survey, are (Bailey 2010:v-xii):

- General competencies [skills]
  - communication skills – including oral, report writing and presentation;
  - problem identification and solution skills; and
  - keeping up-to-date with industry developments, regulatory changes and professional standards.
- Behavioural skills
  - confidentiality; and
  - communication – sending clear messages.
- Technical skills
  - understanding the business; and
  - risk analysis and control assessment techniques.

The CBOK 2010 results show the relative importance that the internal audit profession places on especially personal [behavioural] skills. Communication skills were ranked as the most important skill set by respondents in both the CBOK 2006 and CBOK 2010 studies (Bailey 2010:7). This high rating could be attributable to past experiences of internal auditors, and could indicate that they realise that there is a deficiency in their own behavioural skills capabilities. When referring to communication, the term is typically associated with all skills relating to communication, namely personal skills, Interpersonal skills and intra-personal skills.

The above discussion supports the argument that internal auditing is a relatively new and emerging profession in that there is a substantial amount of development still needed in terms of fundamental education and training – education and training that is essential to address the need for adequately educated and skilled (work-ready) entering (first year) trainee internal auditors that the internal audit profession demands. In addition, by improving the quality of graduate skills, and thereby improving employability, it should become easier to attract greater numbers to enrol for the courses on offer, thus effectively addressing the current shortage of truly work-ready graduates. It should be noted that the exceptional growth in the numbers and diversity of services offered by the profession, places the providers of internal

audit educational services at risk of not staying abreast in respect of the skills and competence expectations or requirements of potential employers.

Another deficiency in the current professional guidance concerning the internal audit profession in the RSA is that no formal requirement exists for entering (first year) internal auditors to undergo any form of mandatory traineeship (articles of clerkship), as is the case with the majority of accountancy-related professions (IIA 2011b). Although mandatory traineeship falls outside of the scope of this research, it must be noted that it forms a successfully tried and tested component of the education and training frameworks for students in other facets of the accountancy-related professions, both in the RSA and globally. The merits of introducing a mandatory trainee internal auditorship should be borne in mind when areas for further research are considered (refer to section 8.7.2). The following section discusses the development of internal audit education and training in the RSA.

3.3 THE HISTORY OF INTERNAL AUDIT EDUCATION AND TRAINING IN THE REPUBLIC OF SOUTH AFRICA

Globally, the development of internal audit education has occurred in distinct stages, as indicated in sections 3.2.1 through 3.2.5. Initially, the primary focus was on the theory-based educational component of the profession (with the objective of selling the internal audit profession to academics), with significantly less emphasis on the practical capabilities of prospective internal auditors.

3.3.1 Development and growth of the internal audit profession in the Republic of South Africa

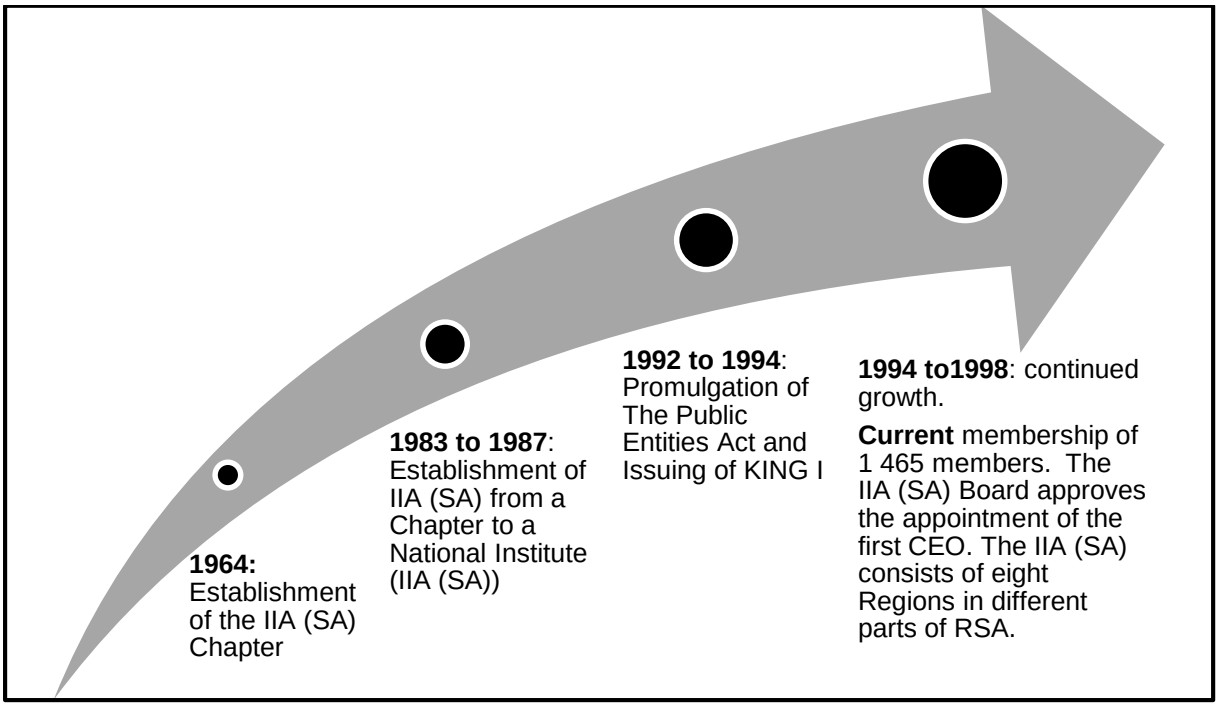
Global developments as discussed in the previous sections also impact on the development of the internal audit profession in the RSA.

It is mainly as a result of this dearth in training in the technical and behavioural skills – essential for the development of effective internal auditors – that this study's research question (problem) was identified (refer to section 1.5). The development of education and training programmes for the internal audit profession is integral to the growth of the profession. The growth of the profession can best be illustrated by the growth in membership numbers (refer to Table 8 and to Figure 11 on pages 65 and 66 respectively, for the latest information on membership growth).

Van Wyk, Hodson, Marx and Du Toit (1998:20-22) identify the following significant milestones in the development of the IIA (SA) and the events that specifically impacted the growth and importance of the internal audit function in business and government in the RSA:

- 1964 – establishment of the IIA (SA) as a Chapter of the IIA;
- 1983 – promotion of the IIA (SA) from a Chapter to a National Institute (IIA (SA));
- 1987 – continued growth and development (membership increases from 699 to 957);
- 1992 – promulgation of The Public Entities Act which leads to an increased demand for internal auditing;
- 1994 – the publication of the first King Report on Corporate Governance (King I);
- 1994 to 1998 (the time of publication of the 1998 study by Van Wyk et al 1998:20-21) – continued growth. 1998 membership: 1 465 members. The IIA (SA) Board approves the appointment of its first Chief Executive Officer (CEO), Mr Phil Hodson. At this stage, the IIA (SA) consists of eight Regions centred in different provinces of RSA; and
- 1999 to the present – see Figure 10 on page 61.

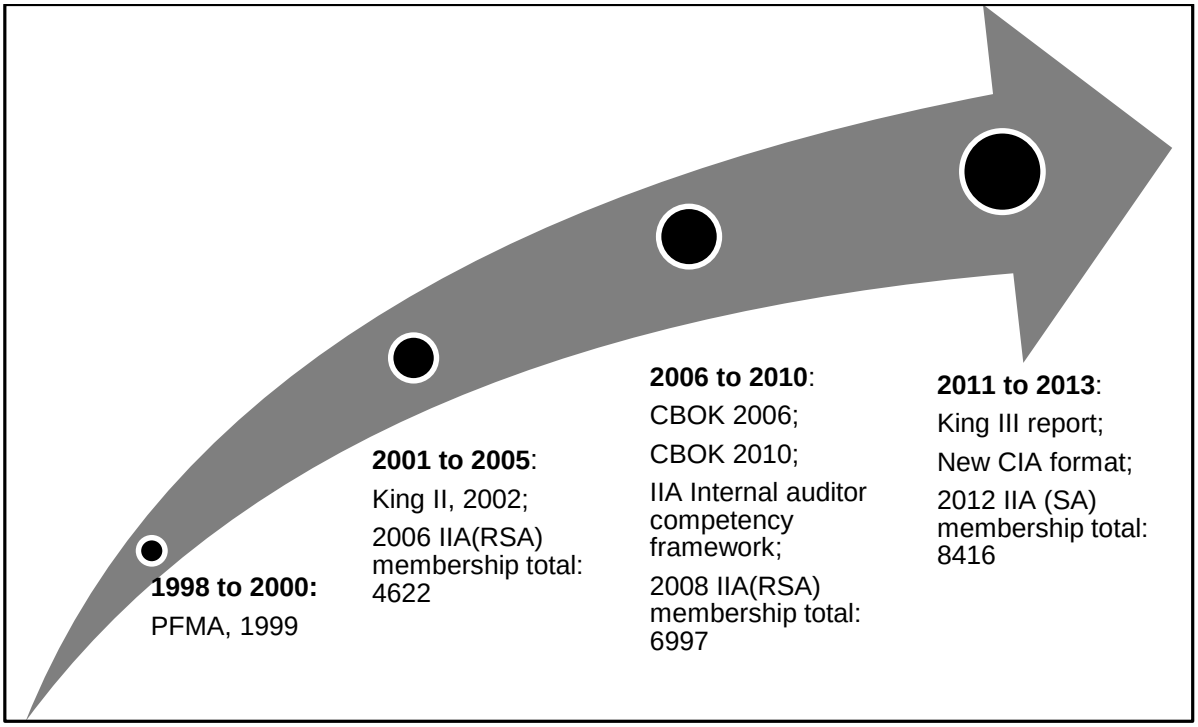
Figure 9 graphically illustrates the vigorous growth of the internal audit profession in the RSA for the period 1964 to 1998 (Van Wyk et al 1998:20-21). In parallel with the growth of the profession has been the growth of the education and training activities in internal auditing, provided both by tertiary educational institutions in the RSA, and by the IIA itself.



(Source: Van Wyk et al 1998:20-21)

Figure 9: Development and growth of the internal audit profession in the RSA up to 1998

Since the publication of the research by Van Wyk et al (1998:20-21), there have been more substantial developments both in the RSA and globally (see Figure 10 on page 61), which have stimulated growth in the numbers of internal auditors, and in the scope of their responsibilities. In addition to the above milestones, the Public Finance Management Act, 1999 (Act 1 of 1999), the third King Report on Governance for South Africa (King III) (IOD 2009), and the USA Congress' Sarbanes Oxley Act of 2002 have been introduced (SOX 2002). In addition, in 1988 the IIA's Research Foundation (IIARF) published its first Competency Framework for Internal Auditors (referred to as CFIA). Soon hereafter the IIA (SA) engaged in tailoring the CFIA to include South African content.



(Source: IIA (SA) 2010c:24; Coetzee 2011; IIA (SA) 2012:28)

Figure 10: Development and growth of the internal audit profession in the RSA from 1999 to 2013

The issuing of the CFIA in 1998 was an important milestone for the development of internal auditor education, specifically in that all internal audit education and training activities throughout the world had, for the first time, a formal framework against which to benchmark their educational programmes.

In terms of the development of education and training in the RSA, the IIA (SA) board also appointed a non-executive director tasked with overseeing the board's Education and Training' portfolio and another non-executive director was appointed to be responsible for the CIA Programme portfolio. It is thus clear that the IIA (SA) has demonstrated its commitment to and support for education and training as an important and integral part of the internal audit profession in the RSA.

In addition to its involvement in education and training in the RSA, the IIA (SA) has since the middle of the 1990's played important roles in all aspects of the operations of the IIA globally. The IIA (SA) has representation on several committees of the IIA (Global), including the Academic Relations Committee (ARC) (which has the most relevance to this study) (IIA 2010b).

The following section provides details on the development of internal audit education and training in the RSA.

3.3.2 Development of internal audit educational programmes in the Republic of South Africa

The former technikons (now referred to as universities of technology) were the first academic institutions to offer internal audit educational programmes in the RSA. Even before 1990 the technikons in the RSA all offered National Diplomas (NDs) based on a common curriculum. The former Technikon Pretoria was the convener technikon, with the responsibility to administer the documentation of the curriculum for the ND Internal Auditing on behalf of all technikons. The IIA (SA) was not part of the development of this curriculum for these national qualifications, but educators soon realised that they needed a professional home for their graduates.

As part of the structured internal audit educational programme the technikons offered a Higher Diploma, a Master's Diploma (MDipTech), and a Laureate (on doctorate level). In 1994 the Higher Diploma: Internal Auditing was replaced by the Bachelor's of Technology (BTech) Internal Auditing, as is it is currently known, and this is now offered by all Universities of Technology and Comprehensive Universities (IEASA 2004; CHE 2010:2-3).

The current structure of the academic programme of the Universities of Technology comprises a Diploma: Internal Auditing, a BTech Internal Auditing, a *Magister Technologiae* (M Tech) Internal Auditing, and a *Doctor Technologiae* (D Tech) Internal Auditing (IEASA 2004; CHE 2010:2-3; SAQA 2011b). The curricula of the former technikons' internal auditing programmes were revised during the period 1994 to 2000 in order to align them with the CFIA, and with the syllabus of the CIA certification programme.

Since the early 1990s various academics in the RSA have been approached to become members of the IIA (SA) Education and Training Committee (EDCOM). This has led to (traditional) universities in the RSA also showing interest in offering internal audit programmes, and in some instances to include internal audit modules/courses in the curricula of their accounting educational programmes. The first universities to offer internal audit programmes were the University of Pretoria and UNISA, which currently offer the only two IIA endorsed programmes in the RSA.

Table 7 contains a list of universities in the RSA currently offering internal auditing as a full educational programme. Universities teaching internal auditing courses as part of an accounting educational programme are not included in this table, as the information in respect of the inclusion of internal audit courses in the curricula of these institutions is not available on the SAQA internet website.

Most of the internal audit education courses and programmes in the RSA are offered by the business or economic sciences faculties of the educational institutions, with the majority being controlled by the universities' Departments of Accounting and Auditing (SAQA 2011b; Chetty 2011).

Table 7: South African educational institutions offering internal auditing qualification programmes

University Name	Internal auditing programme qualifications
Cape Peninsula University of Technology (CPUT)	• Diploma: Internal Auditing • BTech Internal Auditing • MTech Internal Auditing • DTech Internal Auditing
Central University of Technology (CUT)	• Diploma: Internal Auditing • BTech Internal Auditing • MTech Internal Auditing • DTech Internal Auditing
Durban University of Technology (DUT)	• Diploma Internal Auditing • BTech Internal Auditing
Nelson Mandela Metropolitan University (NMMU)	• Diploma: Internal Auditing • BTech Internal Auditing • Post graduate Diploma in Internal Auditing
Tshwane University of Technology (TUT)	• Diploma: Internal Auditing • BTech Internal Auditing • MTech Internal Auditing • DTech Internal Auditing
University of Johannesburg (UJ)	• Diploma: Internal Auditing • BTech Internal Auditing
University of Pretoria (UP)	• B Com Financial Sciences • B Com Honours Internal Auditing • M Com Internal Auditing • M Phil Internal auditing • D Com Internal Auditing • PhD Internal Auditing
University of South Africa (UNISA)	• Diploma: Internal Auditing • BTech Internal Auditing • MTech Internal Auditing • DTech Internal Auditing • Postgraduate diploma in Internal Auditing
Vaal University of Technology (VUT)	• Diploma: Internal Auditing • BTech Internal Auditing • MTech Internal Auditing • DTech Internal Auditing
Walter Sisulu University (WSU)	• Diploma: Internal Auditing • BTech Internal Auditing

(Source: SAQA 2011b; TUT 2011; UJ 2011; UP 2013a)

3.3.3 Membership growth in the internal audit profession

Table 8 records the growth in membership of the IIA, both locally (RSA) and internationally. In the period between 2004 and 2007 the IIA (SA) showed a 70% growth rate, a significantly greater rate than the 29% for the 2004 period and the 26% for the 2008 period (Coetzee 2011).

Table 8: Membership growth of the IIA for the period from 2002 to 2011/12

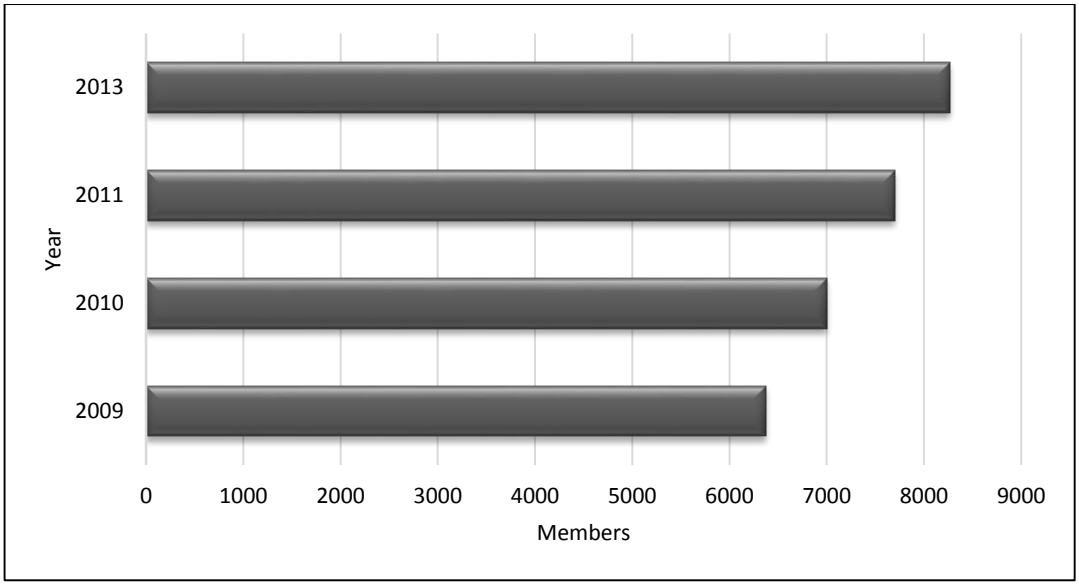
	2004		2006		2008		2010		2012	
	RSA	**Global**	**RSA**	**Global**	**RSA**	**Global**	**RSA**	**Global**	**RSA**	**Global (*2011)**
Members	2625	99 433	4622	135 500	5819	164 815	6997	168 617	8416	175 968
%-growth	29%	21%	70%	36%	26%	22%	20%	2%	20%	4%

* Data taken from the 2011 Annual Report of the IIA as the 2012 Annual Report was not available at the time this table was prepared.

(Source: IIA (SA) 2010c; Coetzee 2011; Erasmus 2011; Johnson 2011; Stanley 2011; IIA 2011c:8; IIA (SA) 2012: 28)

Figure 11 illustrates the steady membership growth of the IIA (SA) from 2009 to 2012. The average growth percentage per annum for the IIA (SA) was 33% compared to 17% for the IIA worldwide.

The rapid growth of the internal audit profession in the RSA has placed a burden on the universities in the country to produce additional qualified internal auditors. While the membership of the IIA (SA) has grown phenomenally fast, as can be seen from Table 8 (Coetzee 2011; Spencer 2000), the annual growth in internal audit student intake and graduate numbers at universities has not come near matching this rate, and the demand for entering trainee internal auditors is nowhere near being satisfied.



(Source: IIA (SA) 2010c:24; Erasmus, 2011; IIA (SA) 2012:28)

Figure 11: IIA (SA) annual growth in membership

The rapid growth in numbers, the diversity of functions within the profession, and the growing number of internal audit educational programmes mentioned above (not all of which comply with SAQA's guidelines, or the IIA's accreditation criteria), could be a reason for the existence of a gap between the expectations of those in internal audit practice, and the actual curriculum content of universities teaching trainee internal auditors.

In the following section the current situation and the development of informal internal audit training, as an extension of the academic learning (formal education) undertaken by internal auditors in the RSA, are discussed.

3.3.4 Internal audit training in the Republic of South Africa

The IIA (SA) has invested substantial resources in the development of training courses for its members. Both formal educational programmes and on-the-job training are now regarded as important aspects of an internal auditor's commitment to life-long learning, and the IIA (SA) has accepted its responsibility to be part of this process. The IIA (SA) has developed a career path, as an official framework, illustrating the typical options that an

individual could consider in an internal auditing career (see Figure 12 on page 68).

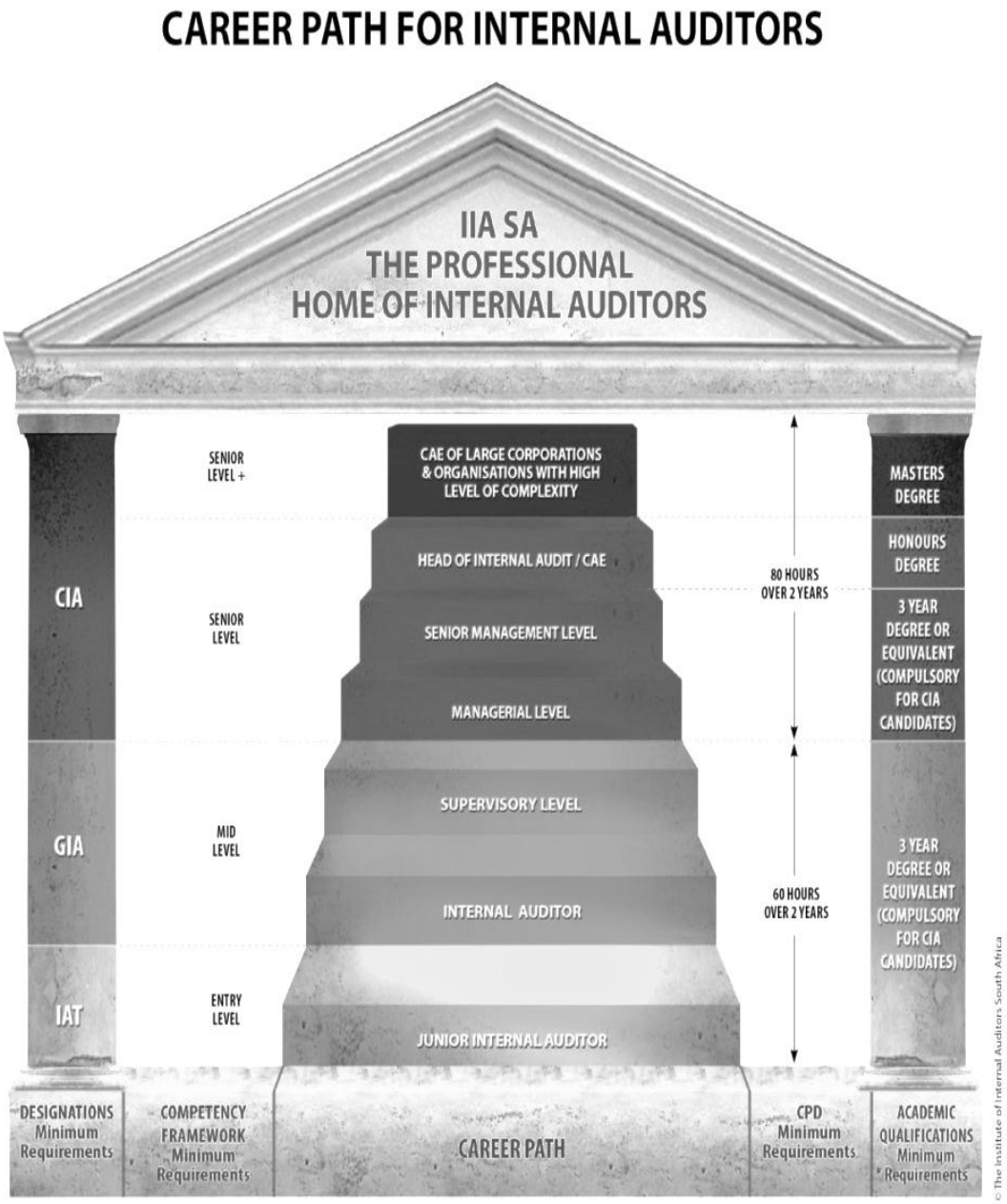
Included in the career path presented by the IIA (SA) are academic qualifications, professional designations, and continuous professional development (CPD) programmes, all conforming to the requirements of the IACF. However, neither the IACF nor the career path presented by the IIA (SA) provide guidance on the knowledge and skills *per se* that entering trainee internal auditors need to have mastered in order to be effective employees.

The career path commences at the level of junior internal auditor. A junior internal auditor can, according to the career path, be a person with either a three year qualification (bachelor's degree or diploma), or a four year qualification (honours degree, postgraduate diploma or BTech degree), but no mention is made of any requirements for practical experience that would qualify one to become a junior internal auditor. It is important to bear in mind that the IIA (SA) has not yet updated their career path, so it does not conform to the Higher Education Qualification Framework (HEQF) and Higher Education Qualification Sub-framework (HEQSF).

In terms of the HEQF and HEQSF it would make more sense to refer to National Qualification Framework (NQF) levels instead of referring to a qualification in terms of a type and/or descriptor such as diploma, degree, honours degree, *et cetera*. Chapter 4 provides an outline of internal audit education in the RSA, and includes an explanation of the NQF Levels in terms of the HEQF and HEQSF.

The CPD component of the IIA (SA) career path consists of a number of courses that cover a wide range of internal audit related topics (such as risk management, corporate governance, fraud, *et cetera*). The courses have been developed to provide training opportunities for all the levels on the career path. The IIA (SA) has been offering these training courses for more than 15 years, and the number of internal auditors enrolling for these courses

has increased steadily over the past years (IIA (SA) 2010b; IIA (SA) 2010c:27).

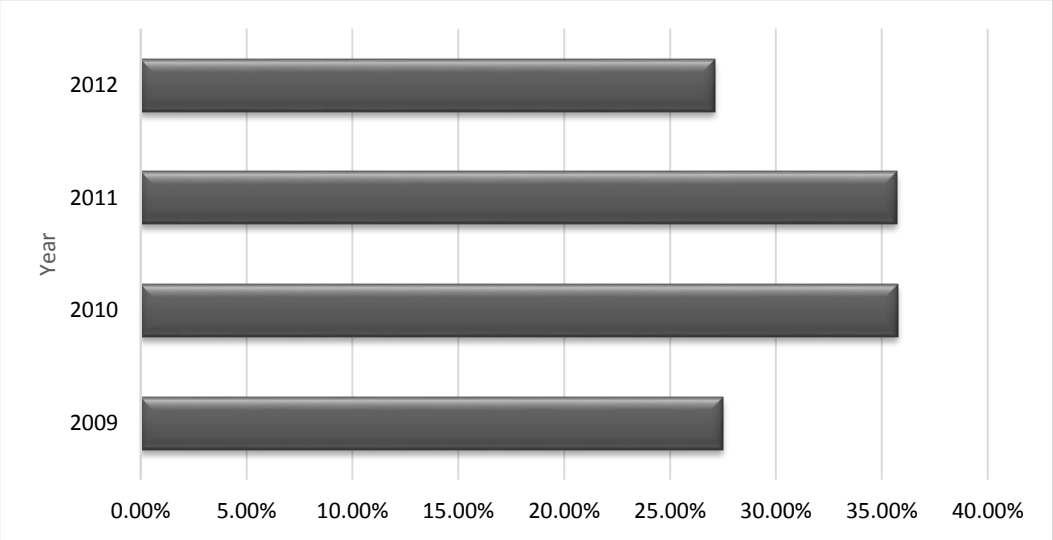


(Source: IIA (SA) 2010c:25)

Figure 12: IIA (SA): Career path

Figure 13 illustrates the increased tendency for internal auditors to take IIA (SA) internal audit training courses. These training courses are offered in the following main learning areas or fields of specialisation (IIA (SA) 2010c):

- technical skills – ranging from basic entry-level courses to advanced technical skills;
- the public sector – covering topics that have specific reference to the public sector, focusing on the requirements of the South African Public Finance Management Act (PFMA) (Act No. 1 of 1999) and the Municipal Finance Management Act (MFMA) (Act 56 of 2003);
- topical issues – training courses on current critical and emerging issues;
- behavioural skills – equipping internal auditors with the essential soft skills in order to improve their overall competence; and
- information systems – providing internal auditors with expertise in aspects of information systems (IS) and processes, and certain computer assisted auditing techniques.



(Source: IIA (SA) 2010c:27; IIA (SA) 2012:33)

Figure 13: Total annual percentage of internal auditors taking IIA (SA) training courses

3.3.5 The Institute of Internal Auditors (South Africa)'s Professional Training Programmes

The IIA (SA) is the first of the IIA's global network of Institutes to introduce a formal, structured programme according to which internal auditors can gain practical experience or training. These facilities are referred to by the IIA (SA) as its Professional Training Programmes (PTPs).

The IIA (SA) defines these PTPs as work-based learning programmes, which could be compared with 'articles of clerkship' or 'training contracts'. Currently, successful completion of the PTPs results in two designations, which are registered with the SAQA and accredited by Fasset of the RSA.

The two designations (also referred to as learnerships) are: (1) – the entry level Internal Audit Technician (IAT), and (2) – General Internal Auditor (GIA) (IIA (SA) 2011). These IIA (SA) learnership programmes are regarded as being highly effective and successful (IIA (SA) 2011).

3.3.6 The internal audit certification programme

The Certified Internal Auditor (CIA) Programme is currently the highest level of certification offered by the IIA (Global). According to the IIA, "… the CIA designation is the only globally accepted certification for internal auditors and remains the standard by which individuals demonstrate their competency and professionalism in the internal auditing field" (IIA (Global) 2013b).

Prerequisites for this certification programme are dictated by the IIA, and require a three year degree or equivalent in order to register for the programme and to take the examination. In the RSA, a person with a three year internal audit qualification is currently allowed to register and sit for the CIA examinations, but will only be certified as a CIA upon passing all four parts of the CIA examination, and in addition, has to successfully complete a compulsory period of *three* years' internal audit experience (IIA (SA) 2011).

Since 2013 the revised CIA qualifying examination consists of three parts (previously it was a four part examination), each part addressing specific sections of the curriculum as indicated below (IIA (Global) 2013b):

- Part 1 – Internal Audit Basics (125 questions, 150 minutes);
- Part 2 – Internal Audit Practice (100 questions, 120 minutes); and
- Part 3 – Internal Audit Knowledge components (100 questions, 120 minutes).

The IIA (SA) is currently investigating the expectations of South African members in respect of IIA certification. The reason for the investigation is that during the 2012 IIA (SA) Leadership Forum, a majority of IIA (SA) leaders (68%) voted in favour of investigating the possibility of adding a unique South African fourth part to the standard international three parts of the 2013 CIA syllabus (Von Eck, 2012). During this leadership forum, 94.8% of South African delegates indicated that the new three part CIA Programme did not adequately address needs in the country (Von Eck 2012).

The dissatisfaction expressed by the South African leaders shows that internal auditors in the RSA regard professional competence as important (the CIA examination is fundamentally theoretical), and that they have a desire for education and training of a higher quality than is currently being offered. This desire could be seen as one of the manifestations suggesting the existence of the internal audit education expectation gap referred to in section 1.5.

3.4 SUMMARY AND CONCLUSION

Based on the objectives of this chapter, namely to analyse the historical background of the internal audit profession regarding the development of education and training, and to outline the development of the training of skills other than academic knowledge obtained through tertiary education, the chapter shows that the internal audit profession and the universities that teach internal auditing need to cooperate in respect of the design and implementation of education and training programmes.

The scrutiny of the data that illustrates the growth and development of the internal audit profession, when placed in relation to the development and importance of formal internal audit education and training in the RSA, indicates the possibility that an expectation gap exists in respect of the work-readiness of entering trainee internal auditors. It is clear that since the inception of the internal audit profession in the 1940s, the IIA has realised the importance of university education as a prerequisite to ensure the existence and sustainability of internal auditing as a profession.

Also, since the 1940s the role of internal auditors has evolved from being control and compliance 'watch dogs' to being important role players in respect of combined assurance. In addition, the internal auditor's role has expanded to include being a valuable governance partner who renders assurance and consulting services to the organisation. These services relate to strategic, operational and financial aspects.

Enhanced capabilities in respect of the roles described above, as well as in respect of services rendered to organisational management, have created amongst employers a *work-readiness expectation* where formal university education graduates are concerned. Formal internal audit education (knowledge transfer) has developed to a very successful level internationally. In addition, while the development of practical training, with specific reference to technical and behavioural skills, is included in the Internal Auditor Competency Framework and related reports, not much has

been developed or formalised to ensure that trainee internal auditors entering the job market for the first time have been adequately equipped by universities.

The reviewed literature substantiates the idea that during the past decade a very exciting new phase of development has commenced, both within the internal audit profession and in the wider business and governance arenas, and this period has not yet reached its peak. The technical and behavioural skills of internal auditors are considered by the professional body (the IIA), internal audit practitioners and universities to be very important components of the full package of competencies required in order for them to do their work.

Sumners has been the director of the Centre for Internal Auditing at the LSU (LSUCIA) since 1984. It was he who initiated an historic and ground-breaking step towards integrating university education (knowledge transfer) with workplace training, by focusing on the work-readiness of university graduates. The LSUCIA's internal audit programme, in spite of having included internships in its formal internal audit education for more than 15 years, has still not integrated these internships as a formal, credit-earning part of the programme.

In the Republic of South Africa the University of Pretoria has followed the example of the LSUCIA. The University of Pretoria also arranges internships for students taking their B Com Honours course in internal auditing, but these internships do not form an integral part of the internal audit educational programme; participation in this work-readiness initiative is not mandatory. The fact that the practical component does not form part of the formal curriculum of either the LSU's or the University of Pretoria's internal audit educational programme (and of many other universities teaching internal auditing, including the two IAEP schools in the RSA), supports the objective of this study – to determine the existence and extent of the possible expectation gap between what internal audit practice expects in respect of the technical and behavioural skills that entering trainee internal auditors

should possess, and the actual knowledge, skills and competencies they do in fact possess, as a result of their having attended formal university internal audit educational programmes.

In the context of the objectives of this chapter, the following conclusions/findings can be drawn from the literature review presented:

- The *basis for internal audit education* was formulated in the 1950s.
- The IIA regards internal audit education as one of the most important factors underpinning its success, and the IIA is thus dependent on the success of internal audit programmes of universities for its sustainability.
- The internal audit profession is experiencing a period of rapid expansion, driven by global concerns about corporate governance and legislative developments, which is reflected in the rapid growth in membership in the RSA and globally – thus increasing the risk of the development of an expectation gap between the internal audit profession and universities, because universities are not keeping up with the pace of real-world professional developments.
- Sumners, director of the Centre for Internal Auditing at the Louisiana State University, did ground-breaking work in respect of the development of internal audit education internationally by integrating on-campus internal audit education with workplace training in the form of internships, thus improving the work-readiness of internal audit graduates.
- South African internal audit leaders are not contented with the capabilities and work-readiness of entering trainee internal auditors.
- The IIA (SA) was the first internal audit institute in the world to introduce PTPs in an attempt to improve the professional capabilities of its members – through improving the work-readiness of entering trainee internal auditors by ensuring they have practical experience.
- The IIA's guidance pronouncements do not provide universities that aspire to teach quality internal auditing with sufficient or adequate guidance and support in respect of curriculum content and design,

especially in respect of the work-readiness of entering (first time) trainee internal auditors.

- Information obtained through the literature review presented in this chapter provides guidance in respect of the focus of the research instrument to be used in the empirical component of this study.

The literature reviewed in this chapter has provided a better understanding of the developments in education and training in relation to the work-readiness requirements of entering trainee internal auditors. In addition, the key features of the various phases in the development of internal audit education and of the profession have been outlined; and it has been stressed that the internal audit profession is dependent on its cooperation with internal audit education providers for its existence to be sustainable.

The following chapter discusses the history and development of the educational landscape in the RSA.

CHAPTER 4: THE INTERNAL AUDIT EDUCATIONAL SYSTEM IN THE REPUBLIC OF SOUTH AFRICA

4.1 INTRODUCTION

Chapter 3 explained the evolvement and development of internal audit education and training activities in the internal audit profession. This evolvement and development resulted in universities in the Republic of South Africa (RSA) collectively realising the need to stay abreast of developments as far as their formal internal audit educational programmes are concerned.

The objective of this chapter is to analyse and describe the educational system and the *status quo* in teaching and learning strategies applied as part of formal internal audit education in the RSA. An analysis and description of the theory associated with the internal audit landscape in the RSA is important in that it provides clarity in respect of the developments in internal audit education as it relates to the work-readiness expectations of employers (the users of the internal audit educational services) regarding entering trainee internal auditors.

A further objective of this chapter is thus to put the South African internal audit educational landscape in perspective with regard to the research problem (refer to section 1.5) and objectives (refer to sections 1.6 and 1.7) of the study. In addition, a brief explanation is given in respect of the providers of internal audit educational services – the three university types found in the RSA, namely: universities of technology, comprehensive universities and traditional universities.

Figure 14 graphically illustrates the relation of Chapter 4 (the black box) to the rest of the study.

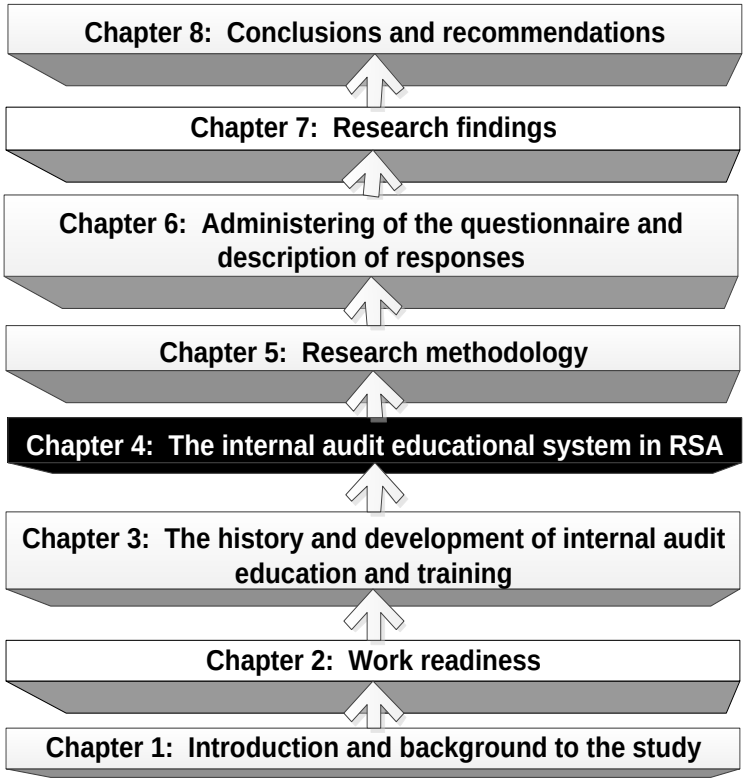


Figure 14: Chapter 4 in relation to the rest of the study

Table 9 includes a description of the abbreviations and acronyms used in this chapter.

Table 9: Abbreviations and acronyms used in Chapter 3

Acronym	Description
ABET	Adult Basic Education and Training
ARC	Academic Relations Committee
BTech	Bachelor of Technology
CATES	Colleges of Advanced Technical Education
CBOK	Common Body of Knowledge
CHE	Commission on Higher Education
CIA	Certified Internal Auditor
CPUT	Cape Peninsula University of Technology
DHET	Department of Higher Education and Training
EDCOM	Education and Training Committee
FET	Further Education and Training
GDP	Gross Domestic Product

Acronym	Description
GET	General Education and Training
HEQF	Higher Education Qualifications Framework
HEQSF	Higher Education Qualifications Sub-framework
HET	Higher Education and Training
IAA	Internal Audit Activity
IACF	Internal Auditor Competency Framework
IAEP	Internal Auditing Educational Partnership
IIA	The Institute of Internal Auditors
IIA (Global)	The Institute of Internal Auditors – Global
IIA (SA)	The Institute of Internal Auditors South Africa
IT	Information Technology
NMMU	Nelson Mandela Metropolitan University
NQF	National Qualifications Framework
NSFAS	National Student Financial Aid Scheme
NWU	North West University
PGD	Postgraduate Diploma
RSA	Republic of South Africa
SAQA	South African Qualifications Authority
SDA	Skills Development Act, 1988 (Act No. 97 of 1988)
UCGH	University of the Cape of Good Hope
UJ	University of Johannesburg
UNISA	University of South Africa
UP	University of Pretoria
US	University of Stellenbosch
USA	United States of America
WSU	Walter Sisulu University

4.2 THE EDUCATIONAL SYSTEM IN THE REPUBLIC OF SOUTH AFRICA

In terms of the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996), all South Africans have a right to ‘basic education’, ‘adult basic education’ and ‘further education’ [the bands of education] (Brand SA 2011).

According to the South African Constitution, the State has the obligation to provide the above bands of education. The RSA Government makes substantial investments in the education of its people at approximately 5.99% (last reported in 2010) of Gross Domestic Product (GDP) which is of the highest in the world (Brand SA 2011; Trading Economics 2013). It can thus be argued that education and training in the RSA is regarded as a high priority by the RSA Government.

The following sections provide a discussion on the background, development and *status quo* in education in general in the RSA.

4.2.1 Introduction and background to education in the Republic of South Africa

As mentioned above, the educational system in the RSA acknowledges three distinct bands of education, namely General Education and Training, Further Education and Training, and Higher Education and Training (Brand SA 2011). General Education and Training includes Grades 0 to 9. On the National Qualifications Framework (NQF), Grade 9 is graded on Level 1, also referred to as NQF Level 1 (CHE 2007:5-13).

The minimum length of time that a child goes to school, from Grade 0 up to Grade 12, totals 13 years. For each of the 13 years of education a grade level is allocated (Grade 0 to 12). The first grade is referred to as Grade '0' or 'R', also referred to as the 'reception year'. A child commences its school career at the age of five and Grade 12 is thus earned (if each successive grade is passed in a one-year period) at the age of 18 (CHE 2007:5-13).

Further Education and Training spans Grades 10 to 12 and represents NQF Levels 2 to 4. Grade 12 is referred to and better known as the matriculation year. Following on from Further Education and Training is Higher Education and Training, which is graded on NQF Levels 5 to 10 (CHE 2007:5-13). Table 10 depicts an analysis of the South African National Qualifications

Framework (NQF) from the lowest (Grade 0) to the highest level (Doctorate Degree).

Table 10: Qualification levels in the Republic of South Africa

Band	School grade	NQF Level	Qualifications
Higher Education and Training (HET)	Not applicable	10	Doctorate Degree
		9	Master's Degree
		8	Honours Degree Postgraduate Diploma
		7	Bachelor's Degree and Advanced Diploma
		6	Diploma
		5	Higher Certificate
Further Education and Training (FET)	12	4	Certificate
	11	3	Certificate
	10	2	Certificate
General Education and Training (GET)	9	1	Grade 9: Adult Basic Education and Training (ABET)
	8		
	7		
	6		
	5		
	4		
	3		
	2		
	1		
	R		

(Sources: CHE 2007:5-13; Brand SA 2011)

4.2.2 Higher education and training in the Republic of South Africa

The first university in the history of the RSA, the University of the Cape of Good Hope (UCGH), was established more than a century ago in 1873 (CHE 2004:10). The UCGH was the only university providing examinations for several university colleges.

During 1916, the Government of the Union of South Africa approved the University Act of South Africa, 1916 (Act No. 12 of 1916) (Raju 2004:1-18), in terms of which (and after merging a number of university colleges) the

University of the Cape and the University of Stellenbosch were established, each with full university status. Soon thereafter the UCGH became the University of South Africa or UNISA, as it is better known today. At this stage UNISA was the examining university and all other university colleges were affiliated to it (CHE 2004:10).

After World War II more universities were granted full university status, which led to the establishment and creation of more universities in the RSA (Raju 2004). Following the promulgation of the University Act of South Africa, more changes to the RSA education system were legislated (refer to Figure 15 on page 83). Technikons were also created as a non-university educational path with an emphasis on technical education.

More advanced training was provided by the university colleges in, for example, their engineering faculties. According to the CHE (2004:10), technical institutes became technical colleges focusing on training up to matriculation level. Following World War II, more colleges started offering three-year qualifications which were referred to as National Diplomas.

In 1967 the South African Parliament approved six Colleges of Advanced Technical Education (CATEs). These were situated in Pretoria, Johannesburg, Vanderbijlpark, Port Elizabeth, Cape Town and Durban (Du Pré 2010:5). The CATEs offered three-year National Diplomas as their core qualifications. In 1977 the CATEs were changed, and were thereafter referred to as technikons. Technikons kept this name for about 25 years and it took a while for the South African public to get acquainted with it. Only during the late 1990s was the term “technikon” widely accepted and recognised by the South African public (Du Pré 2010:7).

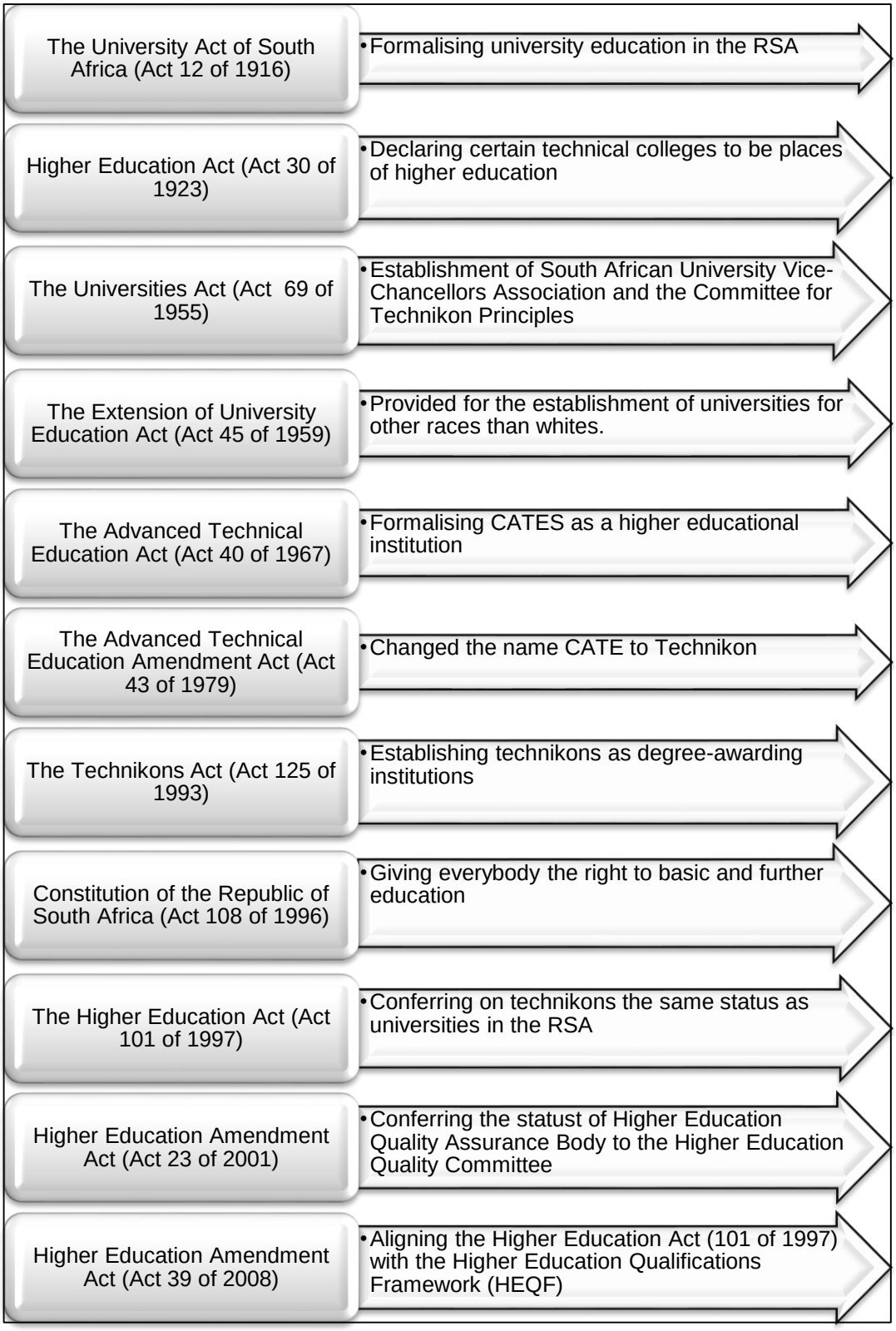
Technical Colleges were retained and fell under the governments of the provincial administrations of the various provinces in the RSA. Universities were governed in terms of the Universities Act, 1955 (Act No. 61 of 1955), and technikons were governed under the Technikons Act, 1993 (Act No. 125 of 1993) (CHE 2004:10-11). Currently all universities in the RSA (refer to

Table 11 on page 85) are governed under the Higher Education Act, 1997 (Act No. 101 of 1997)' (CHE 2004:11).

Figure 15 lists the major acts promulgated by the South African Government that were intended to bring about change and to keep up with skills needs and requirements in the RSA.

It is mainly due to the differentiation between the two types of higher educational institutions – technikons and universities – that as a result of the requirements of the Higher Education Act, 1997 (Act No. 101 of 1997), it became necessary for the RSA Government to find a solution whereby all higher education institutions in the RSA are now referred to as universities (Raju 2004). Previously, a higher education institution either taught research-based qualifications (universities) or technology-based qualifications (technikons) (Du Pré 2010:1-2; CHE 2004:10). In addition, universities of technology in the country were established as a result of the major reconfiguration of the higher education sphere in the RSA (Du Pré 2010:1).

Through this reconfiguration (mergers and re-designations) the 36 higher education institutions in the RSA, which consisted of 21 traditional universities and 15 technikons, were reduced to 23 universities (refer Table 11 on page 85) – hence the three types of universities found in the RSA today, namely traditional or research-intensive universities; comprehensive universities with a combination of technology-based and research-intensive qualifications; and universities of technology focusing on technology as a base for their educational programmes (Du Pré 2010:1-2; CHE 2011:5-6).



(Sources: Raju 2004:1-18; RSA 1996; Lexadin 2010)

Figure 15: Major education and training legislation and regulatory codes of the Republic of South Africa

The Higher Education Act, 1997 (Act No. 101 of 1997) defines a higher education institution as "… any institution that provides higher education on a full-time, part-time or distance basis and which is – a) established or deemed to be established under this Act; b) declared as a public higher education institution under this Act; and c) registered or conditionally registered as a private higher education institution under this Act" (Raju 2004:1-18; CHE 2004:11-12).

Most of the current South African universities include all or a combination of the following disciplines in their programme qualification mix (CHE 2011:6):

- applied sciences;
- business education;
- engineering sciences; and
- health sciences.

In most cases the programmes offered under the above four disciplines are of a high quality and sought after by the stakeholders in the particular university (CHE 2011:6). Many of these universities are proud of the fact that they provide career-focused education, including those that are traditional or research-based universities and for whom career-focused education is not a primary objective. Examples of these programmes are typically found within the engineering and health sciences faculties of universities in the RSA (CHE 2011:6).

Currently higher education and training is provided by 23 universities spread through-out seven of the nine provinces in the RSA. Of the 23 universities six are comprehensive universities, six are universities of technology and the remaining 11 are traditional universities (Du Pré 2010:1-2). Table 11 lists all the universities in South Africa, distinguishing between the three types of universities and indicating the geographical location of each.

Table 11: Universities in the Republic of South Africa

Name of institution	Date founded	Location in the RSA
Traditional universities		
University of Cape Town	1892	Cape Town
University of Fort Hare	1916	Alice, East London
University of the Free State	1904	Bloemfontein
University of KwaZulu-Natal	2004	Durban, Pietermaritzburg, Pinetown, Westville
University of Limpopo	2004	Polokwane, Ga-Rankuwa
North-West University	2004	Mafikeng, Mankwe, Potchefstroom, Vanderbijlpark
University of Pretoria	1908	Pretoria, Johannesburg
Rhodes University	1904	Grahamstown
University of Stellenbosch	1866	Stellenbosch, Saldanha Bay, Bellville
University of the Western Cape	1959	Bellville (Cape Town)
University of the Witwatersrand	1896	Johannesburg
Universities of technology		
Cape Peninsula University of Technology	2005	Bellville, Cape Town
Central University of Technology	1981	Bloemfontein
Durban University of Technology	2002	Durban, Pietermaritzburg
Mangosuthu University of Technology	1979	Umlazi
Tshwane University of Technology	2003	Pretoria, Emalahleni, Nelspruit, Polokwane
Vaal University of Technology	1966	Vanderbijlpark
Comprehensive universities		
University of Johannesburg	2005	Johannesburg
Nelson Mandela Metropolitan University	2005	Port Elizabeth, George
University of South Africa	2004	Pretoria
University of Venda	1982	Thohoyandou
Walter Sisulu University	2005	East London, Butterworth, Mthatha, Queenstown
University of Zululand	1960	Empangeni

(Sources: SAQA 2011a; CHE 2011)

The current Department of Higher Education and Training (DHET) has been in existence since May 2009. The DHET is currently the government department responsible for all education in the 'Higher Education and Training' band of education in the RSA (refer to Table 10 on page 80) (RSA 2010:24). The DHET has adopted the following vision and mission statements for higher education and training in the RSA (RSA 2010:22):

Vision statement:

> "Our vision is of a South Africa in which we have a differentiated and fully inclusive post-school system that allows all South Africans to access relevant post-school education and training, in order to fulfil the economic and social goals of participation in an inclusive economy and society."

Mission statement:

> "It is the mission of the Department of Higher Education and Training to develop capable, well-educated and skilled citizens that are able to compete in a sustainable, diversified and knowledge-intensive international economy, which meets the developmental goals of our country. The department will undertake this mission by reducing the skills bottlenecks, especially in priority and scarce skills areas; improving low participation rates in the post-school system; correcting distortions in the shape, size and distribution of access to post-school education and training; and improving the quality and efficiency in the system, its sub-systems and its institutions."

The mission statement of the DHET emphasises the development of "… capable, well-educated and skilled citizens" (RSA 2010:22). This emphasis supports the research problem and objectives of this study (refer to sections 1.5, 1.6 and 1.7), i.e. to determine the existence and extent of the

expectation gap in respect of the work-readiness of internal audit graduates as explained in Chapter 1.

The higher education mandate of the DHET is contained in the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996). The legislation listed below relates to higher education and training in the RSA, and provides a framework for tertiary education "… in accordance with the values of human dignity, equality, human rights and freedom, non-racism and non-sexism" (RSA 2010:54-55).

The DHET derives its core objectives from the list of pronouncements below, which are assigned to the minister of Higher Education and Training by means of presidential proclamation (Lexadin 2010):

- Higher Education Act, 1997 (Act No.101 of 1997);
- National Student Financial Aid Scheme (NSFAS) Act – Provides for the granting of loans and bursaries to eligible students at universities, as well as for the administration of such loans and bursaries;
- Adult Basic Education and Training (ABET) Act , 2000 (Act No. 52 of 2000);
- Further Education and Training Act, 1998 (Act No. 98 of 1998);
- National Qualifications Framework Act, 1995 (Act No. 55 of 1995) – provides for maintenance and management of the NQF through level dispensations, including qualifications and quality assurance of qualifications;
- Skills Development Levies Act (Act 9 of 1999) – provides for the imposition of skills development levies;
- Skills Development Act (SDA) (Act 97 of 1998) – To create the National Skills Agency which regulates the Quality Council for Trade and Occupations, Apprenticeships and Learnerships;
- South African Council of Educators Act, 2000 (Act No. 31 of 2000) – for the registration of educators employed in adult education and training centres with the South African Council of Educators; and

- General and Further Education and Training Quality Assurance Act, 2001 (Act No. 58 of 2001) – regulates the Quality Council for Further Education and Training Colleges and Adult Education and Training Centres.

From the legislation list above and the high monetary investment that the South African Government makes annually in higher education and training, it is apparent that the development of skills in the RSA is regarded as a high priority. On 5 October 2007 the Minister of Higher Education and Training signed (approved) Government Notice No. 928 in Government Gazette No. 30353 which contains the approval of the 'new' Higher Education Qualifications Framework (HEQF), issued in terms of the Higher Education Act, 1997 (Act No. 101 of 1997) (RSA 2007; RSA 2008).

The following section provides a brief discussion of the impact of the HEQF and HEQSF on education in the RSA and more specifically, on internal audit education in the RSA.

4.2.3 The Higher Education Qualifications Framework and the Higher Education Qualification Sub-Framework

The HEQF replaces NATED Report 02-116 (89/01) – *A Qualification Structure for Universities in the RSA*; NATED Report 02-150 (97/01) – *General Policy for Technikon Instructional Programmes*; and NATED Report 02-151 (93/01) – *Formal Technikon Instructional Programmes in the RSA*. The objective of the South African Government with the new HEQF is to introduce a "… single qualifications framework for a single coordinated higher education sector" (RSA 2007:5; RSA 2008).

The HEQF sets policy in place to manage and administer all South African higher education qualifications into the NQF (refer Table 10 on page 80). The HEQF provides all higher education institutions with a common set of parameters and criteria for the design of qualifications, and it facilitates the

comparability of qualifications through-out the South African higher education sector.

The DHET put the HEQF in context by providing a brief discussion on the following aspects (RSA 2007:5-9):

- the HEQF and the NQF – stating that the HEQF is an integral part of the NQF;
- standards generation in higher education – explaining the 'nested approach' to the design of qualifications, which requires a "movement from generic to specific outcomes";
- qualifications, volumes and credits – explaining that "the HEQF is a qualifications framework, represented by level descriptors, the main qualification types and their descriptors, qualification standards and designated variants and standards and qualifiers for qualification specialisations";
- accumulation of credits towards qualifications – also referred to as credit accumulation and transfer which refers to the process of recognition of a student's achievements; and
- WIL – explaining that certain qualifications could include required periods of work that integrates with classroom learning.

The HEQF re-emphasises the 10 levels of South African qualifications in terms of the NQF (refer to Table 10 on page 80). Additionally, the HEQF provides descriptors for the 10 levels which represent the "… outermost layer or qualification specification" (RSA 2007:5-9). In addition to the qualification levels, the HEQF explains that higher education qualifications in the RSA are divided into undergraduate and postgraduate qualifications as follows (refer to Table 12 on 91):

Undergraduate qualifications:

- Higher Certificate (NQF Level 5);
- Advanced Certificate (NQF Level 5);

- Diploma (NQF Level 6);
- Advanced Diploma (NQF Level 7); and
- Bachelor's Degree (NQF Level 7).

Postgraduate qualifications:

- Postgraduate Diploma (NQF Level 8);
- Bachelors Honours Degree (NQF Level 8);
- Master's Degree (NQF Level 9): and
- Doctorate Degree (NQF Level 10).

When considering the nine qualification types above it becomes clear that although a Diploma (NQF Level 6) and a Bachelor's Degree (NQF Level 7) are both three-year qualifications, they are on different NQF Levels. The Advanced Diploma, a four year qualification, is on the same NQF Level (NQF Level 7) as a three year bachelor's degree (RSA 2007:11-12). Table 12 (on page 91) provides a summarised explanation of the South African HEQF, the NQF Levels and the qualification types.

A further challenge that was encountered following the restructuring of higher education, and specifically in the light of the comprehensive universities, was the matter of drawing a distinction between two predominant forms of education, namely the *conceptual* and *contextual* relevance of educational programmes (SANTED 2010:2). In the case of a university where the academic programmes are of predominantly contextual relevance, such a university will have a more stakeholder-focused academic mission, targeting the educational and training needs of the external environment – a typical cooperative or vocational education strategy.

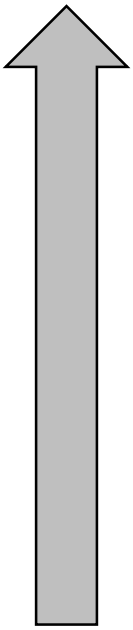
In comparison, a university with a predominantly conceptual relevance, puts more emphasis on research-focused academic programmes (typically associated with traditional universities), designed with a more specific formative base (SANTED 2010:2). For comprehensive universities the choice between contextual and conceptual relevance, as well as the balance

in the combination of the two forms of education, will have a direct impact on the composition of their programme qualification mix.

The HEQF and HEQSF (RSA 2007; RSA 2013) permit all three types of university in the RSA to offer either conceptual, contextual or a combination of the two forms of educational programmes. It is also clear from the above discussion that universities of technology in the RSA are in the best position (but this does not exclude traditional and comprehensive universities) to offer vocational internal audit educational programmes (a contextual form of education) in order to provide more technical and behavioural skills to entering trainee internal auditors.

Table 12: HEQF, HEQSF and NQF Levels and most common qualification types in the Republic of South Africa

	Professional qualifications	**NQF Level**	**Research focused qualifications**
Postgraduate qualifications		10	Doctorate Degree
		9	*Master's Degree
	Postgraduate Diploma	8	Bachelors Honours Degree
Undergraduate qualifications	Advanced Diploma (4th year)	7	Bachelor's Degree (3 years of full-time study)
	Diploma (3 years of full-time study)	6	
	Higher Certificate	5	
	National Senior Certificate (NSC) as entrance requirement to Higher Education and Training (NQF Level 4)		



* Articulation is possible from the Postgraduate Diploma (NQF Level 8) to a Master's Degree (NQF Level 9)

(Sources: CHE 2007; RSA 2013)

The following section provides a discussion of the *status quo* in internal audit educational programmes that are currently offered by the three types of universities in the RSA.

4.3 THE *STATUS QUO* IN INTERNAL AUDIT EDUCATION IN THE REPUBLIC OF SOUTH AFRICA

Section 3.3 provides details of the development and evolvement of the internal audit profession, as well as internal audit education, both globally and in the RSA. This section provides insight into the design of the curricula of some of the internal audit educational programmes in the RSA. Universities from all three types in the country currently offer internal audit qualifications as part of their programme qualification mix (compare Table 7 on page 64 and section 3.3). South African internal audit educational programmes are offered from NQF Level 6 (Diplomas) to NQF Level 10 (doctorate degrees) (refer to Table 10 on page 80). The IIA's Academic Relations Committee (ARC) provides guidance for curriculum design by indicating suggested minimum curriculum content. The following section provides details on the curriculum content suggested by the ARC.

4.3.1 The Institute of Internal Auditor's suggested internal audit curriculum

The IIA's ARC was responsible for the development of the Global Model Internal Audit Curriculum. Apart from the input of internal audit practitioners and educators, the results from the 2006 and 2010 CBOK studies, the Internal Auditor Competency Framework (IACF) and the syllabus of the IIA's certification programme (CIA) were also incorporated into the design of the Global Model Internal Audit Curriculum (IIA 2010b:1).

The Global Model Internal Audit Curriculum was specifically, but not exclusively, designed to provide guidance to academic institutions throughout the world that plan to apply for endorsement as an Internal Audit Educational Partner (IAEP). Any educational institution that is in the initial

stages of developing an internal audit educational programme is advised by the IIA to consider the Global Model Internal Audit Curriculum (IIA 2010b:1).

Endorsement as an IAEP is currently conferred on three levels, namely a) Internal Audit Foundation, b) Comprehensive Internal Auditing and c) Centre for Internal Auditing Excellence (IIA (Global) 2013c). Table 13 illustrates the minimum course expectations set by the ARC on each of the three levels.

In Table 13 and Table 14, the emphasis on internships as an option in the curriculum design in the two higher level IAEP programmes (Comprehensive Internal Auditing and Centre of Internal Audit Excellence) indicates the value that the internal audit profession places on work-readiness. The emphasis on internships, cooperative education and case studies/internal audit projects, supports the research problem and objectives of this study (refer section 1.5 and 1.6).

Table 13: Minimum course expectations set by the IIA's Academic Relations Committee

IAEP level	Minimum module/course expectations
Internal Audit Foundation	• Two core equivalents per year (one of which must be Principles of Internal Auditing)
Comprehensive Internal Auditing	• Principles of Internal Auditing **plus** • Two additional modules/courses, one of which must be a core course. • An **internship** that must be monitored, evaluated and granted university credit for it to be considered a course.
Centre for Internal Audit Excellence	• Internal audit track/concentration/diploma incorporated into a degree program **or** • Internal audit major/degree • An **internship** that must be monitored, evaluated and granted university credit for it to be considered a course.

(Source: IIA 2010b:1)

In terms of the Global Model Internal Audit Curriculum, an internal audit foundation programme must include two core modules/courses, of which one must be Principles of Internal Auditing, as part of a university degree programme. In comparison, the Comprehensive Internal Audit Programme must include at least three modules/courses as part of a university degree programme, one of which must be Principles of Internal Auditing. A university can include any of the modules/courses listed in Table 14 to make up the remaining two modules/courses. According to the ARC, the third course has to be an internship, cooperative education or case studies/internal audit projects course. Any other course has to be accepted and approved by the ARC (IIA 2010b:2).

The flagship programme of the IIA, the Centre of Internal Audit Excellence level IAEP programme, requires a substantially larger component of internal audit specific topics in the curriculum. It requires inclusion of at least four modules/courses which are recognised as a major component – or core part – of a university degree programme. The Principles of Internal Auditing course remains a requirement. The second course can be selected from those listed in Table 14 (on page 95) and the third core course should be an 'internship', 'cooperative education' or 'case studies/internal audit projects course'. The fourth course can be selected from the list in Table 14 (on page 95) or a course recommended for IAEP programmes (IIA 2010b:2).

The ARC divided the recommended curriculum into 'core' and 'supplemental' modules/courses. Table 14 (on page 95) summarises the division of the modules/courses and the recommended course order as published by the ARC (IIA 2010b:2).

When considering the above recommendations and guidelines of the IIA's ARC, it is evident that vocational education plays a substantial role in the fulfilment of the requirement to have an internship, cooperative education or a case studies/internal audit projects course included in the curriculum of internal audit educational programmes. According to the ARC's Global Model Internal Audit Curriculum, internships and/or case studies/internal

audit projects have the objective to provide students with practical experience in which they can apply the theoretical knowledge they have obtained through classroom learning (IIA 2010b:12).

Table 14: The IIA's recommended curriculum

Module/Course*	C (Core) / S (Supplemental)	Recommended course order
Principles Of Internal Auditing	C	1
Ethics And Organisational Governance	C	2
Fraud And Forensics	C	3
Information Technology (IT) Systems And Auditing	C	4
Business Communication Skills For Internal Auditors	C	Any order after 1
Internship and/or Case Studies/Internal Audit Projects	C	Ideally after or at the end of course work; or as co-op time
Internship and/or Case Studies/Internal Audit Projects	S	5
Developing and Managing an Internal Audit Activity (IAA)	S	6
Risk Management	S	Any order after 1
Advanced Organisational Governance	S	Any order after 2
Advanced IT Systems and Auditing	S	Any order after 4
Internal Audit Topics	S	Any order after 1

* A module/course consists of 30 to 45 classroom hours and should include topics related to a general topic.

(Source: IIA 2010b:2)

The ARC (IIA 2010b:12) further asserts that internships should consist of at least 12 working weeks. Students should be required to report on their progress (reflection), and the employer should provide feedback to the university. In the absence of internships, the university should substitute work-related case studies or internal audit projects in the curriculum. The ARC also suggests using team-work situations as these are best able to replicate the real life working environment – exposing students to

behavioural and non-technical aspects of the internal audit profession (IIA 2010b:12).

Table 15 illustrates the exit level outcomes, general topics and detailed syllabus content for internships or case studies/internal audit projects, as suggested by the ARC.

Table 15: Recommendations concerning exit level outcomes, general topics and syllabus content for internships and/or case studies/internal audit projects

Exit level outcomes:	
• Understand the entire internal audit process • Conduct an internal audit engagement with limited supervision • Provide practitioners with a sense of the value of the student skill sets	
General topics	**Syllabus content recommendations**
Internships	• Criteria for selecting organisations (employers) • Criteria for selecting students • Outline/agreement for student actions and behaviour during the work experience • Outline for evaluation criteria as needed for practitioners • Final student evaluation criteria for the organisation
Case studies/internal audit projects	• Case studies created or adapted for each team • Commitment from practitioners to supervise case studies and projects • Providing performance evaluation criteria for practitioners to apply

(Source: IIA 2010b:12)

The following section explains the composition of undergraduate internal audit educational programmes currently offered in the RSA.

4.3.2 Undergraduate internal audit qualifications in the Republic of South Africa

In terms of the Higher Education Act, 1997 (Act 101 No. of 1997), universities are autonomous in respect of the content of their respective curricula (CHE 2007). Undergraduate internal auditing qualifications currently offered by universities in the RSA consist of diplomas and bachelor's degrees. Only two universities in the RSA, the University of

Pretoria (UP) and UNISA, currently offer three year bachelor's degrees (BCom) at NQF Level 7, specialising in internal auditing (UP 2011a; UNISA 2011). All Universities of Technology (UoTs) offer three-year diplomas and a Bachelor's Degree (BTech) in Internal Auditing.

Table 16 provides a summary of the undergraduate internal audit educational programmes currently offered by universities in the RSA. UNISA is currently the only university in the RSA offering a B Com Internal Auditing qualification. The comprehensive universities, University of Johannesburg (UJ), the Nelson Mandela Metropolitan University (NMMU), Walter Sisulu University (WSU) and UNISA, also offer diplomas and BTech degrees in internal auditing as part of their programme qualification mix. Diplomas are currently registered as three year qualifications at NQF Level 6 of the HEQF (CHE 2007). A bachelor's degree, including the four year BTech Degree, is registered at NQF Level 7 (compare Table 12) (NMMU 2010; UNISA 2011; UP 2011a; UP 2013a).

Table 16: Undergraduate internal audit qualifications offered by universities in the Republic of South Africa

Year/ level	UNISA: BCom Internal Auditing (360 credits, NQF Level 7)	Diploma (360 credits, NQF Level 6) and BTech Internal Auditing (120 credits, NQF Level 8)
1	• Commercial Law • Quantitative Modelling • Introductory Financial Mathematics • Economics • Financial Accounting Principles, Concepts and Procedures • Financial Accounting Reporting • Introduction to The Economic and Management Environment • Business Management	• Business Information Systems • Commercial Law • Cost Accounting • Economics • Financial Accounting • Business Calculations • Entrepreneurial Skills
2	• Cost Accounting and Control • Accounting Systems in a Computer Environment • Introduction to the Performing of the Audit Process • Introduction to Internal Auditing • Financial Accounting for Companies • Selected Accounting Standards and Simple Group Structures • Financial Management • General Management • Enterprise Risk Management	• Auditing • Commercial Law: Specific Contracts • Commercial Law: Business Entities • Cost Accounting • Financial Accounting • Taxation • Communication

Year/ level	UNISA: BCom Internal Auditing (360 credits, NQF Level 7)	Diploma (360 credits, NQF Level 6) and BTech Internal Auditing (120 credits, NQF Level 8)
	• The Taxation of Individuals • Taxation of Business Income	
3	• Management Accounting Techniques as an Aid in Decision Making • Financial Planning and Control • Financial Analysis, Valuations and Restructuring • Aspects of Internal Control Important to an Auditor • Computer Auditing and the Use of the Computer in Performing the Audit Process • Practice of Internal Auditing • Advanced Applications in the Internal Audit Process • Operational Auditing • General Financial Reporting • Investments: Derivatives • Strategic Planning	• Business Information Systems • Financial Accounting • Internal Auditing • Taxation • Commercial Law
4		**BTech Internal Auditing*** • Internal Auditing • Information Systems Auditing • Research Methodology • Cost and Management Accounting • Financial Accounting • Financial Management • Advanced Management Communication Skills • International Law

* The BTech Internal Auditing is offered as a fourth year qualification and is currently on the same NQF level (8) as the BCom Honours Degree. BTech educational programmes are being phased out by the DHET.

(Sources: NMMU 2010; UNISA 2011; SAQA 2011c)

The standardisation of internal audit curricula is part of the strategic objectives of the ARC (IIA 2010b) and of the IIA (SA)'s EDCOM. The ARC only prescribes core content in respect of the curriculum of universities that offer internal audit educational programmes, in an effort to ensure quality

internal audit education through-out the world. The prescriptions of the ARC are applicable only to those universities that are endorsed as IAEP programme providers. The ARC reviews and considers the curriculum content when a university applies for IAEP endorsement (refer to Table 13 and Table 14 on pages 93 and 95 respectively). In the RSA this currently only applies to the University of Pretoria and UNISA who are IIA-endorsed (IAEP) programme providers.

Undergraduate internal audit educational programmes are designed to provide in the most basic needs of internal audit practice (UP 2011a). Persons with an undergraduate internal audit qualification will typically be appointed at the lowest level in an internal audit activity's hierarchy, but without significant career prospects, if any.

With an internal audit undergraduate qualification a person can obtain full membership status at the IIA. Persons with undergraduate qualifications, but who are registered as *bona fide* students with a university, can apply for student membership of the IIA. Student membership allows discounted rates on training modules/courses, conferences and seminars, but student members have no voting rights (IIA (SA) 2011). Student membership is a requirement of the ARC for a university to be endorsed as an IAEP educational programme provider (refer to Table 13 on page 93).

With the passing of the latest HEQF and HEQSF, it is proposed that the BTech degree in its current format be discontinued and replaced with an advanced diploma. Advanced diplomas will be registered at NQF Level 7, as opposed to the NQF Level 8 of the current BTech degree (CHE 2007). In this respect, internal auditors holding a (three-year) Diploma, might in future not be allowed by the IIA (SA) to register to sit for the CIA exams, as a bachelor's degree (NQF Level 7) or equivalent is currently the entrance requirement. The equivalent of a bachelor's degree – in respect of the entrance requirements for the CIA exams – would thus be an advanced diploma as per the HEQF and HEQSF (refer to Table 12 on page 91).

When designing undergraduate internal audit educational programmes, universities aim at preparing students to progress into the postgraduate internal audit educational programme without difficulty, and with the objective to prepare these students for more advanced/senior positions in the internal audit workplace. The following section provides a discussion on the design of postgraduate qualifications in the RSA.

4.3.3 Postgraduate internal audit qualifications in the Republic of South Africa

Universities in the RSA are currently in a process of redesigning their qualifications to align them with the HEQF (CHE 2007). Postgraduate qualifications in the RSA, from NQF Level 8 to NQF Level 10 are registered with the South African Qualification Authority (SAQA) (compare Table 12 on page 91). When considering the content of Table 12 it is important to note that the bachelor's honours qualifications are designed to be research-focused (conceptual) qualifications.

In terms of the HEQF and HEQSF, a research-focused honours degree should contain a minimum component of at least 30 credits (of the maximum 120 credits), or 25%, allocated to research as part of the curriculum of the qualification (CHE 2007; RSA 2013). It can thus be deduced that the current BCom Honours qualifications of the University of Pretoria and UNISA will be redesigned to align them with the 'professional qualifications' section of the HEQF and HEQSF (refer to Table 12 on page 91). For the purposes of this study the current NQF Level 8 BCom Honours Internal Auditing qualifications will be regarded as equivalent to the NQF Level 8 Postgraduate Diplomas (PGDs).

Two of the comprehensive universities in the RSA (UNISA and the NMMU) have registered their Postgraduate Diplomas (PGDs) in Internal Auditing with the higher education authorities of RSA. UNISA currently offers a BCom Honours and a PGD in Internal Auditing. Both these PGDs are aligned with

the HEQF and the requirements of the ARC (refer to Table 12, Table 13, Table 14 and Table 15 on pages 91, 93, 95 and 96 respectively).

Table 17 provides an illustration of the curriculum design and content of the various postgraduate qualifications currently offered by universities in the RSA. All four of the curricula summarised in Table 16 and Table 17 (on pages 97 and 102 respectively) are aligned with the curriculum suggestions of the ARC (refer to Table 14 on page 95). Not one of the undergraduate or postgraduate internal audit educational programmes currently offered includes a credit-bearing vocational component as part of the curriculum. This absence of a formal vocational component in the formal internal audit academic programmes in the RSA re-emphasises the importance of this study (refer to sections 1.5, 1.6 and 1.7).

Table 17: Curricula of postgraduate internal audit educational programmes in the RSA

UNISA		The Nelson Mandela Metropolitan University	The University of Pretoria
BCom Honours Internal Auditing (120 credits)	PGD in Internal Auditing (120 credits)	PGD in Internal Auditing (120 credits)	BCom Honours Internal Auditing (180 credits)

• Internal Audit Practice
• Internal Audit Applications
• Risk Management
• Applied Management Accounting
	• Compulsory modules:
	  ○ Internal Auditing (A)
	  ○ Internal Auditing (B)
	  ○ Internal Auditing (C)
	• Elective modules (Any two of):
	  ○ Management Accounting
	  ○ Accounting Information Systems
	  ○ General Management
	  ○ Operational Risk Management
		• Internal Auditing (A)
		• Internal Auditing (B)
		• Risk Based Auditing
		• Forensic Auditing
		• Organisational Behaviour and Management Skills
		• Public Sector Accountability
		• Financial Risk Management
		• Information Systems Auditing
		• Managerial Accounting and Finance
			• Business and Administrative Communication
			• *Capita selecta* in Financial Management or Research In Internal Auditing
			• Forensic Auditing
			• Financial Accounting
			• Internal Auditing – Internal Audit Management
			• Internal Auditing – Information Systems Auditing
			• Internal Auditing
			• Organisational Behaviour and Management Skills
			• Risk Based Auditing

(Sources: UP 2011b; Du Bruyn 2013; UP 2013a; NMMU 2011; UNISA 2011; SAQA 2011d; SAQA 2011e; SAQA 2011f; SAQA 2011g)

4.4 SUMMARY AND CONCLUSIONS

This chapter provided arguments in support of the research objectives and questions of this study (refer to sections 1.6 and 1.7). An overview of education in general, as well as of higher education, was provided.

The chapter revealed that education and training went through more than a decade of exciting changes and developments. Of the most significant recent changes or developments have been those instituted by the RSA Government in an attempt to correct the wrongs of the so-called 'apartheid' past. These changes affected all the institutions of higher education in the country.

The South African Government tasked the Ministry of Higher Education and Training with the responsibility of reviewing the 'size and shape' of higher education in the RSA. Some technikons were merged with one another; some traditional universities were merged with technikons, et cetera. Other major developments were the approval of the Higher Education Act, 1997 (Act No. 101 of 1997), the release of the 'Approved Academic Programmes for Universities and Technikons', the 'new Academic Policy for Programmes and Qualifications in Higher Education: Discussion Document', and perhaps the most prominent of all, the Higher Education Qualifications Framework (HEQF) and subsequent Higher Education Qualifications Sub-framework (HEQSF) (CHE 2007; RSA 2007; RSA 2013). As a result of the above changes, developments in higher education in the RSA have resulted in a single coordinated qualifications framework encompassing all higher education programmes.

Substantial changes in the internal audit profession has coincided with South African educational changes, increasing the risk of a work-readiness expectation gap between providers and users of internal audit educational services – with specific reference to entering trainee internal auditors.

Internal audit education in the RSA was part of the offering of the former technikons for more than 25 years, before the first universities realised the value and importance of internal audit educational programmes. The University of Pretoria was the first traditional university in the RSA to offer a higher education qualification in internal auditing. Before that, traditional universities mainly focused on the education of external auditors. Internal audit education was regarded by traditional universities as a 'technikon type' qualification.

The University of Pretoria's Centre of Internal Audit Excellence IAEP programme is regarded as a leading university programme in respect of internal audit education. The internal auditing programmes of this university are sought after – becoming competition for the other accountancy related qualifications. In addition, UNISA is the only distance learning higher education institution or university that currently has IAEP-endorsed status.

Internal audit education in the RSA has developed rapidly only since the 1990s. This development has followed a similar pattern to the developments in the United States of America (USA) (refer to section 2.3). Currently, internal audit education in the RSA is in a boom phase, as demonstrated by the rapid growth of the internal audit profession in the RSA (refer to Figure 10 on page 61).

The sustainability of internal audit education depends on the growth and development of the internal audit profession locally and internationally. In Chapter 2 (refer to section 2.2) evidence is provided that the opposite is also true, namely that the development of the internal audit profession depends on the cooperation and development of internal audit education, especially on tertiary level. This proves that it is imperative for educators to be involved in their professional body (the IIA), and that the IIA ensures its commitment to and involvement with its educational partners – the sustainability of the one depends on the commitment and involvement of the other.

Conclusions in this chapter are derived from an in-depth review of the South African educational landscape, with specific reference to developments in internal audit education by higher education institutions. Internal audit education had to develop rapidly in order to adjust to the pace at which the internal audit profession has developed and expanded in the RSA as well as in the rest of the world.

The following findings and conclusions are derived from the literature reviewed in this chapter:

- Internal audit education in the RSA is of an acceptably high standard, as two South African universities offer IIA endorsed IAEP programmes.
- Internal audit educators and the IIA must cooperate to ensure the sustainability of the internal audit profession, as the two role players are interdependent for their sustainable existence.
- Although it has only showed substantial development since 1991, internal audit education in the RSA is currently in a boom phase – a phase that potentially holds the risk of deficiencies in respect of the work-readiness expectations of employers in respect of trainee internal auditors.
- South African legislation, the NQF, the HEQF and the HEQSF provide for and encourage the integration of workplace based education with internal audit educational programmes in order to improve the work-readiness of graduates.
- Evidence is provided that the internal audit educational landscape in the RSA has, in the last decade, undergone substantial changes arising mainly from political reforms that have resulted in changes in educational legislation.
- The information obtained through the review of the literature provides clear context and guidance in terms of the structure and design of the research instrument (questionnaire).

The following chapter describes the research methodology applied in the empirical research component of the study.

CHAPTER 5: RESEARCH METHODOLOGY

5.1 INTRODUCTION

In the preceding chapters published literature that justifies the need for the current research, and that supports the research problem and objectives of the study, was discussed. The theoretical background provided in those chapters was incorporated in the design of the research methodology that will be explained in this chapter.

The objective of this chapter is to analyse and examine pertinent literature to describe and explain, with motivation, the research methodology applied in this research. In addition, the study's research design, as well as the design of the research questionnaire, is explained and justified. The justification and reasons for choosing the quantitative research method are also provided. Additionally, the characteristics of the population from which the data was obtained, are described. And finally, the different groups of participants targeted in this study are defined.

In the context of the research problem (refer to section 1.5), the empirical component aimed to obtain the perceptions of respondents in respect of the work-readiness expectations they have of *entering trainee internal auditors*. The competencies required in order for entering internal auditors to be regarded as work-ready were used as the basis for the design of the research questionnaire. These competencies are grouped into two distinct categories of competencies, namely *technical* and *behavioural* skills.

When considering the overall plan of a research project it is important to take into consideration the research problem, the objective and secondary research objectives of the study, the nature of the target population, and the kind of data that the investigation and analysis of the problem is expected to generate. It is also imperative to ensure that the means of data collection,

as well as the method of analysis and interpretation thereof, are feasible, and that these aspects are duly considered when planning the empirical component of the research (Leedy & Ormrod 2005:87-88).

Figure 16 illustrates Chapter 5 (the black box) in relation to the rest of the study.

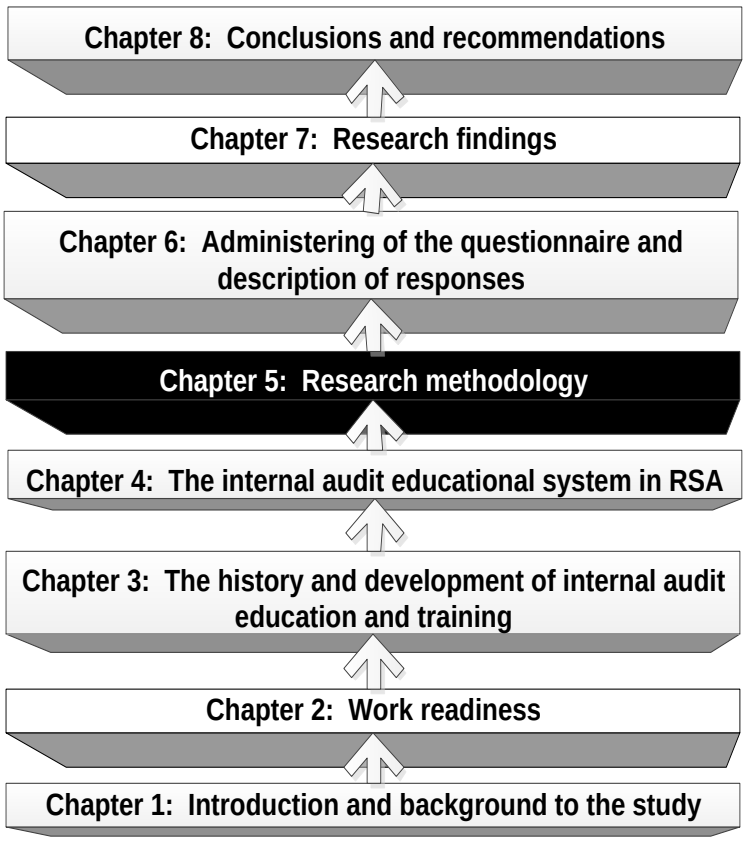


Figure 16: Chapter 5 in relation to the rest of the study

Table 18 provides the abbreviations and acronyms used in this chapter.

Table 18: Abbreviations and acronyms used in Chapter 5

Acronym	Description
CAATs	Computer Assisted Auditing Tools
CAE	Chief Audit Executive
CBOK	Common Body of Knowledge
CEO	Chief Executive Officer
COBIT	Control Objectives for Information and Related Technology
COSO	Committee of Sponsoring Organisations
ERM	Enterprise Risk Management
Fasset	Finance and Accounting Services Sector Education and Training Authority
IACF	Internal Auditor Competency Framework
IIA (Global)	Institute of Internal Auditors (Global)
IIA (SA)	Institute of Internal Auditors (South Africa)
IS	Information Systems
IT	Information Technology
MFMA	Municipal Finance Management Act, 2003 (Act No. 56 of 2003)
PAYE	Pay As You Earn
PFMA	Public Finance Management Act, 1999 (Act No. 1 of 1999)
SOX	Sarbanes Oxley Act of 2002
SPSS	Statistical Package for the Social Sciences
URL	Unique Resource Locator
VAT	Value Added Tax

The following sections provide a description and analysis of the scientific research method (empirical method), that defines and explains both the qualitative and quantitative research methods.

5.2 THE RESEARCH OBJECTIVE OF THE STUDY

In the light of the nature of this study, the research is based on *quantitative descriptive research.* The objective of employing the quantitative descriptive research method is firstly to conduct an in-depth investigation of literature in respect of the *status quo* in internal audit education, including the competence level of internal audit-specific technical and behavioural skills transferred to prospective entering trainee internal auditors.

Secondly, the research aims to obtain an understanding of the *expectations* of employers of entering trainee internal auditors in respect of the level of technical and behavioural skills capabilities that these graduates *should* possess. In addition, in order to determine whether an expectation gap exists, the study aims to obtain the perceived levels of skills capability actually possessed by recently graduated trainee internal auditors.

The research methodology and design aim to address the research objective of the study as outlined above (refer to section 1.6). The following sections explain the research methods employed to achieve the objective of the research.

5.3 SCIENTIFIC RESEARCH METHODS

Empirical research, employing both qualitative and quantitative techniques, is often applied in research studies. Struwig and Stead (2001:3) assert that scientific research can be distinguished from non-scientific means of gathering and organising information in that scientific research possesses three distinct characteristics:

- scientific research is founded on an "… open system of thought";
- data are critically analysed and examined; and

- scientific researchers provide generalisations derived from their findings, and identify limitations in respect of these generalisations.

In addition, Saunders Lewis and Thornhill (2007:5) state that scientific research possesses the following three characteristics:

- data are gathered in a systematic way;
- data are analysed and interpreted in a systematic way; and
- the research has a definite purpose – "… to find things out".

Bless, Higson-Smith and Kagee (2006:7) list the following further characteristics of scientific research:

- "[S]*cientific research is empirical since the aim is to know and understand reality";*
- *"a systematic and logical process is followed";*
- *"scientific research is replicable and transmittable";*
- *"scientific research is reductive"; and*
- *"claims made as a result of scientific research must be falsifiable"*.

In the context of the nature of this study, the research methodology and research design have been guided by a combination of the characteristics outlined in the definitions of scientific research above. The data on which the findings of this research (which has a definite purpose) are based, are systematically (empirically) collected, critically analysed and interpreted. In addition, the study has identified limitations and risks to be borne in mind when the findings and conclusions are considered.

The systematically collected data used in this study consist of primary data. Primary data is collected by the researcher himself (also known as "own" or "first-hand" data) (Bless et al 2006:112). The following section explains the methods employed during the collection of the primary data for the study.

5.4 THE QUANTITATIVE RESEARCH METHODOLOGY OF THE STUDY

Quantitative research is about measurement of quantity or value (variables). It is thus only applicable to data or information (variables) that can be expressed in terms of quantity or value. In addition, quantitative methods are used to estimate *proportions* of data obtained from individuals with regard to experiences, opinions, perceptions, beliefs or attitudes, and to perform statistical analysis on these proportions. Qualitative research, on the other hand, is used with qualitative aspects – aspects that relate to qualitative attributes or characteristics (Bless et al 2006:43-44).

As the research objective and secondary research objectives of this study are not qualitative in nature (refer to sections 1.6 and 1.7) and, taking into consideration the nature of the research, it was concluded that *quantitative descriptive research* is the most appropriate and applicable research method to use in this study.

The quantitative descriptive research method is outlined, motivated and explained in the following section.

5.4.1 The quantitative research methodology as applied in the empirical component of the research

As mentioned previously, this study is the outcome of an extensive literature review and *quantitative empirical research*. The purpose of the literature review was to ensure that published research is not duplicated; to obtain the most recent theory about matters pertaining to the field of research; to determine what the results of the published information in the field of study are; to identify instrumentation that can be applied in ensuring research validity and reliability; and to obtain the most recent definitions of key concepts in the field of research (Mouton 2001:87).

This study is descriptive in nature in that it aims, firstly, to describe the *status quo* in the current level of actual capability of entering trainee internal auditors and, secondly, to provide a description of the level of capability currently *expected* of entering trainee internal auditors.

5.4.2 The population the study focuses on

The population on which the research component of this study is based consists of the members on the database of the IIA (SA) (members whose membership fees were up to date at the time the research was conducted, but excluding educator and student members). The IIA (SA) membership database includes possible respondents from each of the three levels categorised in the IIA's Internal Auditor Competency Framework, namely: internal audit staff, internal audit managers and CAEs (IIA (Global) 2013a:1). The perceptions of all three levels (but excluding those members with less than three years' internal audit experience – trainee internal auditors) were used in the research.

The responses of the three levels of the population (those with more than three years of internal audit experience) were regarded as valuable to the research, as these responders were in a position to provide information based on real life experiences. These IIA (SA) members were seen as being in the best position to provide first hand, reliable and current information on the level of technical and behavioural skills that entering trainee internal auditors possess, and whether, in their opinion, the education of entering trainee internal auditors has any deficiencies – i.e. whether a gap exists – and if so, what the extent of such a gap would be (refer to section 1.5 and 1.6).

In respect of the 'internal audit staff' level it was necessary to distinguish between internal auditors with varying numbers of years of internal audit experience in order to identify the trainee internal auditors – respondents with less than three years' internal audit experience. As mentioned previously, trainee internal auditors were excluded from the research. To

this end, except for CAEs, respondents on the 'internal audit staff' and 'internal audit manager' levels could indicate their position in the organisation by indicating the number of years of internal audit experience they had acquired, through selecting one of the options indicated below:

- internal audit trainee with less than 1 year internal audit experience;
- internal audit trainee with more than 1 year but less than 3 years internal audit experience;
- internal auditor with more than 3 years but less than 5 years internal audit experience; and
- internal auditor with 5 years or more internal audit experience.

For the purposes of this study, and in respect of the design of the research questionnaire, the first two bullets above were classified as 'trainee internal auditors'. Internal auditors with more than three years' internal audit experience (the third and fourth bullets above) were grouped together as internal audit manager respondents.

The internal audit manager respondents had all completed at least three years of practical internal audit experience. CAE members on the IIA's membership database comprised the third group from the IIA (SA) membership database (the population of the study). Responses to questions in respect of the level of capability expectations could thus be analysed according to number of years of internal audit experience, and by other geographical information obtained in Section A of the questionnaire (refer to section 5.4.3). Section 6.3 provides explanations regarding the inclusion and/or exclusion of some respondent groups from the findings.

The IIA's membership was identified as the most fertile population from which the primary data for the research could be obtained. The database of the IIA (SA) contained 8 266 members (refer to Figure 11 on page 66) (IIA (SA) 2012:28) at the time the research was conducted. All the members on the database (except educator and student members) were included in the

survey, as the research questionnaire was easily distributed to the entire IIA (SA) membership database.

The following section explains the design of the research instrument and the approach adopted for collecting data from the population.

5.4.3 The questionnaire and the data collection method

Information obtained from the curricula and prospectuses of tertiary institutions, and literature from publications on internal auditing and internal audit education, was considered during the design of the questionnaire. The questions (items) comprising the questionnaire were formulated according to the problem, objective and questions of the research study, and were structured so as to facilitate appropriate analysis of the data gathered from participants.

5.4.3.1 The design of the questionnaire

A research questionnaire was developed which permitted different response-type questions in order to obtain a wider range of information from participants' responses. The questions (research items) in the research questionnaire were formulated after taking the information obtained in respect of the developments of the internal audit profession, as well as internal audit education, into consideration. The research items were based on a combination of: (1) the CBOK 2010 skills and competence categories; (2) the core competencies according to the IIA's Internal Auditor Competency Framework, and (3) the behavioural and technical skills as presented in the Fasset Work-readiness Programme (refer to Table 19 and Table 20 on pages 116 and 118 respectively) (Bailey 2010:7; IIA (Global) 2013a:1; Fasset 2013).

The CBOK 2010 study used General Competencies, Behavioural Skills and Technical Skills to categorise internal auditor competencies and skills. The Internal Auditor Competency Framework (IACF) lists 10 core competency areas for internal auditors (derived from the CBOK 2010 study), while the Fasset Work-readiness Programme is based on a combination of 22 behavioural and technical skills (Bailey 2010:7; IIA (Global) 2013a:1; Fasset 2013). Table 19 summarises the various competencies and skills used in formulating the *behavioural and technical skills* upon which the research instrument was based.

Table 19: Competencies and skills applied in the formulation of the behavioural and technical skills used in the study

CBOK 2010 study	Internal Auditor Competency Framework	Fasset Work-readiness Programme
General competencies: • Ability to promote the value of internal audit activity within an organisation • Keeping up-to-date with industry and regulatory changes and professional standards • Organisational skills (incl. project and time management) • Communication skills (incl. oral, written, report writing, presentation) • Problem identification and solution skills (incl. critical, conceptual, and analytical thinking skills) • Conflict resolution/negotiation skills • Change management skills • Cultural fluency and foreign language skills • Staff training and development • Competency with IT/ICT frameworks, tools and techniques • Competency with accounting frameworks, tools and techniques **Behavioural skills:** • Confidentiality	**10 Core competency areas:** • Professional ethics • Internal audit management • International Professional Practices Framework • Governance, risk and control • Business acumen • Communication • Persuasion and collaboration • Critical thinking • Internal audit delivery • Improvement and innovation	• Oral communication • Numeracy skills • Positive work ethic • Interpersonal skills and teamwork • Self-discipline • Problem-solving skills • Motivation • Time management • Written communication • A mature attitude • Information Technology skills • Confidence • Adaptability • Self-development • Leadership • Effective management of resources • Occupation skills (job-search strategies) • Decision-making skills • Self-reliance • Innovation • Negotiation skills • Awareness of how changes in the world impact on the organisation

• Facilitation • Governance and ethics sensitivity • Influence • Communication • Staff management • Leadership • Acts as a change catalyst • Objectivity • Judgement • Relationship building • Is a team player • Team building • Can work independently • Can work well with all management levels **Technical skills:** • Operational and management research skills • Forecasting • Project management • Business process analysis • Understanding business • ISO/Quality knowledge • Total quality management • Balanced scorecard • Risk analysis and control assessment techniques • Identifying types of controls • Governance, risk and controls techniques • Data collection and analysis tools and techniques • Statistical sampling • Financial analysis tools and techniques • Forensic skills/fraud awareness • Problem solving tools and techniques • Negotiation skills • Use of IT/ICT/technology based audit techniques		

(Sources: Bailey 2010; IIA (Global) 2013a:1; Fasset 2013)

The technical and behavioural skills listed in Table 19 are categorised based on the nature of the skills shown in Table 20. The technical skills category in Table 20 includes internal audit-specific knowledge and proficiencies required of internal auditors in order to perform internal audit engagements. The behavioural skills category, in the context of this research, includes those skills, attitudes and (personal) characteristics that are needed in order to efficiently perform internal audit engagements – mostly applied in conjunction with technical skills. In the context of this research, *attitudes* and *personal characteristics* form part of the behavioural skills category shown in Table 20. Where appropriate, these skills are broken down or sub-divided into specific skills.

The questions in the questionnaire were formulated according to the technical and behavioural skills shown in Table 20.

Table 20: Categories of technical and behavioural skills according to which the research questions were formulated

Technical skills	**Behavioural skills**

• Accounting skills
  ○ Basic accounting skills (bookkeeping)
  ○ Company annual financial statements
  ○ IFRS (accounting standards)
  ○ Public sector accounting (GRAP)
• Auditing skills
  ○ Financial
  ○ Internal
  ○ Operational
  ○ Public Sector
  ○ IT/IS
• Business management
• Economics
• Fraud and forensic skills
• Governance and associated codes (King III, SOX, etc.)
• Internal Audit Standards and Practice Advisories
• IT/IS and related skills
• Legislation
  ○ Companies Act
  ○ MFMA
	• Inter-personal skills
	  ○ Oral communication skills
	  ○ Written communication skills
	  ○ Listening skills
	  ○ Negotiation skills
	  ○ Conflict management
	  ○ Teamwork
	• Personal Characteristics
	  ○ Adaptability
	  ○ Confidence
	  ○ Critical thinking
	  ○ Cultural sensitivity
	  ○ Governance and ethics sensitivity
	  ○ Interpersonal skills
	  ○ Judgement skills
	  ○ Leadership skills
	  ○ Maturity
	  ○ Motivation (of self and others)
	  ○ Problem identification and solving skills
	  ○ Self-discipline
	  ○ Work ethic

Technical skills	Behavioural skills
○ PFMA • Management skills ○ Managing the IAA (including people management) ○ Managing internal audit engagements (planning, working paper management, evidence gathering and maintenance) • Managerial accounting and finance • Professional ethics • Project and time management • Quantitative techniques ○ Statistical analysis • Risk and control ○ COSO, COBIT and other control frameworks ○ Enterprise risk management (ERM) ○ Risk management • Sampling techniques ○ CAATs ○ Non-statistical sampling ○ Statistical sampling • Strategic planning • Taxation ○ Companies Tax ○ Pay As You Earn (PAYE) ○ Value Added Tax (VAT)	

The design of the questionnaire included structured (pre-formulated), and unstructured questions which were post-formulated. Pre-formulated responses are also referred to as closed-ended responses, while unstructured responses are referred to as open-ended responses. The closed-ended responses included in the questionnaire of this research included dichotomous, multiple-choice, drop-down list and Likert-type scaled responses. The open-ended responses allowed for answers in the respondent's own words – thus providing valuable additional *qualitative* information relevant to the study (Tustin, Ligthelm, Martins & van Wyk 2005:394).

Wegner (2007:31) explains that questionnaires should be divided into different sections. The research instrument was organised into various sections in a manner that makes it possible to sort different types of information together. The questionnaire for this study is divided into three sections, as follows:

- Section A – Biographical information;
- Section B – Work-readiness of entering trainee internal auditors; and
- Section C – Trainee internal auditors' experience of work-readiness preparation during university education.

Section A obtained participants' biographical information, which enabled the researcher to divide the responses into different segments/clusters according to experience levels, as well as by other biographical information characteristics.

In respect of the work-readiness of entering trainee internal auditors, Section B gathered the opinions of those participants with more than three years' internal audit experience, and of CAEs. Firstly they were requested to indicate the lowest level of capability they expect, and secondly to rate the actual level of capability they had encountered in entering trainee internal auditors, specifically concerning technical and behavioural skills.

Section C collected data in respect of the actual experience of trainee internal auditors with regard to the perceived actual and expected levels of technical and behavioural skills capability they possessed or were expected to possess. The data obtained through this section were excluded from the results reported in this research (refer to section 6.3).

5.4.3.2 Pilot testing

The purpose of pilot testing a questionnaire is to provide assurance that the data obtained through the questionnaire are relevant and as accurate as possible. In addition, pilot testing is used to ensure that all questions are understandable and clear, without bias and ambiguities (Tustin, et al 2005:413). The pilot testing also tested that the re-direction (branching and skip patterns) of respondents to various questions and sections of the questionnaire was working as intended. Pilot testing is also a measure to ensure that the collection of data and the subsequent analysis thereof proceeds without interruption (Bless & Higson-Smith 1995:135-137; Tustin et al 2005:413; Du Plooy 2009:99).

In order to test whether the questionnaire complied with the above qualities, it was distributed (as part of the pilot test) to ten respondents from each of the three categories of respondents, namely trainee internal auditors, internal auditors with more than three years' internal audit experience, and CAEs. From the responses and critique received, valuable insight was gained and appropriate changes were made to the research questionnaire before it was finally distributed to the entire research population.

5.4.3.3 Data collection

Following the adjustments made to the questionnaire (as explained in section 5.4.3.2), data were collected by means of the *quantitative research questionnaire*. The six-point Likert-type scale was used to gather responses to the questions in the questionnaire. Participants were requested to rate their work-readiness *expectations* of entering trainee internal auditors under the two skills categories based on the skills these trainees demonstrated. The response options were expressed as percentages of *expected* capability, namely: '0% capability', '20% capability, '40% capability', '60% capability', '80% capability' and '100% capability', for each of the constructs under the technical and behavioural skills categories. In addition, respondents were requested to rate the *actual* level of capability of entering

trainee internal auditors, based on their experience, using the same Likert-type scale, and in respect of the same constructs.

According to Struwig and Stead (2013:4), constructs are the research themes that the research is based on. The constructs (themes) into which the technical and behavioural skills were grouped when the questionnaire was designed (refer to section 5.4.3.1) are:

- Technical skills
  - Accountancy-related skills;
  - types of auditing;
  - risk-related skills;
  - knowledge areas;
  - management skills;
  - internal audit tools and techniques;
  - legislation; and
  - tax-related knowledge areas.
- Behavioural skills
  - Interpersonal skills; and
  - personal characteristics.

The Chief Executive Officer (CEO) of the IIA (SA) agreed to distribute the questionnaire to the members of the IIA (SA). The questionnaire was distributed electronically (as an e-survey), with the assistance of the IIA (SA), on the basis of a census. The research instrument was designed to re-direct respondents, based on the responses to the biographical information questions in Section A, to the relevant sections of the questionnaire. Section 6.2.1 explains the administering of the questionnaires to the population of the study.

5.4.4 Data analysis

An analysis and comparison of the data was conducted in order to find possible solutions to the questions derived from the research problem and the objective of the research (refer to sections 1.5, 1.6 and 1.7) (Leedy & Ormrod 2005:140). The data were classified according to its source (the various categories were explained in Section 5.4.2), namely:

- trainee internal auditors;
- internal auditors with more than three years of internal audit experience (internal audit management); and
- Chief Audit Executives (CAEs).

The empirical quantitative approach allowed for statistical analysis. The data were analysed, where applicable, by exporting it into tables in an electronic spread sheet (Microsoft Excel ®) after which statistical analysis application software (IBM SPSS Statistics Version 21) (IBM SPSS 2013) was used for statistical analysis and comparison purposes. Graphs and charts were prepared from the data contained in the tables of analysis.

The following section explains the statistical techniques that were used to ensure that the data collected were reliable, useful and meaningful.

5.5 STATISTICAL TECHNIQUES APPLIED DURING DATA ANALYSIS

The statistical techniques used to arrive at meaningful, reliable and understandable results are outlined in the following sections.

5.5.1 Paired sample t-tests as a method to determine the significance of differences between variables' means

The paired sample t-test technique is used to determine whether differences exist, and whether these differences are significant (Easton & McColl, n.d.). The paired sample t-test is based on the paired difference between the means of the two variables (*expected* and *actual* levels of capability) and determines the *significance* of the difference between these means. The paired sample t-test thus statistically tests whether the means of the two variables are *significantly different* from each other (Tustin, et al 2005:633-634). The paired sample t-tests performed to determine the significance of the results of the study were done using IBM SPSS Statistics Version 21 (IBM SPSS 2013).

In the context of the objective of this research, significant differences would confirm the existence of an internal audit educational expectation gap – based on the difference between *expected* and *actual* levels of capability of entering trainee internal auditors. The following section explains how the meaningfulness of a significant difference is determined.

5.5.2 Cohen's *d* as a measure of the effect-size of significant differences

Effect-size estimates are measures designed to meaningfully present results by showing the *size* of the effect of significant differences on the population of the research (Walker 2008). Statistical significance, explained in Section 5.5.1 above, does not indicate the *meaningfulness* (effect-size) of a reported significant difference. In the context of the above, it is important to determine whether the statistically significant results have a meaningful effect, in order to understand the effect-size of a significant difference (Norman & Streiner 2003:32). In the context of the research objective, the effect-size is an indication of the *extent* of the internal audit educational expectation gap under investigation.

Cohen's *d* is typically used with paired-sample *t*-test results to determine the *effect-size* (also shown as *d*) of a significant difference between two variable means (Cohen 1988; Walker 2008). In terms of Cohen's *d*, the difference between the means of two variables is divided by the average (pooled) standard deviation of the two variable means. For the purposes of this study, the benchmarks presented by Cohen (1988) have been used to indicate the *effect-size* (meaningfulness) of the mean differences between the expected and actual skills capabilities of entering trainee internal auditors, thus indicating the *extent* of the possible expectation gap (Schuele & Justice 2006).

Table 21 provides an illustration and explanation of the mean differences between the expected and actual skills capabilities, based on Cohen's *d* of the interpretation intervals of the effect-size, reported for the various skills categories in this research. 'Small' but significant differences range from a Cohen's *d* value of '0.2 to 0.5', significant but 'moderate' differences range from '0.5 to 0.8' while 'large' significant differences have a Cohen's *d* value of more than '0.8' (Cohen 1988; Walker 2008).

Table 21: Effect-size - Cohen's *d* interpretation intervals

Small	Moderate	Large
$0.2 < d < 0.5$	$0.5 < d < 0.8$	$d > 0.8$

(Source: Own compilation with information from Cohen 1988)

The following section explains how the reliability of the data that were used to determine the significance and effect-size of differences, was determined.

5.5.3 Cronbach's Alpha coefficient as a measure of internal consistency reliability

Cronbach's Alpha is a statistical technique used to measure the reliability of data obtained by means of Likert-type or scaled questions in a questionnaire. The calculation of Cronbach's Alpha is based on the reliability of a

questionnaire's Likert-type scaled questions in relation to other questions, within a specific theme or construct and using the same scale (Hatcher 1994). In addition to the reliability of research data, Cronbach's Alpha indicates the degree of 'interrelatedness' of the scaled questions of the questionnaire, for example those that pertain to the same construct. The degree of interrelatedness of scaled questions refers to the 'internal consistency' of these items. Gliem and Gliem (2003:88) conclude that "… when using Likert-type scales [questions] it is imperative to calculate and report Cronbach's Alpha coefficient for internal consistency reliability for any scales or subscales one may be using".

The Cronbach's Alpha coefficient can range from '0.0' to '1.0'. The higher the value of the Cronbach's Alpha coefficient, the higher the degree of correlation and thus the more reliable the data (Laerd Statistics 2013). It can thus be deduced that the closer the Cronbach's Alpha coefficient is to '1.0', the higher the internal consistency and thus the reliability of the data derived from the scaled questions are (Gliem & Gliem 2003:87). A Cronbach's Alpha of 0.7 or higher indicates an acceptable (high) measure of reliability of the data obtained (Gliem & Gliem 2003:87).

The Cronbach's Alpha tests were performed on the data collected through the Likert-type scale questions of this study's questionnaire using IBM SPSS Statistics Version 21 (IBM SPSS 2013). Cronbach's Alpha coefficients (*internal consistency reliability* values) for each of the themes (constructs) in the various tables that illustrate findings of Likert-type scaled research questions are reported in Chapter 7.

The three statistical techniques explained above were used to ensure the *internal consistency reliability* of the data, which was then used to determine the *significance* of differences between variable means, and finally the *effect-size* (meaningfulness) of these significant differences. The following section summarises and concludes the chapter.

5.4 SUMMARY AND CONCLUSION

The research methodology used in the study was described and motivated in the context of the research problem, research objective and the secondary research objectives. The research design of the study was explained and justified.

Justification for the choice of a quantitative research methodology for this research study was provided. Based on the limited availability of published information in relation to the research problem and objective, the empirical component employed a descriptive, non-experimental, quantitative methodology. The method of data collection was described and motivated i.e. an e-survey method was implemented.

In the context of the research problem and the objective of this study, it could be concluded that the most appropriate research methodology was the non-experimental, descriptive, quantitative methodology. The research design was thus based on the following findings:

- The population from which the data for the research was gathered was the members on the membership database of the IIA (SA), and these were divided into three groups.
- The instrument used to gather the data was a quantitative research questionnaire.
- The most efficient method to distribute the research questionnaire was with the assistance of the IIA (SA).
- Pilot testing was used to ensure the understandability of the questions and the reliability of the data that would be obtained by means of the questionnaire.
- Statistical analysis was performed using an electronic spread sheet combined with a statistical analysis software programme (SPSS).

The results of the survey were used to perform a descriptive statistical analysis, determining the mean differences between the perceptions of the various categories and levels of internal auditors in respect of the levels of capability possessed by entering trainee internal auditors for each of the skills. These statistical results provided a clear indication of similarities and differences (including the significance and effect-size of differences, and the internal consistency of data) in the perceptions of the level of work-readiness of entering trainee internal auditors – indicating whether an internal audit educational expectation gap exists.

The following chapter explains the administering and application of the questionnaire. In addition, the responses obtained through the research are statistically described.

CHAPTER 6: ADMINISTERING OF THE QUESTIONNAIRE AND DESCRIPTION OF RESPONSES

6.1 INTRODUCTION

The previous chapter outlined and described the research methodology and the research design. The objective of this chapter is to provide insight into aspects specifically relating to the questionnaire used during the data collection process of the study.

In the context of the research problem, the objective, and the secondary research objectives of this study (refer to sections 1.5, 1.6 and 1.7 respectively), justification is provided for decisions taken in respect of the omission or inclusion of specific respondent groups in the analysis and interpretation of the results presented in Chapters 7 and 8. In addition, this chapter provides a descriptive statistical analysis in respect of the respondents who participated in the survey, and determines the representativeness of these respondents relative to the population of the study.

Figure 17 illustrates the position of Chapter 6 in relation to the structure of the research study.

Figure 17: Chapter 6 in relation to the rest of the study

Table 22 indicates the abbreviations and acronyms used in this chapter.

Table 22: Abbreviations and acronyms used in Chapter 6

Acronym	Description
CA (SA)	Chartered Accountant (South Africa)
CAE	Chief Audit Executive
CCSA	Certification in Control Self-assessment
CEO	Chief Executive Officer
CIA	Certified Internal Auditor
CISA	Certified Information Systems Analyst
CRMA	Certified in Risk Management and Assurance
e-Survey	Electronic survey
IIA (SA)	Institute of Internal Auditors (South Africa)
MBA	Master's in Business Administration
MBL	Master's in Business Leadership
PDF	Portable Document Format
PFMA	Public Finance Management Act, 1999 (Act No. 1 of 1999)

Acronym	Description
RA	Registered Auditor
RGA	Registered Government Auditor
RSA	Republic of South Africa
SAIPA	South African Institute of Professional Accountants
URL	Unique Resource Locator

6.2 THE ADMINISTERING OF THE QUESTIONNAIRE

The extensive literature review reported in Chapters 2, 3 and 4 was used as the basis for the design and development of the questionnaire. In addition, the context of the research problem, the research objective, and the secondary research objectives were considered during the design and development process of the questionnaire.

The administering of the questionnaire was to a large extent automated as a result of the use of an electronic survey (e-survey). Where appropriate, particular questions in the questionnaire were identified as compulsory, thus ensuring that respondents filled in all the answers for a particular section.

Respondents were, based on their responses to Question A8, automatically directed to the appropriate section of the questionnaire. Table 23 shows the basis according to which the re-direction of the respondents to the appropriate sections of the questionnaire was made.

Table 23: Allocation of categories of respondents to questionnaire sections

Respondent category	Section A	Section B	Section C
Trainee internal auditors	√		√
Internal audit managers	√	√	
CAEs	√	√	

6.2.1 Distribution of questionnaires to the study's population

The research data were collected by means of an e-survey published on the World Wide Web (also referred to as the internet). E-surveys are useful as they enable the automation of the data capturing process and eliminate data capturing errors (Wegner 2007:30). E-surveys are relatively cheap to administer, and the method enables the researcher to reach much wider-spread populations than do paper-based surveys. E-surveys result in the collection of data that is more current and accurate (Wegner 2007:30).

The request to participate in the survey was distributed to the population of the research by means of electronic mail, with the assistance of the CEO of the IIA (SA) (refer to section 5.4.3). The electronic mail, serving as a cover letter to the questionnaire (refer to Annexure C), included a brief description of the research problem and objectives, and an indication that participation was both *voluntary* and *anonymous*. This method of data collection was chosen as it allowed easier access to the research population.

Access to the electronic questionnaire was made possible through a unique resource locator (URL) link, also known as a 'hyperlink', contained in the text of the electronic mail message. Once the electronic questionnaire had been accessed through the hyperlink provided, it was not possible for the researcher to identify the participant. This ensured the anonymity of participants.

The questionnaire for this study was distributed to all the "paid-up" members of the IIA (SA) (excluding educator and student members) recorded on its membership database at the time of the survey (see section 5.4.3). Bulk e-mails that included the URL-link to the web based questionnaire were sent to these members by the IIA (SA). The first bulk e-mail was sent on 20 June 2013. As the response rate by 30 June (ten days from the date the first bulk e-mail was sent) was too low, the IIA (SA) was requested to send a second bulk e-mail, requesting IIA members to participate in the survey. This mail was sent on 23 July 2013.

Apart from the two bulk e-mails sent to IIA (SA) members, those IIA (SA) member CAEs and senior internal auditors from firms providing internal audit services, who were specifically involved with and responsible for the recruitment, appointment and monitoring of *entering trainee internal auditors*, were directly approached for assistance with the distribution of the questionnaire. These individuals were requested to distribute the e-mail message containing the URL-link to the questionnaire to all their internal audit staff members. In addition, senior internal auditors and CAEs from internal audit service providers, public sector organisations and private sector organisations were approached for assistance in distributing the questionnaire to their internal audit colleagues.

Once the questions had been answered the participants were given the option to 'submit' the responses. Once the final deadline for submission had been reached, the researcher was able to download the response data into an electronic spread sheet (Microsoft Excel ®) for preparation for statistical analysis.

6.2.2 Risks associated with electronic surveys

Some participants reported that their organisations' internet security measures prevented them from accessing the URL-link provided (refer to section 5.4.3.3). These preventative internet security measures could therefore have impacted negatively on the response rate of this study.

In an attempt to minimise this risk, the respondents who reported these difficulties were sent an electronic Portable Document Format (PDF) type file containing the questionnaire. The questionnaires could then be printed on paper to be filled in manually, scanned and returned to the researcher by means of facsimile or electronic mail. The data collected through the manually distributed questionnaires were captured onto an MS Excel ® spread sheet and integrated with the data that were collected through the e-survey process.

It is thus clear that electronic surveys do hold risks in respect of data collection. Firstly, when making use of a URL-link it could cause organisations' internet security software to block incoming e-mails containing such links. In these cases the targeted respondents would not be able to access the questionnaire. Secondly, many individual e-mail accounts are being flooded with various forms of 'junk e-mails' and 'spam e-mails' which could result in the targeted respondent ignoring or not taking note of the e-mail containing the URL-link to the research survey. Thirdly, internal auditors receive many requests to participate in surveys and are, as a result, unlikely to participate in surveys ending up in their e-mail inboxes, unless there is some sort of further intervention.

The above threats (not a complete list) could be the reasons for the research universe's internal auditors not generally participating in electronic surveys. In addition, the daily workloads of internal auditors could be another reason why questionnaires are not being attended to, especially if their e-mail messages are prioritised according to a company-defined protocol. Important work-related e-mail messages would receive priority attention ahead of e-mail messages containing questionnaires – resulting in these e-mails not being attended to.

6.2.3 Responses received from the survey

In this chapter the responses generated by the data collection process are analysed and described in the context of the research objectives of the study.

The total number of responses received was 148 (1.79% of the population). Trainee internal auditors who responded numbered 34 (23% of the responses), internal auditor managers (with more than three years' internal audit experience) numbered 78 (53%), and CAEs, 36 (24%) (refer to Figure 18 and Table 25 on pages 135 and 137 respectively).

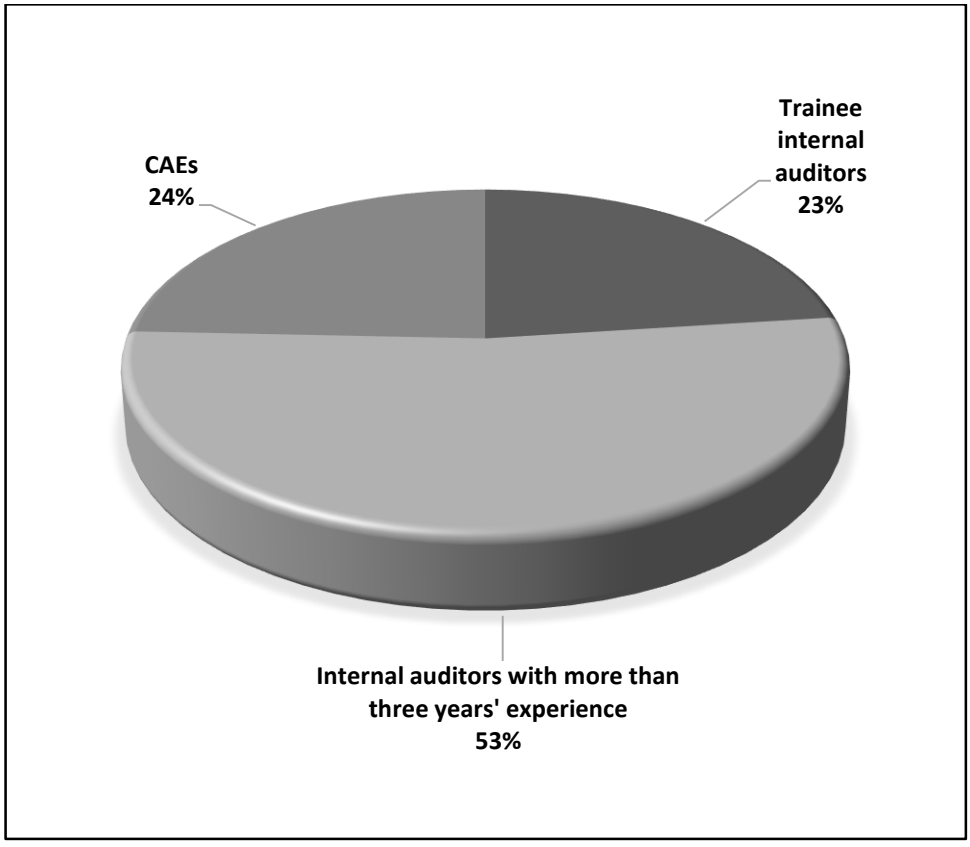


Figure 18: Position in the organisation: all respondents

The profile of the respondents in this research is similar to the profile of respondents recorded by another survey, conducted by Barac et al (2010) in the Republic of South Africa (RSA), on the current standing of and demand for internal auditing in large listed companies. Table 24 shows that for the positions listed, similar proportions of the total number of respondents are

represented. The proportion of CAE respondents that participated in the current study (24.3%) is higher than in the case of the national survey by Barac et al (2010) (10.0%).

The similarity in the two profiles proves that the responses in respect of this study are sufficiently representative of the IIA (SA) membership database (refer to section 5.3.2).

Table 24: Comparison of respondents' profiles with the internal auditor profile of large listed companies in the RSA

Position in organisation	Proportion of national study	Proportion of this study
Internal auditors with more than 3 years' but less than 5 years' internal audit experience	17.8%	13.5%
Internal auditors with 5 years or more internal audit experience	44.9%	39.2%
Chief Audit Executives	10.0%	24.3%
Proportion of senior (internal audit management) respondents to all respondents	72.7%	77.0%

(Source: Barac et al 2010:92)

The following section explains the respondent groups that were used but excluded from the study.

6.3 RESPONDENT GROUPS USED IN AND EXCLUDED FROM THE STATISTICAL ANALYSIS

In light of the research objective of the study (refer to section 1.6) it was decided to limit the respondent groups to CAEs and internal auditors with more than three years' internal audit experience. Internal audit trainee respondents were excluded as they are typically not involved with the recruitment, appointment and management of entering trainee internal auditors, and thus not in an ideal position to provide meaningful opinions and views on the technical and behavioural skills capabilities of entering trainee internal auditors. This limitation in respect of the usefulness of trainee

internal auditors' responses is material in the context of this study. The responses obtained from these respondents may yet be useful in other areas of research as suggested in section 8.5.

CAEs and internal auditors with more than three years of internal audit experience are directly involved in the recruitment and appointment of entering trainee internal auditors, as well as in their supervision and on-the-job training. In addition, these two respondent groups were combined, as their position in the organisation resulted in them being able to provide the most appropriate and meaningful responses (opinions, perceptions and views) from which the secondary research objectives of the study were addressed (refer to section 1.7). The combined group is hereafter referred to as *internal audit management*. The internal audit management group consists of 114 responses.

Table 25 illustrates the breakdown of the 114 survey responses used in the statistical analysis of the research. Internal auditors with more than three years internal audit experience represent 68.4% of respondents, and CAEs represent 31.6% of the responses used in the analysis and interpretation of the results.

Table 25: The position of respondents in the organisation

Position in organisation	Distribution (n)	Cumulative distribution (n)	Proportion of distribution
Internal auditors with three to five years' internal audit experience	20	20	17.5%
Internal auditors with more than five years' internal audit experience	58	78	50.9%
Chief Audit Executives	36	114	31.6%
Total	**114**		**100%**

6.4 DESCRIPTIVE STATISTICS: BIOGRAPHICAL INFORMATION OF RESPONDENTS

Section A of the questionnaire obtained the biographical information of respondents. This included information in respect of the their highest academic qualifications; the professional designations they hold; the type of higher education institution they obtained their highest academic qualification from; the focus of their highest qualification; the IIA (SA) region they reside in; the economic sector in which their organisation functions; and their position in the organisation.

Question 1a of the questionnaire requested respondents to indicate either 'yes' or 'no' in response to the following: that they agreed to participate in the survey; that they understood that the information was to be used for research purposes only; and that their participation was anonymous and voluntary. All participants chose the 'yes' option to all three questions.

The responses to the rest of Section A (biographical information) of the questionnaire are presented in the following sections. Brief descriptions, tables and graphs are used to illustrate and explain proportions and distributions of responses.

6.4.1 Respondents' highest academic qualification

Question A2 of the questionnaire requested respondents to indicate their highest academic qualification. The distribution and proportion of all three respondent categories' responses (CAEs and internal audit managers) are presented in Table 26.

The highest percentage of respondents (28.1%) represents those in possession of an honours degree, followed by bachelor's degrees (20.2%) and BTech Degrees (18.4%). The highest academic qualification held by respondents is at master's degree level, and is held by 16.7% of respondents

(7.9% have a master's degree and 8.8% an MBA/MBL). None of the respondents is in possession of a doctorate level qualification.

Table 26: Highest academic qualifications of respondents

Academic Qualification	Distribution	Proportion
BTech degree	21	18.4%
Bachelor's degree (3 year)	23	20.2%
Diploma or National Diploma (3 year)	11	9.6%
Honours degree	32	28.1%
Master's degree	9	7.9%
MBA/MBL	10	8.8%
Postgraduate diploma	8	7.0%
Total	**114**	**100%**

These results show that the respondents to the questionnaire are sufficiently qualified to provide authoritative, meaningful and relevant responses, which contributes to the quality and reliability of the research findings: the majority (35.8%) is in possession of an honours level qualification. As can be seen from Table 26, respondents' highest academic qualifications range from a diploma or National Diploma to a master's degree.

6.4.2 Professional designations held by respondents

Participants were requested to indicate all the professional designations that they possessed (Question A3). The majority of respondents are in possession of one or more professional designations (refer to Table 27 on page 140). Of these respondents, 47.4% are in possession of the Certified Internal Auditor (CIA) professional designation of the IIA. The Chartered Accountant (CA) (SA) professional designation is held by 12.3% of respondents, of whom 2.6% are also Registered Auditors (RA).

Other IIA professional qualifications held by respondents include Certification in Control Self-Assessment (CCSA) (16.7%) and Certified in Risk Management and Assurance (CRMA) (8.8%). Respondents who indicated that they were not in possession of any professional qualifications represent 31.6% of the 114 respondents.

Table 27: Professional designations held by respondents

Professional designation		Distribution	Proportion (n = 114)
The IIA's internal audit and related professional designations	CCSA	19	16.7%
	CIA	54	47.4%
	CRMA	10	8.8%
	Total	**83**	**72.8%**
Other professional designations	CA (SA)	14	12.3%
	CISA	8	7.0%
	Professional Accountant (SAIPA)	3	2.6%
	Registered Auditor (RA)	3	2.6%
	Registered Government Auditor (RGA)	1	0.9%
	Other	19	16.7%
	Total	**48**	**42.1%**
None		36	31.6%

* Respondents could choose more than one option. The total (n) represents the number of respondents and not the number of professional qualifications. The proportions are expressed as a percentage of the number of respondents.

Based on the high proportion of participants holding professional designations (more than 30.0%), which is indicative of a good standing in the internal audit profession, the number of responses is regarded as sufficient. The authoritative standing of these respondents further contributes to the quality and reliability of this study's research findings.

6.4.3 Types of tertiary institution where respondents' highest academic qualification was obtained

Respondents were requested (Question A4) to indicate at which of the three types of South African tertiary institutions they obtained their highest academic qualification. As illustrated in Figure 20, a majority of 73.7% of respondents obtained their academic qualifications from universities, 14.0% obtained their highest qualification at a university of technology, and 12.3% obtained theirs from the former technikons.

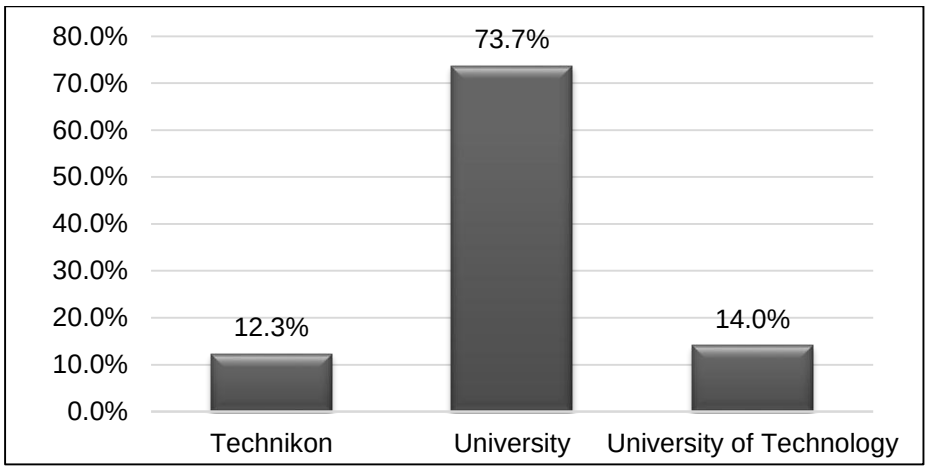


Figure 19: Type of tertiary institution where highest academic qualification was obtained

6.4.4 The main focus of respondents' highest academic qualifications

Question A5 requested respondents to indicate the main focus of their highest academic qualifications. The highest proportion of respondents' qualifications (45.6%) focussed on internal auditing, followed by auditing (19.3%) and accounting (17.5%) (refer to Table 28).

Table 28: Focus of respondents' highest academic qualifications

Focus	Distribution	Proportion
Accounting	20	17.5%
Auditing	22	19.3%
Business Management	12	10.5%
Information Technology	2	1.8%
Internal Auditing	52	45.6%
Management	4	3.5%
Managerial Accounting	2	1.8%
Total	**114**	**100%**

6.4.5 Respondents' Institute of Internal Auditors South Africa region of residence

Respondents were requested to indicate their geographical location by choosing the IIA (SA) Region they currently reside in (Question A6). Table 29 shows that the majority of respondents reside in the Gauteng Province of RSA (Johannesburg region (31.6%) and Pretoria (31.6%)). The higher percentages of respondents in these two regions correspond with the distribution of the IIA (SA) national membership database.

Apart from the concentration in the two Gauteng regions, the remaining regions are sufficiently represented by respondents (refer to Table 29) to render meaningful results. Only one region, the North West region, had no members participating in the survey.

Table 29: The IIA (SA) Region that respondents reside in

IIA (SA) Region	Distribution	Proportion
Border Kei	2	1.8%
Central	4	3.5%
Johannesburg	36	31.6%
Kwazulu Natal	3	2.6%
Limpopo	1	0.9%
Mpumalanga	3	2.6%
Northern Cape	9	7.9%
Port Elizabeth	8	7.0%
Pretoria	36	31.6%
Western Cape	12	10.5%
Total	**114**	**100%**

6.4.6 Economic sectors of the organisations that employ respondents

Question A7 requested participants to identify the economic sector of their employer organisations. According to the frequency distribution of responses in Table 30, the largest group of respondents (12.3%) are employed by financial services organisations, followed by internal audit service providers (10.5%) and 'services (accounting, medical, legal, etc.)' (10.5%). External audit firms employ 9.6% of respondents. Economic sectors with the lowest representation are 'Provincial Government' (0.9%) and 'Retail' (3.5%) (their relative proportions are illustrated in Table 30). The distribution of the respondents amongst the various economic sectors shows adequate representation of the internal audit profession in the RSA.

The possibility existed that respondents from the different economic sectors could have different opinions on the levels of capability desired in respect of the various skills categories listed in the questionnaire. The fair and almost 'normal' distribution of responses across the various economic sectors

shown in Table 30 ensures that such differences in opinion did not favour any particular economic sector.

Table 30: Economic sector of respondents' employer organisations

Economic sector	Distribution	Proportion
Constitutional institution	9	7.9%
Education	8	7.0%
External audit firm providing internal audit services	11	9.6%
Financial services	14	12.3%
Internal audit service provider	12	10.5%
Local government	10	8.8%
Manufacturing	7	6.1%
Mining	6	5.3%
Public entity (Schedule 2 of PFMA)	10	8.8%
Public sector: national department	10	8.8%
Public sector: provincial government	1	0.9%
Retail	4	3.5%
Services (accounting, medical, legal, etc.)	12	10.5%
Total	**114**	**100.0%**

6.4.7 Respondents' positions in their organisations

Participants were requested to indicate the position they currently hold in their respective organisations. The objective of this question (Question A8) was to enable the division and organisation of the responses into the three categories of respondents, namely CAEs internal audit managers and internal audit trainees, in order to statistically analyse and compare the perceptions of these three categories of respondents. As was explained in Section 6.3, responses from trainee internal auditor respondents are excluded from the results reported in Chapters 7 and 8 (refer to Figure 23).

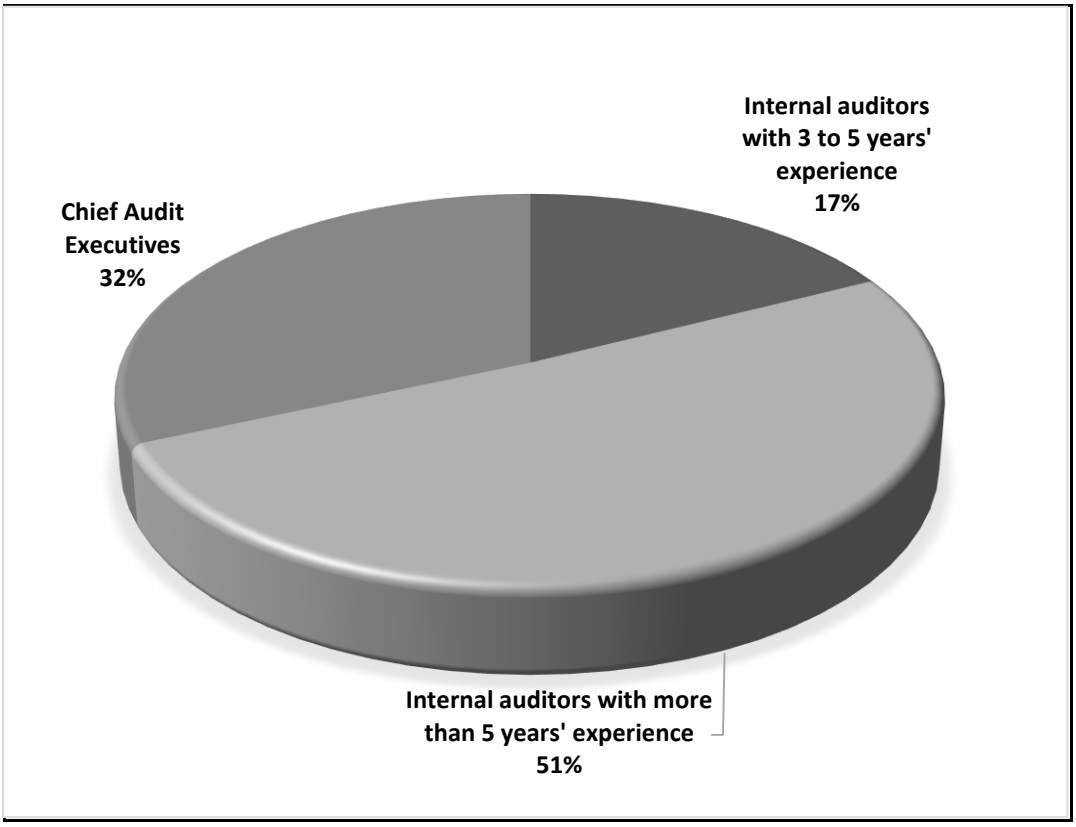


Figure 20: Positions held by survey respondents in their organisations

Based on the three options that respondents (excluding the trainee internal auditors group) could choose from in Question A8 of the questionnaire, respondents were redirected to the appropriate section of the questionnaire (refer to section 5.3.3). The three options were:

a) internal auditors with more than three years', but less than five years' internal audit experience;
b) internal auditors with more than five years' internal audit experience; and
c) Chief Audit Executives (CAEs).

All respondents filled in Section A of the questionnaire. Trainee internal auditors, who were excluded from the research findings presented in this study, were re-directed to Section C. Trainee internal auditors did not have access to Section B of the questionnaire and similarly, internal audit managers and CAEs could not access Section C.

In the context of the research problem, the research objective, and the secondary research objectives (as explained in sections 1.5, 1.6 and 1.7), the three positions in the organisation as illustrated in Table 25 are referred to as *internal audit management*.

6.5 SUMMARY AND CONCLUSION

The objective of this chapter was to outline and explain the process followed in the collection of survey responses; to explain why some respondent groups were included in the analysis and why the trainee internal auditors were excluded; and to provide some descriptive statistical analysis of the responses obtained.

In addition, the chapter provided justification for accepting the 114 responses in this study as being representative of the population (IIA (SA) members) from which the respondents were obtained. The following deductions and findings have thus been made from the explanations and descriptions provided in this chapter:

- Using the IIA (SA) to distribute the questionnaire was the most efficient manner to reach the research population.
- The use of e- surveys holds different risks compared to other forms of questionnaire administration techniques.
- Based on the demographical information reported the responses received from the survey (114) can be regarded as representative of

the population and sufficient to ensure the quality of the data obtained.

- The relative positions of the respondents within their organisations were used to create a single group (**internal audit managers**) which is used in the statistical analysis and interpretation of results in the following chapters.

In the context of the research problem, research objective and the secondary research objectives of this study, it can be concluded that the responses obtained through the e-survey are sufficient, adequate and reliable, enabling the researcher to perform statistical analyses, to interpret research findings and to draw meaningful conclusions therefrom.

The following chapter provides a statistical analysis and interpretation of the results in respect of the technical and behavioural skills capabilities of entering trainee internal auditors.

CHAPTER 7: RESEARCH FINDINGS

7.1 INTRODUCTION

The previous chapters provided reasons and explanations that substantiated the study's research objective with regard to the development of the internal audit profession, and the development of internal audit education in the RSA and globally. These chapters conceptualised work-readiness in the context of this study, and the methodology applied in the research.

The objective of this chapter is to statistically analyse, interpret, describe and meaningfully present the findings of the research in respect of the technical and behavioural skills capabilities of entering trainee internal auditors, in the context of the study's main and secondary research objectives .

Findings in respect of technical and behavioural skills pertinent to the internal audit educational expectation gap are statistically analysed, described and summarised, in order to determine the extent of the overall internal audit educational expectation gap (technical and behavioural skills combined) within the context of the research objective of this study.

The perceptions of respondents (internal auditors with more than three years of internal audit experience, and CAEs) are subjected to statistical analysis in this chapter. The results of the statistical analysis are interpreted and presented in table and graph form.

Figure 21 illustrates the relation of Chapter 7 (the black box) to the rest of the study.

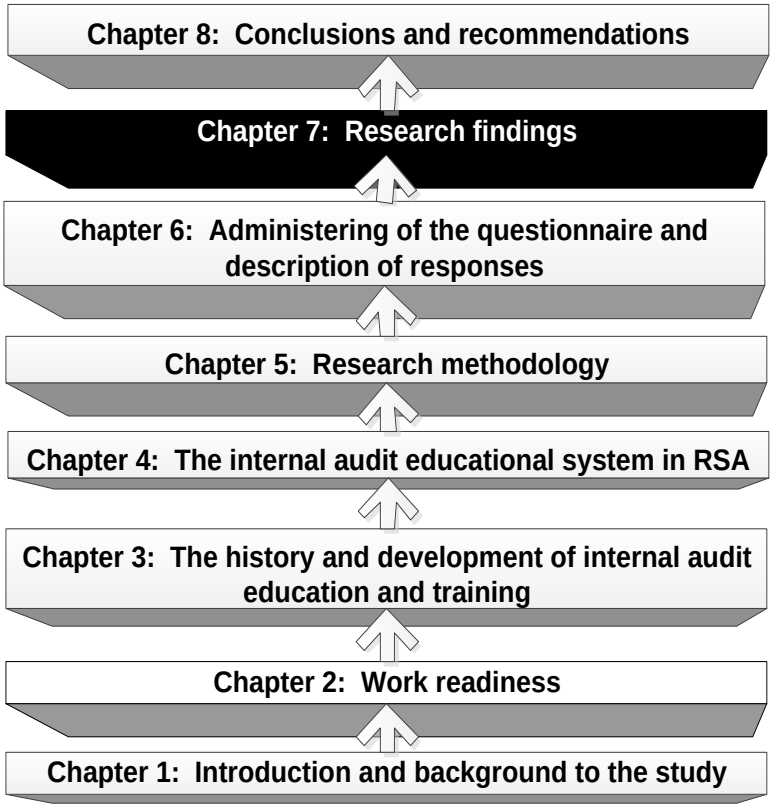


Figure 21: Chapter 7 in relation to the rest of the study

Table 31 includes and describes the abbreviations and acronyms used in this chapter.

Table 31: Abbreviations and acronyms used in Chapter 7

Acronym	Description
ACL	Audit Command Language
AFS	Annual Financial Statement
CAATs	Computer Assisted Auditing Techniques
CAE	Chief Audit Executive
COBIT	Control Objectives for Information and Related Technology
COSO	Committee of Sponsoring Organisations
DHET	Department of Higher Education and Training
ERM	Enterprise Risk Management
GRAP	Generally Recognised Accounting Practice (Public Sector Accounting Standards)
IACF	Internal Auditor Competency Framework
IFRS	International Financial Reporting Standards

Acronym	Description
IIA	Institute of Internal Auditors
IS	Information Systems
IT	Information Technology
MAF	Managerial Accounting and Finance
MFMA	Municipal Finance Management Act, 2003 (Act No. 56 of 2003)
NMMU	Nelson Mandela Metropolitan University
PAYE	Pay As You Earn
PFMA	Public Finance Management Act, 1999 (Act No. 1 of 1999)
RSA	Republic of South Africa
SAQA	South African Qualifications Authority
SOX	Sarbanes Oxley Act of 2000
SPSS	Statistical Package for the Social Sciences
UP	University of Pretoria
VAT	Value Added Tax

The research findings reported in this chapter are grouped according to the following themes:

- Findings in respect of the technical skills capabilities of entering trainee internal auditors (refer to section 7.2).
- Findings in respect of the behavioural skills capabilities of entering trainee internal auditors (refer to section 7.3).
- Summarised overall findings in respect of technical and behavioural skills capabilities of entering trainee internal auditors (refer to section 7.4)
- The sourcing, recruiting and appointment of entering trainee internal auditors (refer to section 7.5).

The demographics (Section A of the questionnaire) of the respondents were discussed in Chapter 6. The remaining empirical findings (Section B of the questionnaire) in respect of technical and behavioural skills are analysed and explained in this chapter, to give effect to the research objective of the study. These findings have a direct relation to the research objective, and are thus analysed and summarised (and combined) in this chapter. The research findings are the end product of the empirical research methods justified and described in Chapters 5 and 6.

Section B of the research questionnaire, which this chapter addresses, is sub-divided into three parts: technical skills capabilities of entering trainee internal auditors; behavioural skills capabilities of entering trainee internal auditors; and sourcing, recruiting and appointment of entering trainee internal auditors.

For the purposes of statistical analysis, the technical skills category is further divided into specific skills as follows:

- Accountancy-related skills (Question B1);
- Types of auditing (Question B2);
- Risk-related skills (Question B3);
- Knowledge areas (Question B4);
- Management skills (Question B5);
- Internal audit tools and techniques (Question B6);
- Legislation (Question B7); and
- Tax-related knowledge areas (Question B8).

For the purposes of statistical analysis, the behavioural skills category is further divided into specific skills as follows:

- Interpersonal skills (Question B10); and
- Personal characteristics (Question B11).

Questions in Section B of the research questionnaire requested respondents to indicate their perceptions of the technical and behavioural skills capabilities of entering trainee internal auditors. The respondents were required to select a point on a 'six point Likert-type scale' that presented the following response options: '0% capability'; '20% capability'; '40% capability'; '60% capability'; '80% capability'; and '100% capability'.

Based on the Likert-type scale indicated above, respondents were firstly requested to indicate the minimum level of capability that *they expect* of entering trainee internal auditors, and secondly to indicate the level of *actual capability* (from their experience) that entering trainee internal auditors *actually possess* with regard to technical and behavioural skills.

As mentioned above, the questions addressed the respondents' perceptions in respect of *expected* and *actual* levels of the technical and behavioural skills capabilities of entering trainee internal auditors. The differences between the mean expected and the mean actual levels of capability with regard to technical and behavioural skills quantify the *expectation gaps.* These are shown as part of the presentation of the results in the tables that follow, and are referred to as the *mean difference* in the interpretations and explanations below.

The *significance* of the mean differences, at a 95% confidence level, is indicated as a *p*-value (refer to section 5.5.1). The 'significance' adjective is used in the rest of this study when $p < 0.05$. In addition, in order to illustrate the meaningfulness (effect-size) of these mean differences, a Cohen's *d* score is indicated (refer to section 5.5.2). The *internal consistency reliability* of the scaled responses is confirmed by indicating the value of Cronbach's Alpha for each of the constructs (refer to section 5.5.3).

The following section explains the research findings in respect of the technical skills capabilities of recently graduated trainee internal auditors.

7.2 TECHNICAL SKILLS CAPABILITIES OF ENTERING TRAINEE INTERNAL AUDITORS

The previous section described the approach followed in the presentation of the research findings in the sections that follow. This section focuses on the *technical skills* capabilities of entering trainee internal auditors.

The following section analyses and explains the findings in respect of *expected* and *actual* accountancy-related technical skills capabilities of recently graduated trainee internal auditors.

7.2.1 'Accountancy-related skills' capabilities of entering trainee internal auditors, as perceived by respondents

Questions B1a requested respondents to indicate the level of capability they expect of entering trainee internal auditors in respect of 'Accountancy-related skills'. Question B1b requested respondents to draw on their experience and indicate the actual 'Accountancy-related skills' capabilities of these entering trainee internal auditors.

Table 32 and Figure 22 illustrate that on average, respondents expect a significantly higher level of capability (mean = 53.2%) in respect of 'Accountancy-related skills' than that actually possessed by entering trainee internal auditors (mean = 34.7%). The Cohen's *d* score shown in Table 32 indicates a 'large' effect-size (d = 1.10) between the expected and actual capabilities in respect of 'Accountancy-related skills' ($p < 0.001$).

Respondents (69.1%) expected entering trainee internal auditors to possess capabilities in 'Basic accounting skills' (basic bookkeeping) (the highest level of expected skills capability), while the perceived actual skills capability level that entering trainee internal auditors possess is significantly lower (48.6%). Similar to 'Basic accounting skills', capability levels of more than 50.0% are expected in respect of 'Managerial Accounting and Finance (MAF)' (55.3%), 'Company Annual Financial Statements (AFS)' (55.1%), 'Cost Accounting'

(54.4%) and 'International Financial Reporting Standards (IFRS)' (50.7%), while perceived actual capabilities are reported at 34.9%, 37.9%, 35.4% and 33.9% respectively for these skills.

Table 32: Expected skills capabilities and actual skills capabilities as perceived in respect of 'Accountancy-related skills'

Accountancy-related skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Basic accounting skills	69.1%	48.6%	20.5	< 0.001	0.92	Large
Company Annual Financial Statements (AFS)	55.1%	37.9%	17.2	< 0.001	0.75	Medium
Cost Accounting	54.4%	35.4%	18.9	< 0.001	0.85	Large
International Financial Reporting Standards (IFRS)	50.7%	33.9%	16.8	< 0.001	0.79	Medium
Managerial Accounting and Finance (MAF)	55.3%	34.9%	20.4	< 0.001	0.91	Large
Public Sector Accounting Standards (GRAP)	37.5%	21.2%	16.3	< 0.001	0.69	Medium
Year-end adjustments	50.5%	31.1%	19.5	< 0.001	0.79	Medium
Mean	**53.2%**	**34.7%**	**18.5**	**< 0.001**	**1.10**	**Large**
Standard deviation	**17.5%**	**18.7%**				
Cronbach's Alpha	**0.92**					

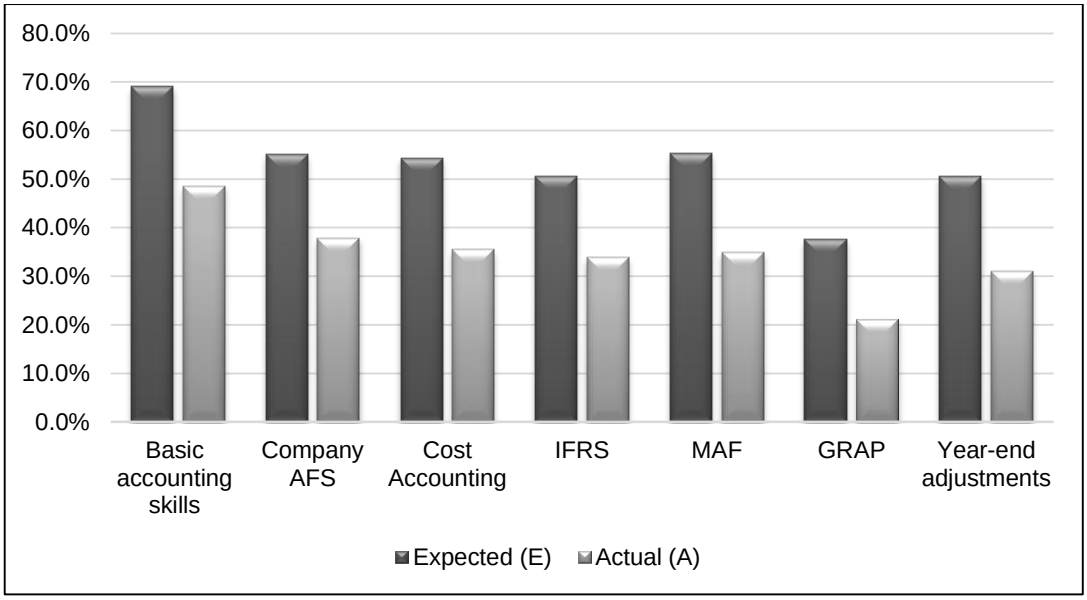


Figure 22: Expected skills capabilities and actual skills capabilities as perceived in respect of 'Accountancy-related skills'

'Basic accounting skills' and 'Managerial Accounting and Finance (MAF)' show the largest mean differences between the expected and actual levels of capability (20.5 and 20.4 respectively), indicating that respondents expect significantly higher capability levels than those actually possessed by entering trainee internal auditors ($p < 0.001$).

It can thus be concluded that respondents have significantly higher skills capability expectations of their entering trainee internal auditors in respect of 'Accountancy-related skills' (listed in Table 32) than they actually possess. The significant mean difference (18.5) ($p < 0.001$) shows that, for these skills, an expectation gap with a 'large' effect-size exists between expected and actual levels of capability.

The following section provides an analysis and interpretation of the findings in respect of the capability levels of entering trainee internal auditors with regard to the 'Types of auditing' category of technical skills.

7.2.2 The capabilities of entering trainee internal auditors in respect of 'Types of auditing'

Respondents were requested (in Questions B2a and B2b of the questionnaire) to indicate the technical skills capability levels in 'Types of auditing' that they desire, and the perceived actual skills capability levels possessed by entering trainee internal auditors.

Table 33 and Figure 23 show the levels expected by and the perceived actual capabilities experienced by respondents with regard to entering trainee internal auditors' competence in 'Types of auditing'. On average, a significantly higher level is reported for the expected level of capability (55.5%) compared to the actual level of capability (35.8%). The effect-size for the mean difference score of 19.2 in respect of skills capabilities relating to 'Types of auditing' is 'large' (d = 1.12).

Table 33: Expected skills capabilities and actual skills capabilities experienced in respect of 'Types of auditing'

Types of auditing	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Financial Auditing	63.0%	44.4%	18.6	< 0.001	1.02	Large
Fraud/Forensic Auditing	42.6%	24.4%	18.2	< 0.001	0.94	Large
Internal Auditing	74.2%	51.1%	23.2	< 0.001	1.08	Large
IT/IS Auditing	47.5%	28.2%	19.3	< 0.001	0.84	Large
Operational Auditing	63.2%	39.3%	23.9	< 0.001	1.04	Large
Public Sector Auditing	42.5%	27.2%	15.3	< 0.001	0.56	Medium
Mean	**55.5%**	**35.8%**	**19.2**	**< 0.001**	**1.12**	**Large**
Standard deviation	**18.3%**	**19.8%**				
Cronbach's Alpha	**0.91**					

The three types of auditing which are ranked highest in respect of skills capability expectations are 'Internal Auditing' (74.2%), 'Operational Auditing'

(63.2%) and 'Financial Auditing' (63.0%). The actual skills capabilities reported for these three types of auditing are 51.1% (mean difference = 23.2), 39.3% (mean difference = 23.9) and 44.4% (mean difference = 18.6) respectively. The type of audit with the lowest reported capability expectation is 'Public Sector Auditing' (42.5%) (actual capability = 27.2%).

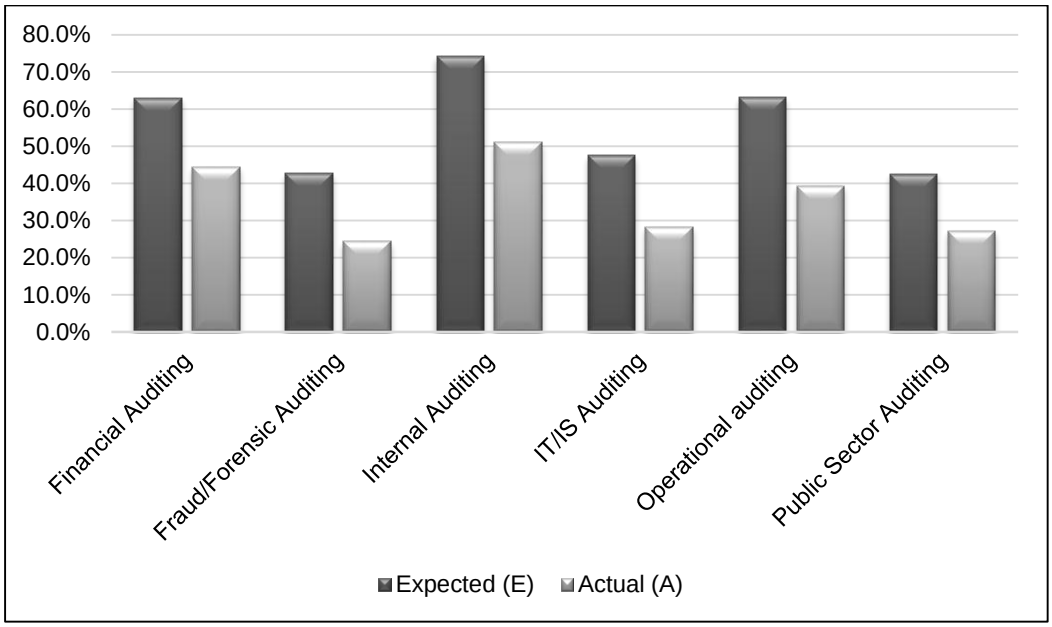


Figure 23: Expected skills capabilities and actual skills capabilities experienced in respect of 'Types of auditing'

Respondents' expectations with regard to the 'Types of auditing' capabilities of entering trainee internal auditors differ significantly ($p < 0.001$) from the perceived actual capability levels. The mean difference of almost 20 proves that respondents' expectations in respect of the 'Types of auditing' listed in Table 33 are not being adequately addressed by universities offering formal internal audit educational programmes. In addition, the high score of Cronbach's Alpha (0.91) indicates that all respondents consistently have similar perceptions in respect of the 'Types of auditing' skills capability levels of entering trainee internal auditors.

The following section provides an analysis and interpretation of the findings in respect of the capability levels of entering trainee internal auditors with regard to the 'Risk-related skills' category of technical skills.

7.2.3 'Risk-related skills' capabilities possessed by entering trainee internal auditors

Questions B3a and B3b requested respondents to indicate their expectations in respect of the 'Risk-related skills' capabilities of their entering trainee internal auditors and, based on their experience, the level of capability they actually possessed.

Responses, presented in Table 34 and Figure 24, show that on average respondents expect a significantly higher level of capability for 'Risk-related skills' (mean = 61.1%) than the reported level of actual capability (mean = 37.9%) for entering trainee internal auditors ($p < 0.001$).

Table 34: Expected skills capabilities and actual skills capabilities experienced in respect of 'Risk-related skills'

Risk-related skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Control frameworks (COSO, COBIT, etc.)	60.0%	37.4%	22.6	< 0.001	1.02	Large
Enterprise Risk Management (ERM)	56.0%	33.5%	22.5	< 0.001	1.04	Large
Internal control assessment	68.1%	44.7%	23.3	< 0.001	1.11	Large
Risk Management	60.5%	36.1%	24.4	< 0.001	1.07	Large
Mean	**61.1%**	**37.9%**	**21.3**	**< 0.001**	**1.15**	**Large**
Standard deviation	**21.0%**	**22.8%**				
Cronbach's Alpha	**0.93**					

The highest level of required capability is reported for 'Internal control assessment' (68.1%), followed by 'Risk Management' (60.5%) and 'Control frameworks' (60.0%). The perceived actual levels of capability reported for these risk-related skills are 44.7%, 36.1% and 37.4% respectively. Significant mean difference scores of above 20 exist for all the risk-related skills listed. A 'large' effect-size (d = 1.15) is shown in respect of the mean difference.

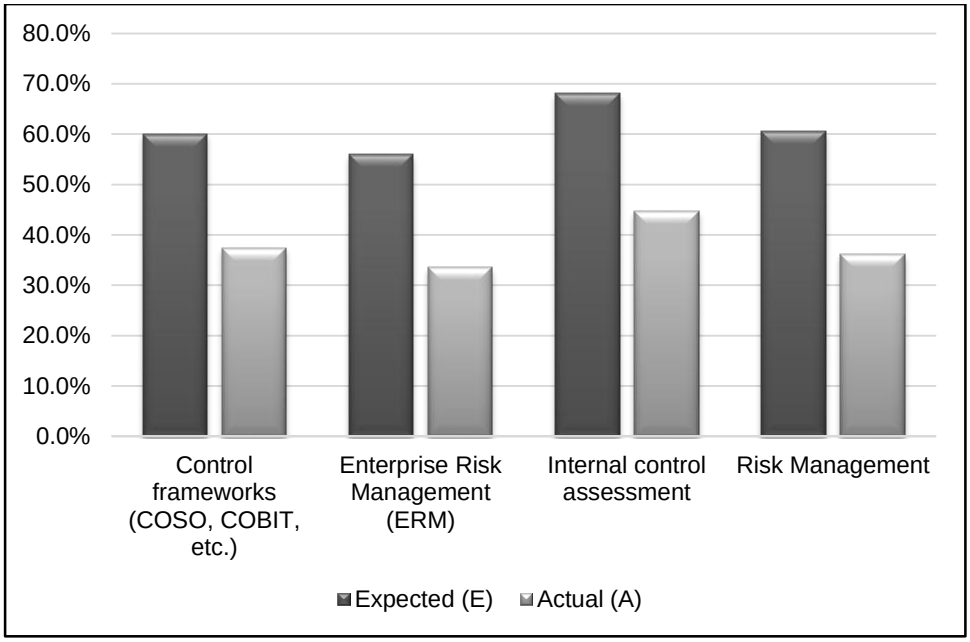


Figure 24: Expected skills capabilities and actual skills capabilities experienced in respect of 'Risk-related skills'

Risk based auditing (and thus risk-related skills) has become the primary focus of engagement planning by internal auditors globally, which emphasises the importance of risk-related skills capabilities, and explains the high level of capability desired in respect of these skills (Coetzee, Du Bruyn, Fourie & Plant 2013:29). Based on the 'large' effect-size ($d > 0.80$) of the mean difference recorded in Table 34, it is clear that respondents expect significantly more from entering trainee internal auditors than their undergraduate studies are giving them. The high Cronbach's Alpha score (0.93) confirms that all respondents consistently share similar views regarding entering trainee internal auditors' capability levels in respect of 'Risk-related skills'.

The following section provides an analysis and interpretation of the findings in respect of the capability levels of entering trainee internal auditors with regard to the internal audit 'Knowledge areas' category of technical skills.

7.2.4 Level of capability possessed by entering trainee internal auditors with regard to 'Knowledge areas'

Questions B4a and B4b of the questionnaire solicited the respondents' expected and perceived actual skills capability levels on knowledge areas of their companies' entering trainee internal auditors.

As can be read from Table 35 and Figure 25, respondents expect a significantly higher level ($p < 0.001$) of capability (mean = 56.5%) in respect of 'Knowledge areas' than what they experience the actual level of capability of entering trainee internal auditors to be (mean = 39.2%). With regard to the mean difference of 17.3, a 'large' effect-size (d = 1.10) is reported.

Table 35: Expected skills capabilities and actual skills capabilities experienced in respect of 'Knowledge areas'

Knowledge areas	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Business management	54.4%	41.1%	13.3	< 0.001	0.67	Medium
Economics	48.8%	35.6%	13.2	< 0.001	0.69	Medium
Governance codes and legislation (e.g. King, SOX, etc.)	62.6%	45.3%	17.4	< 0.001	0.83	Large
Internal audit standards and practice advisories	76.8%	36.0%	40.9	< 0.001	1.54	Large
Information Technology	54.7%	55.4%	-0.7	0.733	-0.03	Not sign.
Professional ethics	78.9%	53.0%	26.0	< 0.001	1.13	Large
Project management	50.7%	32.3%	18.4	< 0.001	0.95	Large
Public sector finance and administration	38.4%	28.2%	10.2	< 0.001	0.43	Small
Strategic planning	43.0%	25.6%	17.4	< 0.001	0.77	Medium
Mean	**56.5%**	**39.2%**	**17.3**	**< 0.001**	**1.10**	**Large**
Standard deviation	17.8%	18.8%				
Cronbach's Alpha	**0.95**					

For the 'Professional ethics' knowledge area, respondents expect a high level of capability (78.9% – the highest expected level of competence of all

areas investigated) while, according to their experience, entering trainee internal auditors possess a level of capability of only 53.0% – a significant mean difference with a 'large' effect-size ($d > 0.80$) of more than 25.0 ($p < 0.001$).

The 'Internal audit standards and practice advisories' category has a desired level of capability of 76.8%, but the perceived actual level of capability of entering trainee internal auditors is low (36.0%), resulting in an exceptionally high mean difference of 40.9 ($d = 1.54$) – the highest difference reported for all technical and behavioural skills.

The two knowledge areas with the lowest expected mean level of capability are 'Public sector finance and administration' (38.4%) and 'Strategic planning' (43.0%). These show significantly lower mean levels of actual capability: 10.2% for 'Public sector finance and administration', with a 'small' effect-size ($d = 0.43$), and 17.4% for 'Strategic planning', with a 'medium' effect-size ($d = 0.77$).

'Information Technology' is the only knowledge area where respondents' mean levels of expected capability were lower than their perception of actual capability (expected mean level = 54.7% versus actual mean level = 55.4%).

The 'large' effect-size ($d = 1.10$) in respect of the mean difference (17.3) between the expected and actual mean levels of capability in respect of 'Knowledge areas' recorded in Table 28, as well as the high Cronbach's Alpha score of 0.95, indicates that internal audit managers consistently have similar significantly higher expectations ($p < 0.001$) of entering trainee internal auditors' capability levels for 'Knowledge areas' than they are perceived to deliver. ('Knowledge areas' are typically included in the theoretical component of the curricula of formal internal audit educational programmes.)

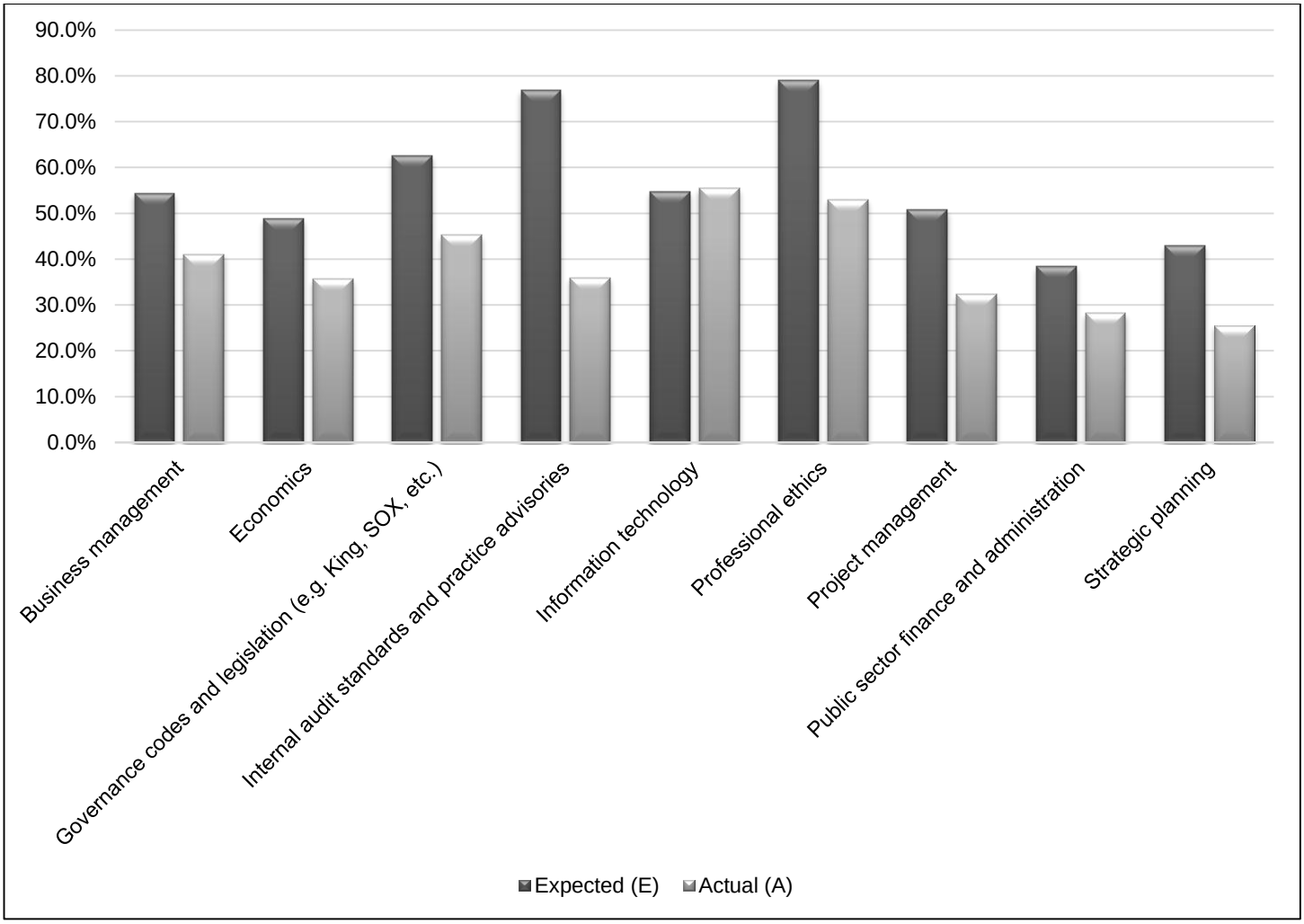


Figure 25: Expected skills capabilities and actual skills capabilities experienced in respect of 'Knowledge areas'

The following section provides an analysis and interpretation of the findings in respect of the capability levels of entering trainee internal auditors with regard to the 'Management skills' category of technical skills.

7.2.5 'Management skills' capabilities possessed by entering trainee internal auditors

Respondents were requested to indicate the expected and the perceived actual skills capability levels of entering trainee internal auditors in respect of 'Management skills' (addressed in Questions B5a and B5b of the questionnaire).

Responses recorded in Table 36 and Figure 26 show an expected mean level of capability of 45.3% in respect of the three types of management skills listed. However, when this modest expectation is compared to the mean perceived actual level of capability (31.6%), it shows a significant mean difference ($p < 0.001$) of 13.7, with a 'medium' effect-size ($d = 0.69$).

Table 36: Expected skills capabilities and actual skills capabilities experienced in respect of 'Management skills'

Management skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Human resource management	45.3%	31.8%	13.5	< 0.001	0.64	Medium
Managing internal audit engagements	49.8%	34.4%	15.4	< 0.001	0.71	Medium
Managing the Internal Audit Activity	40.7%	28.6%	12.1	< 0.001	0.52	Medium
Mean	**45.3%**	**31.6%**	**13.7**	**< 0.001**	**0.69**	**Medium**
Standard deviation	**23.5%**	**20.6%**				
Cronbach's Alpha	**0.90**					

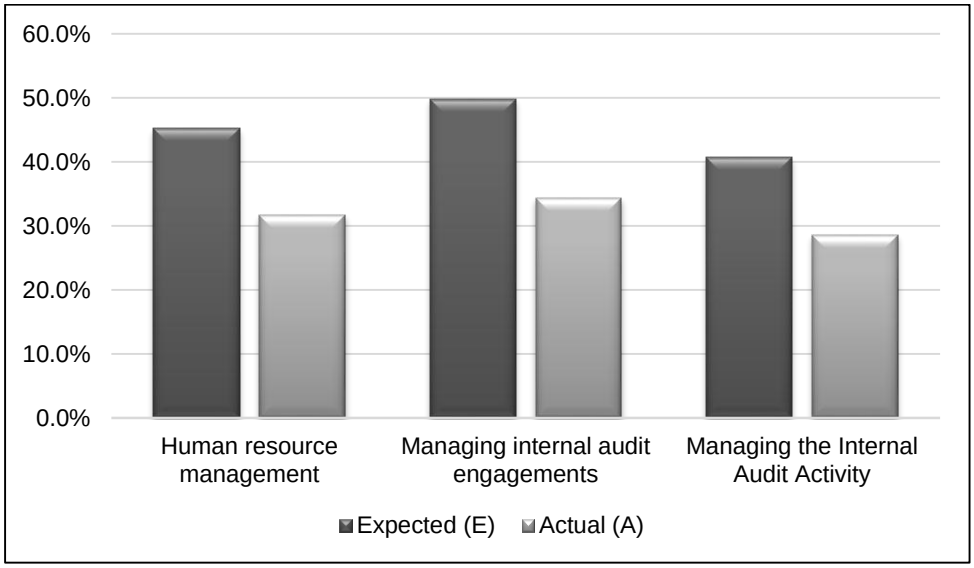


Figure 26: Expected skills capabilities and actual skills capabilities experienced in respect of 'Management skills'

The expected mean level of capability for the 'Management skills' listed in Table 36 are below 46.0%, which indicates that respondents do not expect entering trainee internal auditors to have a high level of capability in these skills, possibly because they are not directly involved in management roles yet. All respondents consistently share similar views in this respect (Cronbach's Alpha = 0.90).

The following section provides an analysis and interpretation of the findings in respect of the capability levels of entering trainee internal auditors with regard to the 'Legislation' category of technical skills.

7.2.6 Level of capability possessed by entering trainee internal auditors in respect of 'Legislation'

Question B6a requested respondents to indicate the level of capability they expect entering trainee internal auditors to possess with regard to 'Legislation'. Question B6b sought the views of respondents in respect of the actual skills capabilities they perceived these trainee internal auditors to possess.

Table 37 and Figure 27 show the respondents' expected and perceived actual mean values of capability. With regard to skills pertaining to legislation, respondents indicated that they expect a significantly higher mean level of capability than entering trainee internal auditors actually possess ($p < 0.001$). As indicated in Table 37, the mean difference of 18.0 represents a 'large' effect-size ($d = 0.93$).

Technical skills capabilities in respect of the 'Companies Act' received a score that shows the highest significant mean difference, i.e. of 34.7, between the expected and the perceived actual capability levels, resulting in a 'large' effect-size ($d = 1.02$). The 'Companies Act' is at the highest mean level of expected skills capability (56.0%). The expected mean levels of capability in respect of skills in other legislation (the Constitution of the RSA, and the PFMA and MFMA) listed in Table 37 are below 50.0%, as are the

respondents' perceived actual mean levels of capability ($p < 0.001$). The Cronbach's Alpha of 0.85 suggests that respondents share similar views in respect of 'Legislation'.

Table 37: Expected skills capabilities and perceived actual skills capabilities in respect of 'Legislation'

Legislation	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Constitution of the RSA	46.7%	32.1%	14.6	< 0.001	0.66	Medium
Companies Act	56.0%	34.7%	21.2	< 0.001	1.02	Large
Municipal Finance Management Act (MFMA)	38.9%	21.1%	17.9	< 0.001	0.72	Medium
Public Finance Management Act (PFMA)	41.8%	23.3%	18.4	< 0.001	0.71	Medium
Mean	**45.8%**	**27.8%**	**18.0**	**< 0.001**	**0.93**	**Large**
Standard deviation	**20.5%**	**18.1%**				
Cronbach's Alpha	**0.85**					

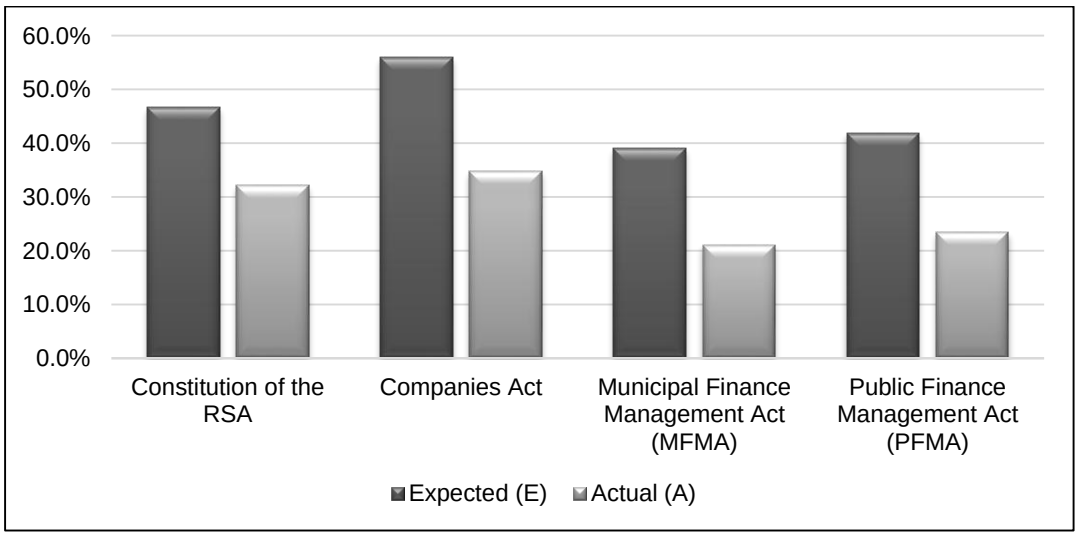


Figure 27: Expected skills capabilities and perceived actual skills capabilities in respect of 'Legislation'

The following section provides an analysis and interpretation of the findings in respect of the capability levels of entering trainee internal auditors with regard to the 'Internal audit tools and techniques' category of technical skills.

7.2.7 'Internal audit tools and techniques' – capability levels expected and possessed by entering trainee internal auditors

Questions B7a and B7b requested respondents to record their expectations of and the perceived actual capabilities possessed by their departments' entering trainee internal auditors with regard to their competence in 'Internal audit tools and techniques'.

Table 38: Expected skills capabilities and actual skills capabilities experienced in respect of 'Internal audit tools and techniques'

Internal audit tools and techniques	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
CAATs (e.g. ACL, BarnOwl, IDEA, etc.)	49.5%	26.0%	23.5	< 0.001	0.94	Large
Non-statistical sampling techniques	56.0%	34.7%	21.2	< 0.001	1.03	Large
Statistical analysis techniques	53.9%	28.4%	25.4	< 0.001	1.09	Large
Statistical sampling techniques	54.0%	29.3%	24.7	< 0.001	1.12	Large
Mean	**53.3%**	**29.6%**	**23.7**	**< 0.001**	**1.14**	**Large**
Standard deviation	**22.4%**	**19.9%**				
Cronbach's Alpha	**0.92**					

For 'Internal audit tools and techniques', Table 38 shows that a significant mean difference ($p < 0.001$) exists between the average expected level of capability (mean = 53.3%) and the level of actual capability (mean = 29.6%) possessed by entering trainee internal auditors. As can be read from Table 38, a significant mean difference of 23.7 is reported between these levels of capability ($p < 0.001$), resulting in a 'large' effect-size ($d = 1.14$).

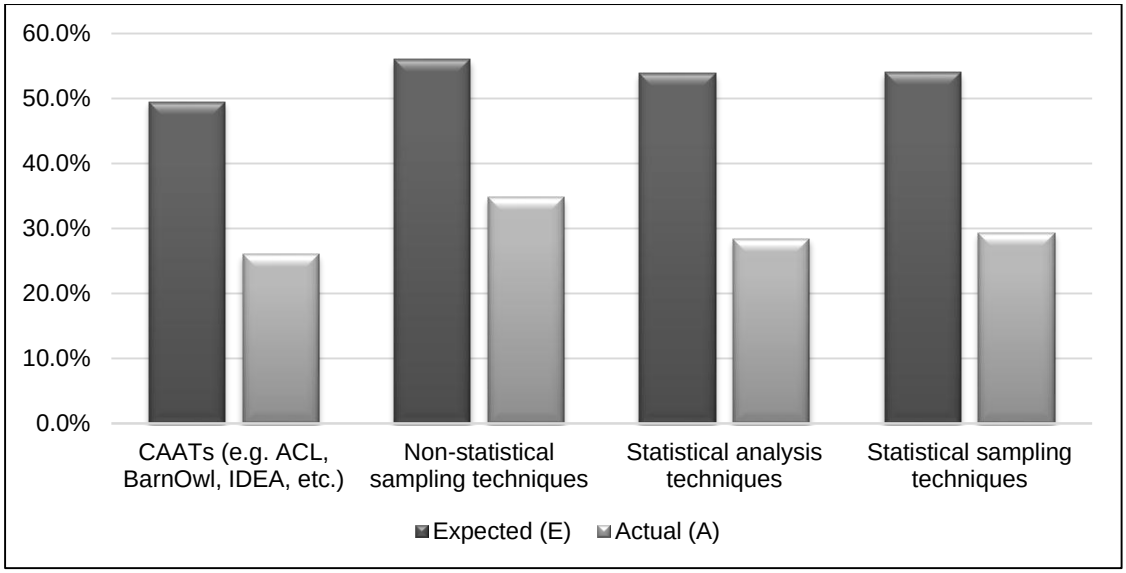


Figure 28: Expected skills capabilities and perceived actual skills capabilities experienced in respect of 'Internal audit tools and techniques'

Figure 28 illustrates that respondents expect levels of capability below 60.0% for all the skills listed under 'Internal audit tools and techniques'. The mean differences in respect of expected skills capability levels compared to the perceived actual levels of capability of entering trainee internal auditors are all above 20.0. 'Large' effect-sizes (d > 0.80) exist for all four of the internal audit tools and techniques listed in Table 38.

The following section provides an analysis and interpretation of the findings in respect of the capability levels of entering trainee internal auditors with regard to the 'Tax-related knowledge areas' category of technical skills.

7.2.8 Capabilities of entering trainee internal auditors in respect of 'Tax-related knowledge areas'

Questions B8a and B8b requested respondents to indicate the expected and the perceived actual levels of capability of entering trainee internal auditors in respect of 'Tax-related knowledge areas'.

Table 39 and Figure 29 show that, on average, respondents experience a significant difference ($p < 0.001$) between what they expect (53.7%) and what entering trainee internal auditors actually possess (36.6%) insofar as 'Tax-related knowledge areas' are concerned. The significant mean difference ($p < 0.001$) between the expected and perceived actual level of capability for these knowledge areas (17.1) results in a 'large' effect-size ($d = 0.89$).

Table 39: Expected skills capabilities and actual skills capabilities experienced in respect of 'Tax-related knowledge areas'

Tax-related knowledge areas	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Companies Tax	49.6%	35.8%	13.9	< 0.001	0.71	Medium
Tax on individuals (PAYE)	53.5%	36.1%	17.4	< 0.001	0.85	Large
Value Added Tax (VAT)	58.1%	37.9%	20.2	< 0.001	0.86	Large
Mean	**53.7%**	**36.6%**	**17.1**	**< 0.001**	**0.89**	**Large**
Standard deviation	**21.2%**	**21.2%**				
Cronbach's Alpha	**0.91**					

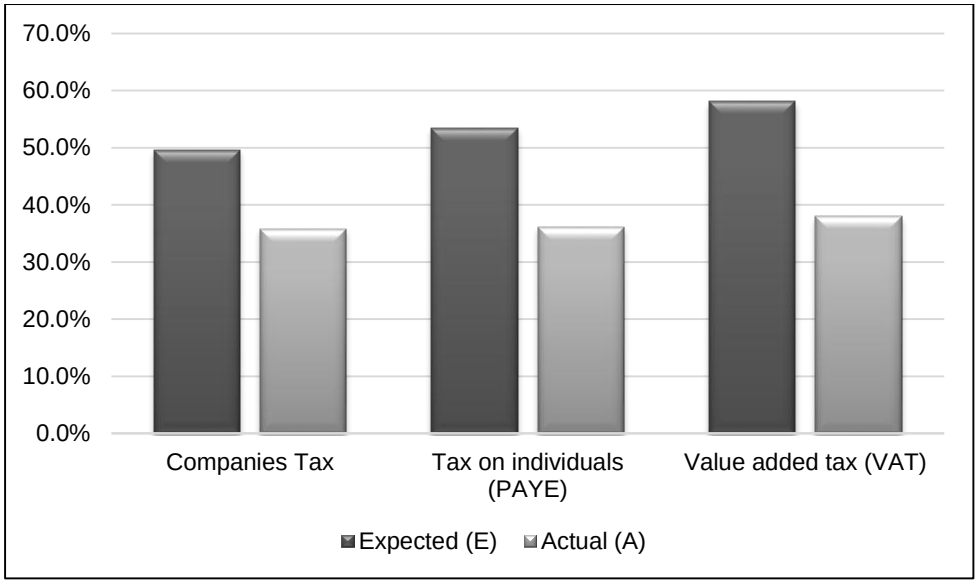


Figure 29: Expected skills capabilities and actual skills capabilities experienced in respect of 'Tax-related knowledge areas'

The high score of Cronbach's Alpha (0.91) shown in Table 39 is evidence of the consistency of the perceptions of respondents in respect of the desired skills capability levels for entering trainee internal auditors. It can thus be deduced from the results described above that, in respect of 'Tax-related knowledge areas', respondents expect a higher level of capability from entering trainee internal auditors than they actually possess – and this is the level of capability that has been transferred through formal internal audit educational programmes.

The following section provides an analysis and interpretation of the findings in respect of skills regarded as important by respondents, but not included by name in the technical skills portion of the survey.

7.2.9 Technical skills regarded as important by respondents, but not included in the survey questions on technical skills

Question B9 of the questionnaire requested participants to provide technical skills that they regard as important, but that had not been listed in the questionnaire. A number of the technical skills provided by respondents were similar to those included in the questionnaire. However, these

duplicate responses are included in the technical skills listed in Table 40, indicating the number of times each of the skills is recorded by respondents, because it emphasises the perceived importance of these skills.

Respondents indicated that 'Computer proficiency' (recorded 5 times), which includes aspects such as Microsoft Word, Excel, PowerPoint, *et cetera,* and 'Project management' (recorded 4 times), were important skills which were not included in the technical skills questions of the questionnaire.

With regard to 'Computer proficiency', these skills form part of 'Information Technology' (refer to Table 35) and 'CAATs' (refer to Table 38), analysed in previous sections.

Table 40: Technical skills regarded as important by respondents, but not included in the survey questions on technical skills

Skills description	Number of times recorded
Computer proficiency (MS Excel, PowerPoint and Word)	5
Project management	4
Risk identification	2
Performance auditing	2
Analysis of financial statements	1
Documenting of a system flow (system description)	1
Working paper documentation	1
Formulating audit tests	1
Integrated auditing	1
Advanced IT Systems (SAP)	1
Internal Audit Coverage Plan	1
Total Quality Management	1
Six Sigma	1
Knowledge of the audit process	1

Table 40 shows that the questionnaire is sufficiently comprehensive and addresses the vast majority of the skills that respondents regard as important.

The following section provides summarised information of the mean differences for all the technical skills.

7.2.10 Summarised findings concerning the technical skills capabilities of entering trainee internal auditors

Table 41 illustrates the significance as well as the effect-size of the mean differences between the expected and actual mean levels of skills capability of entering trainee internal auditors in respect of all technical skills. The significant mean difference of 18.9 ($p < 0.001$) reflects a 'large' effect-size ($d = 1.29$). On average, respondents had similar perceptions in respect of the expected and perceived actual capability levels of entering trainee internal auditors for technical skills (Cronbach's Alpha = 0.92 and 0.94 respectively).

The mean difference shown in Table 41 (18.9) represents an *expectation gap* in respect of the technical skills capabilities of entering trainee internal auditors – a gap between the capabilities transferred by universities and the levels of capability expected by employers of university graduates.

Table 41: Summarised mean levels of expected and actual skills capabilities for technical skills

Technical skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Accountancy-related skills	53.2%	34.7%	18.5	< 0.001	1.10	Large
Types of auditing	55.5%	35.8%	19.2	< 0.001	1.12	Large
Risk-related skills	61.1%	37.9%	21.3	< 0.001	1.15	Large
Knowledge areas	56.5%	39.2%	17.3	< 0.001	1.10	Large
Management skills	45.3%	31.6%	13.7	< 0.001	0.69	Medium
Legislation	45.8%	27.8%	18.0	< 0.001	0.93	Large
IA tools and techniques	53.3%	29.6%	23.7	< 0.001	1.14	Large
Tax-related knowledge areas	53.7%	36.6%	17.1	< 0.001	0.89	Large
Mean	**53.1%**	**34.1%**	**18.9**	**< 0.001**	**1.29**	**Large**
Standard deviation	16.2%	17.1%				
Cronbach's Alpha	0.92	0.94				

The following section provides rankings of the technical skills discussed above.

7.2.11 The ranking of technical skills

The ranking of technical skills is presented in respect of: 1) expected level of capability; 2) actual level of capability; and 3) the mean difference between the expected and actual capabilities, based on the results included in Table 41.

The following section ranks technical skills based on the expected capability levels of entering trainee internal auditors.

7.2.11.1 Ranking of technical skills according to expected capability levels

The top 10 technical skills included in the questionnaire are listed in Table 42. The ranking of these skills has been done according to the mean *expected* level of capability as perceived by respondents. Based on these expectations, it can be deduced that respondents regard these as the 10 most important *technical skills* that entering trainee internal auditors should possess.

The mean differences reported for these skills are all significant ($p < 0.001$), with 'large' effect-sizes ($d > 0.80$). The differences thus represent a technical skills *expectation gap* between what employers desire in respect of capability compared to what formal internal audit education at universities actually provide entering trainee internal auditors with.

Although universities do address 'Internal audit standards and practice advisories' in their curricula, a mean difference (gap) of more than 40.0 is perceived by respondents for this specific technical skill. Under 'Types of auditing', respondents expect levels of capability of more than 74.0% for 'Professional ethics', 'Internal audit standards and practice advisories' and 'Internal Auditing'.

The top five technical skills according to the capability levels expected of entering trainee internal auditors are 'Professional ethics' (78.9%), 'Internal audit standards and practice advisories' (76.8%), 'Internal auditing' (74.2%), 'Basic accounting skills' (69.1%) and 'Internal control assessment' (68.1%).

'Basic accounting skills' is perceived to be the fourth most important technical skill with an expected mean level of capability of 69.1%, while 'International Financial Reporting Standards (IFRS)' (mean = 50.7%) and 'Company annual financial statements' (mean = 55.1%) – the higher level accounting skills – are not included in the top 10 list. These results show that respondents expect lower levels of capability in respect of annual

financial statement-related skills, possibly because these skills are typically associated with skills capabilities expected of external auditors.

Table 42: The top 10 technical skills according to mean levels of expected capability

Technical skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Professional ethics	78.9%	53.0%	26.0	< 0.001	1.13	Large
Internal audit standards and practice advisories	76.8%	36.0%	40.9	< 0.001	1.54	Large
Internal Auditing	74.2%	51.1%	23.2	< 0.001	1.08	Large
Basic accounting skills	69.1%	48.6%	20.5	< 0.001	0.92	Large
Internal control assessment	68.1%	44.7%	23.3	< 0.001	1.11	Large
Operational auditing	63.2%	39.3%	23.9	< 0.001	1.04	Large
Financial Auditing	63.0%	44.4%	18.6	< 0.001	1.02	Large
Governance codes and legislation (e.g. King, SOX, etc.)	62.6%	45.3%	17.4	< 0.001	0.83	Large
Risk management	60.5%	36.1%	24.4	< 0.001	1.07	Large
Control frameworks (COSO, COBIT, etc.)	60.0%	37.4%	22.6	< 0.001	1.02	Large

The following section ranks technical skills based on the actual capability levels of entering trainee internal auditors.

7.2.11.2 Ranking of technical skills according to actual capability levels

The top five skills, based on actual capability levels, are ‘Information Technology’ (55.4%), ‘Professional ethics’ (53.0%), ‘Internal Auditing’ (51.1%), ‘Basic accounting skills’ (48.6%) and ‘Governance codes and legislation’ (e.g. King, SOX, etc.)’ (45.3%).

Table 43: The top 10 technical skills according to mean levels of actual capability

Technical skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Information Technology	54.7%	55.4%	-0.7	0.733	-0.03	Not sign.
Professional ethics	78.9%	53.0%	26.0	< 0.001	1.13	Large
Internal Auditing	74.2%	51.1%	23.2	< 0.001	1.08	Large
Basic accounting skills	69.1%	48.6%	20.5	< 0.001	0.92	Large
Governance codes and legislation (e.g. King, SOX, etc.)	62.6%	45.3%	17.4	< 0.001	0.83	Large
Internal control assessment	68.1%	44.7%	23.3	< 0.001	1.11	Large
Financial Auditing	63.0%	44.4%	18.6	< 0.001	1.02	Large
Business management	54.4%	41.1%	13.3	< 0.001	0.67	Medium
Operational Auditing	63.2%	39.3%	23.9	< 0.001	1.04	Large
Value Added Tax (VAT)	58.1%	37.9%	20.2	< 0.001	0.86	Large

Table 43 shows the top 10 technical skills according to the *actual* levels of capability of entering trainee internal auditors as perceived by respondents. According to these respondents, entering trainee internal auditors have the highest actual mean level of capability for 'Information Technology' (55.4%), while respondents expect a mean level of capability of 54.7% (0.07 lower than the actual level of capability) for the same skill set. Actual mean levels of capability for these skills are all perceived to be below 54.0%.

The following section ranks technical skills based on the differences between the expected and actual capability levels of entering trainee internal auditors.

7.2.11.3 Ranking of technical skills according to the differences between the expected and perceived actual capability levels

The 10 technical skills with the highest mean differences between the expected and actual levels of capability are indicated in Table 44. All the skills reported in Table 44 have significant mean differences of more than 22.0, with 'large' effect-sizes (d > 0.80).

Of the 10 skills with the largest differences included in Table 44, five are also reported amongst the top 10 technical skills according to expected level of capability (refer to Table 42). These skills are 'Internal audit standards and practice advisories', 'Professional ethics', 'Risk management', 'Internal control assessment' and 'Control frameworks (COSO, COBIT, etc.)'.

'Internal audit standards and practice advisories' has the largest difference (40.9), as perceived by respondents. While these skills are covered in the syllabi of internal audit modules/courses in formal internal audit educational programmes, respondents nevertheless still perceived there to be a level of actual capability of only 36.0%. According to the syllabi it seems that enough time is spent on 'Internal audit standards and practice advisories', which suggests that the methods by which these skills are taught and assessed are only theoretical, and fail to integrate them with the practical internal audit process.

Table 44: The top 10 technical skills ranked according to the mean differences between the expected and actual levels of capability

Technical skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Internal audit standards and practice advisories	76.8%	36.0%	40.9	< 0.001	1.54	Large
Professional ethics	78.9%	53.0%	26.0	< 0.001	1.13	Large
Statistical analysis techniques	53.9%	28.4%	25.4	< 0.001	1.09	Large
Statistical sampling techniques	54.0%	29.3%	24.7	< 0.001	1.12	Large
Risk management	60.5%	36.1%	24.4	< 0.001	1.07	Large
Operational auditing	63.2%	39.3%	23.9	< 0.001	1.04	Large
CAATs (e.g. ACL, BarnOwl, IDEA, etc.)	49.5%	26.0%	23.5	< 0.001	0.94	Large
Internal control assessment	68.1%	44.7%	23.3	< 0.001	1.11	Large
Internal Auditing	74.2%	51.1%	23.2	< 0.001	1.08	Large
Control frameworks (COSO, COBIT, etc.)	60.0%	37.4%	22.6	< 0.001	1.02	Large

The following section provides statistical analyses and interpretations of the results of the survey with regard to the two groups of behavioural skills – interpersonal skills and personal characteristics of entering trainee internal auditors.

7.3 BEHAVIOURAL SKILLS CAPABILITIES OF ENTERING TRAINEE INTERNAL AUDITORS

The previous section provided descriptive information based on the statistical analysis of responses to the survey questions that relate to the *technical skills capabilities* of entering trainee internal auditors. This section focuses on the *behavioural skills* capabilities of these trainee internal auditors.

The following section analyses and explains the findings in respect of *expected* and *actual* behavioural skills capabilities of recently graduated trainee internal auditors.

7.3.1 Expected and actual levels of capability of entering trainee internal auditors in respect of 'Interpersonal skills'

Questions B10a and B10b requested respondents to indicate the level of capability they expect, as well as the actual level of capability of entering trainee internal auditors, with regard to 'Interpersonal skills'. Significant mean differences ($p < 0.05$) were reported between the expected levels of capability and the perceived actual levels of capability possessed by entering trainee internal auditors.

Table 45 and Figure 30 show the mean expected level as 67.9%, and the perceived actual level as 42.7%, indicating a significant mean difference of 25.2 ($p < 0.001$) with a 'large' effect-size ($d = 1.28$). The mean difference between the expected and actual skills capabilities indicated in respect of all the interpersonal skills listed in Table 41 (graphically illustrated in Figure 30) are all significant, with 'large' effect-sizes ($d > 0.80$).

Interpersonal skills are important skills for internal auditors to possess: they allow them to effectively do the technical part of their internal audit work. The significant mean difference explained above in respect of these skills proves that respondents are consistently not satisfied (Cronbach's Alpha = 0.94) with the mean level of capability of entering trainee internal auditors with regard to interpersonal skills capabilities of recently graduated trainee internal auditors.

Table 45: Expected skills capabilities and actual skills capabilities experienced in respect of 'Interpersonal skills'

Interpersonal skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Conflict management skills	54.7%	36.5%	18.2	< 0.001	0.82	Large
Listening skills	73.2%	47.0%	26.1	< 0.001	1.16	Large
Negotiation skills	58.6%	36.5%	22.1	< 0.001	1.00	Large
Oral communication skills	73.3%	46.5%	26.8	< 0.001	1.17	Large
Teamwork	76.3%	50.7%	25.6	< 0.001	1.04	Large
Written communication skills	71.1%	38.8%	32.3	< 0.001	1.28	Large
Mean	**67.9%**	**42.7%**	**25.2**	**< 0.001**	**1.28**	**Large**
Standard deviation	**18.9%**	**21.7%**				
Cronbach's Alpha	**0.94**					

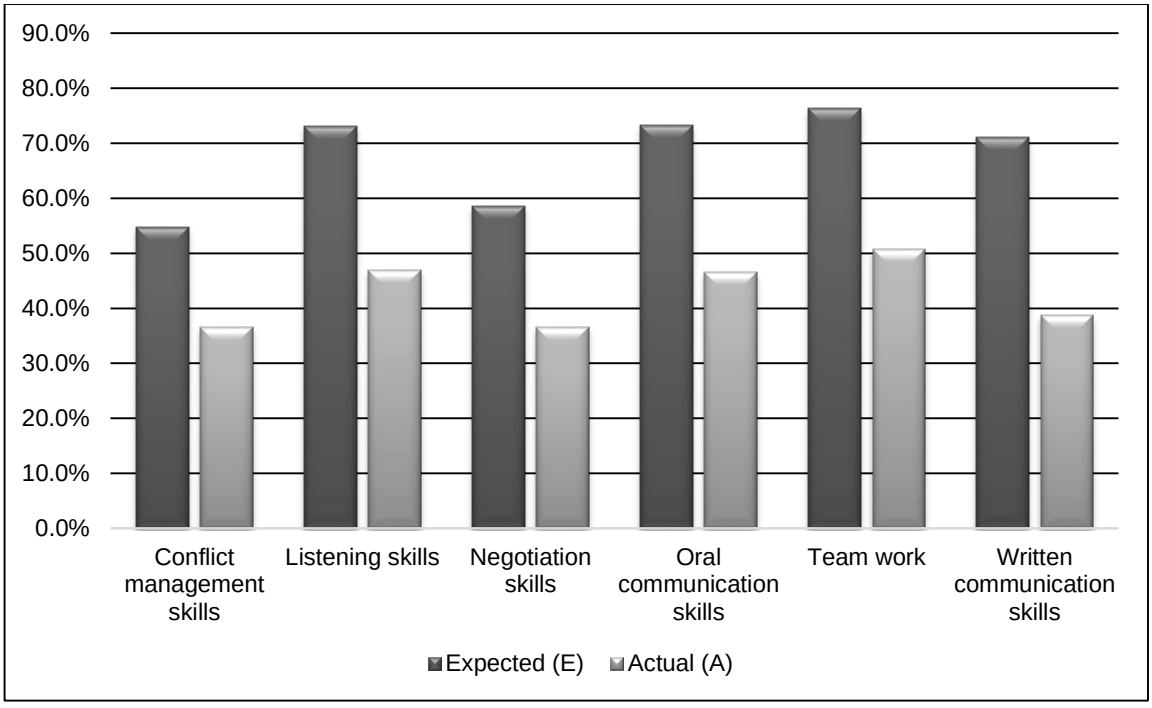


Figure 30: Expected skills capabilities and actual skills capabilities experienced in respect of 'Interpersonal skills'

The following section describes skills capability findings in respect of the 'Personal characteristics' category of the behavioural skills of entering trainee internal auditors.

7.3.2 Expected and actual capabilities of entering trainee internal auditors with regard to 'Personal characteristics'

In respect of 'Personal characteristics', Questions B11a and B11b requested respondents to indicate the level of capability they expect of, as well as the perceived actual level of capability possessed by, entering trainee internal auditors. The average level of expected capability (70.1%) is significantly higher ($p < 0.001$) than the reported mean level of actual capability (47.3%) possessed by these trainee internal auditors (refer to Table 46). The mean difference of 22.8 between the expected and actual levels of capability in respect of 'Personal characteristics' illustrates the existence of an internal audit educational expectation gap with a 'large' effect-size ($d = 1.12$).

Figure 31 provides a graphical illustration of the mean expected and mean actual levels of capability in respect of 'Personal characteristics' as perceived by internal audit manager respondents. These respondents identified two skills as requiring capability levels higher than 80%. These are 'Punctuality' (mean = 81.4%) and 'Work ethic' (mean = 81.6%). The respective mean levels of actual capability for these personal characteristics are 54.7% and 52.1% respectively, showing significant mean differences ($p < 0.001$) and 'large' effect-sizes ($d = 0.97$ and 1.04). 'Large' effect-sizes are also reported for 10 of the 13 personal characteristics listed in Table 46.

Table 46: Expected skills capabilities and perceived actual skills capabilities experienced in respect of 'Personal characteristics'

Personal characteristics	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Adaptability	68.2%	48.9%	19.3	< 0.001	0.75	Medium
Critical thinking	64.9%	42.5%	22.5	< 0.001	0.88	Large
Cultural sensitivity	68.6%	53.7%	14.9	< 0.001	0.61	Medium
Governance and ethics sensitivity	69.5%	47.2%	22.3	< 0.001	0.99	Large
Judgement	65.6%	44.9%	20.7	< 0.001	0.93	Large
Leadership	51.4%	34.9%	16.5	< 0.001	0.72	Medium
Maturity	62.3%	43.0%	19.3	< 0.001	0.81	Large
Problem identification and solving skills	66.3%	41.9%	24.4	< 0.001	1.03	Large
Punctuality	81.4%	54.7%	26.7	< 0.001	0.97	Large
Self-confidence	74.9%	51.8%	23.2	< 0.001	0.84	Large
Self-discipline	78.2%	49.5%	28.8	< 0.001	0.99	Large
Self-motivation	78.8%	49.8%	28.9	< 0.001	1.02	Large
Work ethic	81.6%	52.1%	29.5	< 0.001	1.04	Large
Mean	**70.1%**	**47.3%**	**22.8**	**< 0.001**	**1.12**	**Large**
Standard deviation	**18.7%**	**20.4%**				
Cronbach's Alpha	**0.96**					

The personal characteristics of internal auditors are regarded as important by respondents as implied by the high average of the mean expected level of capability (70.1%). These expectations in respect of behavioural skills (personal characteristics) are scored highest against interpersonal skills (refer to section 7.3.1) as well as against the technical skills category (refer to section 7.2). It can thus be deduced that the values, attitudes and personal attributes of entering trainee internal auditors are regarded as the most important capabilities that they are expected to possess.

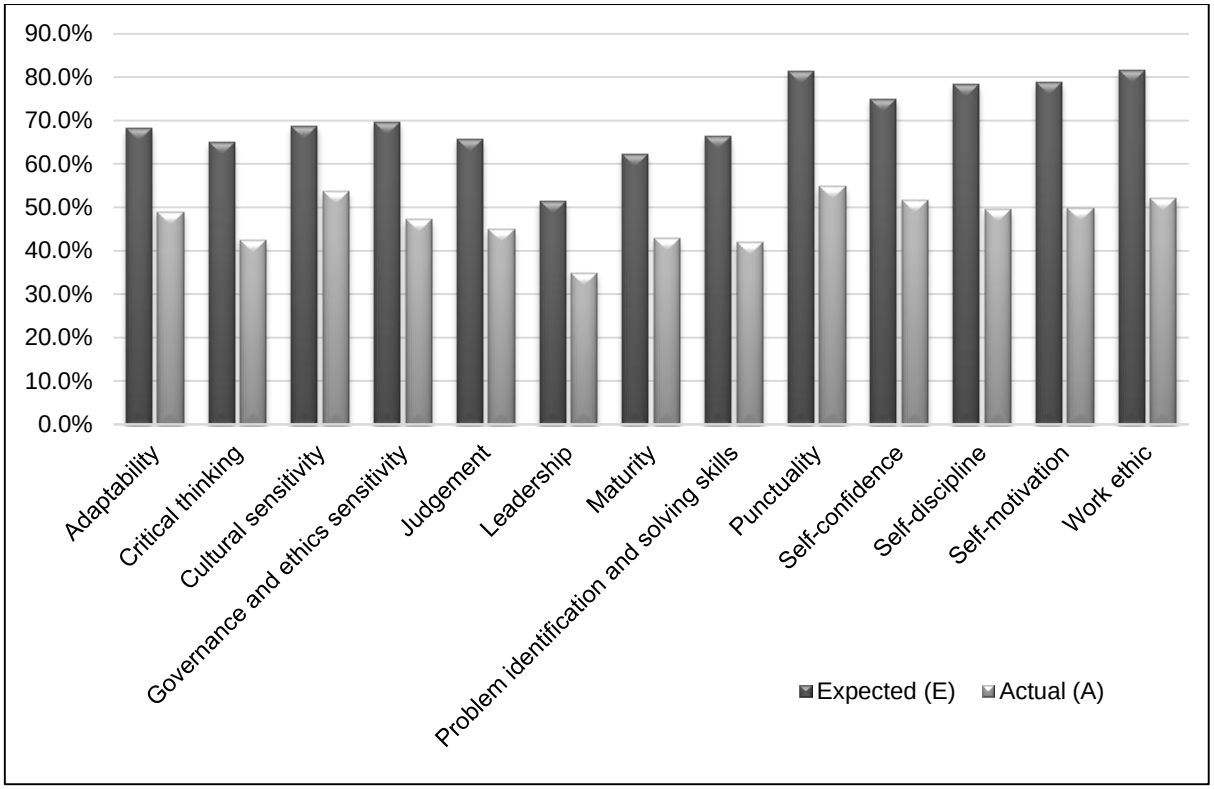


Figure 31: Expected skills capabilities and actual skills capabilities experienced in respect of 'Personal characteristics'

The mean difference (22.8) reported shows that entering trainee internal auditors are not sufficiently equipped with personal characteristics (attributes and attitudes) by the time they graduate from their respective universities. The Cronbach's Alpha value of 0.96 indicates that respondents have consistently similar views in respect of capabilities relating to these soft (behavioural) skills.

The following section highlights those behavioural skills that were not listed in the questionnaire, but are nevertheless regarded as important by respondents.

7.3.3 Behavioural skills regarded as important but not listed in the questionnaire

Question B12 requested respondents to identify behavioural skills that they regard as important but that were not included in the questionnaire. Many

of the skills reported in Table 47 were listed in the questionnaire. However, Table 47 indicates how many times a particular skill was mentioned by the internal audit manager respondents; also, the additional mentioning thereof by respondents could be an indication of a high level of expectation (and importance) that internal auditor managers have concerning these skills.

Table 47: Behavioural skills regarded as important but not listed in the questionnaire

Skills description	Number of times recorded
Report writing	5
Oral communication skills	3
Presentation skills	3
Time management	3
Proficiency in English	3
Written communication skills	2
Meeting procedures	2
Communication skills	1
Personality skills	1
The ability to construct a finding and come up with recommendations	1
Listening skills	1
Organisation skills	1
Interviewing skills	1
Relationship management	1
Research capabilities	1
Self-review	1

'Report writing' and 'Written communication skills' were mentioned seven times as *important but not listed in the questionnaire*. 'Presentation skills', 'Time management', 'Oral communication skills' and 'Proficiency in English' were listed three times by respondents. It is thus clear that, based on the number of times these behavioural skills are indicated in Table 47, communication skills (verbal and written) are perceived as important by respondents.

Behavioural skills listed but not included in the questionnaire are 'Personality skills', 'Listening skills', 'Organisation skills', 'Presentation skills', 'Meeting procedures', 'Relationship management', 'Research capabilities', 'Self-review skills', 'Time management' and 'Proficiency in English'. The majority of the skills listed by respondents relate to the 'Interpersonal skills' group listed under the behavioural skills category.

The following section explains the results of the statistical analysis of the combined and summarised findings with regard to all behavioural skills.

7.3.4 Summarised findings with regard to behavioural skills

For the behavioural skills category, Table 48 illustrates the significance and effect-size of the mean differences between the expected and perceived actual levels of skills capability of entering trainee internal auditors. The significant mean difference of 24.0 ($p < 0.001$) reflects a 'large' effect-size ($d = 1.26$). All respondents had consistently similar perceptions in respect of mean expected and actual levels of capability of entering trainee internal auditors for the behavioural skills category (with Cronbach's Alpha levels of 0.93 and 0.94 respectively).

The mean difference of 24.0 shown in Table 48 indicates an internal audit educational *expectation gap* between the capabilities transferred by universities and the levels of skills capability expected by respondents in respect of the behavioural skills capabilities of entering trainee internal auditors.

Table 48: Summarised mean levels of expected and actual skills capabilities for behavioural skills

Behavioural skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Interpersonal skills	**67.9%**	**42.7%**	**25.2**	**< 0.001**	**1.28**	**Large**
Personal Characteristics	**70.1%**	**47.3%**	**22.8**	**< 0.001**	**1.12**	**Large**
Mean	**69.0%**	**45.0%**	**24.0**	**< 0.001**	**1.26**	**Large**
Standard deviation	18.1%	20.4%				
Cronbach's Alpha	0.93	0.94				

Section 7.3.5 provides a description of the ranking of behavioural skills.

7.3.5 The ranking of behavioural skills

The ranking of behavioural skills is presented in respect of: 1) expected level of capability; 2) actual level of capability; and 3) the mean difference between the expected and actual capabilities, based on the results included in Table 48.

The following section presents the ranked behavioural skills based on the capability levels expected of entering trainee internal auditors.

7.3.5.1 Ranking of behavioural skills according to expected capability levels

Table 49 lists the top 10 behavioural skills according to the mean *expected* levels of capability as perceived by respondents. 'Work ethic' is ranked highest with an expected level of capability of 81.6%, followed by 'Punctuality' (81.4%) and 'Self-motivation' (78.8%). These skills (the top three expected behavioural skills) represent skills from the 'Personal characteristics' skills group under the behavioural skills category.

The high ranking of these characteristics shows that entering trainee internal auditors are expected to show high capability levels in respect of 'Personal characteristics'. The significant mean differences (expectation gap) between the expected and actual mean levels of capability for these personal characteristics are above 26.0 – with 'large' effect-sizes.

'Oral communication skills' (mean = 73.3%), 'Listening skills' (mean = 73.2%) and 'Written communication skills' (mean = 71.1%) from the 'Interpersonal skills' group are ranked seventh, eighth and ninth in the list of top 10 behavioural skills in Table 49. The expected mean levels of capability for these skills are above 71.0%, indicating the *high expectation* that employers have of entering trainee internal auditors in respect of their *communication abilities*.

Behavioural skills are regarded as important when entering trainee internal auditors are recruited. The five most important behavioural skills for employers, revealed by the results presented above, are 'Punctuality', 'Self-confidence', 'Self-discipline', 'Self-motivation' and 'Work ethic'. These behavioural skills can thus be regarded as important in respect of the work-readiness of entering trainee internal auditors.

The significant mean differences (with 'large' effect-sizes) between the expected and the perceived actual mean levels of capability for these skills (more than 26.0) is indicative of 'large' and significant *expectation gaps* – pointing to 'large' deficiencies in the curricula of formal internal audit educational programmes.

Table 49: The top 10 behavioural skills according to expected levels of capability

Behavioural skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Work ethic	81.6%	52.1%	29.5	< 0.001	1.04	Large
Punctuality	81.4%	54.7%	26.7	< 0.001	0.97	Large
Self-motivation	78.8%	49.8%	28.9	< 0.001	1.02	Large
Self-discipline	78.2%	49.5%	28.8	< 0.001	0.99	Large
Teamwork	76.3%	50.7%	25.6	< 0.001	1.04	Large
Self-confidence	74.9%	51.8%	23.2	< 0.001	0.84	Large
Oral communication skills	73.3%	46.5%	26.8	< 0.001	1.17	Large
Listening skills	73.2%	47.0%	26.1	< 0.001	1.16	Large
Written communication skills	71.1%	38.8%	32.3	< 0.001	1.28	Large
Governance and ethics sensitivity	69.5%	47.2%	22.3	< 0.001	0.99	Large

The following section ranks behavioural skills based on the perceived actual capability levels of entering trainee internal auditors.

7.3.5.2 Ranking of behavioural skills according to actual capability levels

Behavioural skills of entering trainee internal auditors were additionally ranked using the *actual* mean level of capability as perceived by respondents (refer to Table 50). Although the top 10 behavioural skills are perceived to have the highest mean levels of capability, the mean differences between the expected and actual mean levels of capability in respect of these skills are significant, with 'large' effect-sizes. 'Punctuality' (mean = 53.7%), 'Cultural sensitivity' (mean = 53.7%) and 'Work ethic' (mean = 52.1%) are the three behavioural skills ranked highest according to actual mean levels of capability. Eight of the ten significant mean differences reported in Table 50 for these behavioural skills have 'large' (d > 0.8) effect-sizes.

Table 50: The top 10 behavioural skills ranked according to perceived actual levels of capability

Behavioural skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Punctuality	81.4%	54.7%	26.7	< 0.001	0.97	Large
Cultural sensitivity	68.6%	53.7%	14.9	< 0.001	0.61	Medium
Work ethic	81.6%	52.1%	29.5	< 0.001	1.04	Large
Self-confidence	74.9%	51.8%	23.2	< 0.001	0.84	Large
Teamwork	76.3%	50.7%	25.6	< 0.001	1.04	Large
Self-motivation	78.8%	49.8%	28.9	< 0.001	1.02	Large
Self-discipline	78.2%	49.5%	28.8	< 0.001	0.99	Large
Adaptability	68.2%	48.9%	19.3	< 0.001	0.75	Medium
Governance and ethics sensitivity	69.5%	47.2%	22.3	< 0.001	0.99	Large
Listening skills	73.2%	47.0%	26.1	< 0.001	1.16	Large

The following section ranks behavioural skills based on the differences between the expected and actual capability levels of entering trainee internal auditors.

7.3.5.3 Ranking of behavioural skills according to the mean differences between the expected and actual capability levels

The behavioural skills shown in Table 51 are ranked based on the size of the mean differences between what respondents (on average) expect of entering trainee internal auditors and the level of capability they are perceived to actually possess. These mean differences represent *expectation gaps* between what employers of entering trainee internal auditors expect in respect of behavioural skills capabilities and what universities teaching formal internal audit educational programmes actually provide them with.

The mean differences for the behavioural skills reported in Table 51 are above 23.0, with 'large' effect-sizes (d > 0.8). The largest mean difference of 32.3 occurs for 'Written communication skills'.

Table 51: The top 10 behavioural skills ranked according to differences between the expected and actual levels of capability

Behavioural skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Written communication skills	71.1%	38.8%	32.3	< 0.001	1.28	Large
Work ethic	81.6%	52.1%	29.5	< 0.001	1.04	Large
Self-motivation	78.8%	49.8%	28.9	< 0.001	1.02	Large
Self-discipline	78.2%	49.5%	28.8	< 0.001	0.99	Large
Oral communication skills	73.3%	46.5%	26.8	< 0.001	1.17	Large
Punctuality	81.4%	54.7%	26.7	< 0.001	0.97	Large
Listening skills	73.2%	47.0%	26.1	< 0.001	1.16	Large
Teamwork	76.3%	50.7%	25.6	< 0.001	1.04	Large
Problem identification and solving skills	66.3%	41.9%	24.4	< 0.001	1.03	Large
Self-confidence	74.9%	51.8%	23.2	< 0.001	0.84	Large

The mean differences (gaps) explained above confirm that entering trainee internal auditors are not adequately educated in respect of behavioural skills capabilities, especially in the light of the 'large' effect-sizes of these differences.

Section 7.3.6 below summarises the overall combined results of the findings with regard to technical and behavioural skills.

7.3.6 Overall results of findings: technical and behavioural skills

The research objective of this study is to determine whether an internal audit educational expectation gap exists – the gap between what universities offering formal internal audit educational programmes provide graduates with, and what employers expect from entering trainee internal auditors in respect of technical and behavioural skills (refer to section 1.6).

Based on the mean difference of 19.1 between the mean expected level of capability (60.7%), and the actual capability level of entering trainee internal auditors (41.5%) with regard to technical and behavioural skills, the summarised results presented in Table 52 confirm that an expectation gap, of which the extent is 'large', exists. The mean difference (expectation gap) of 19.1 is significant ($p < 0.001$) and has a 'large' effect-size ($d = 1.06$).

Table 52 further shows that, on average, a larger expectation gap (mean difference) exists in respect of the behavioural skills category (24.0) in comparison to the technical skills category (18.9). Both these mean differences are significant, with 'large' effect-sizes ($d > 0.80$). In addition, the higher expected mean level of capability of 69.0% reported for behavioural skills, compared to that of technical skills at 53.1% (mean difference = 18.9), shows that behavioural skills are consistently (Cronbach's Alpha = 0.83) regarded by all respondents as more important for entering trainee internal auditors to possess.

Table 53 shows the 10 skills (technical and behavioural skills combined) with the highest levels of expected capability. As perceived by respondents, 'Work ethic' and 'Punctuality' (both in the behavioural skills category) have the highest mean level of expected capability (81.6% and 81.4% respectively). 'Professional ethics' is ranked in the third place, with a desired level of capability of 78.9%. The results reported in Table 53 show that eight of the top 10 skills listed (including the top 5 skills) are from the behavioural skills category.

Table 52: Summarised mean levels of expected and actual skills capabilities for technical and behavioural skills

Skills category	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Technical skills	53.1%	34.1%	18.9	**< 0.001**	1.29	Large
Behavioural skills	69.0%	45.0%	24.0	**< 0.001**	1.26	Large
Mean	**60.7%**	**41.5%**	**19.1**	**< 0.001**	**1.06**	**Large**
Standard deviation	18.2%	18.1%	18.1			
Cronbach's Alpha	0.83	0.85				

The ranking shown in Table 53 identifies the skills respondents believe to be the 10 most important skills (technical and behavioural skills) entering trainee internal auditors are expected to possess. The mean differences reported for these skills are significant, with 'large' effect-sizes ($d > 0.8$), and this again confirms that an internal audit educational *expectation gap* exists between what employers of recently graduated internal auditors expect, and what universities provide in respect of all skills (technical and behavioural skills).

The top 10 technical and behavioural skills ranked according to perceived actual capability levels are indicated in Table 54. According to the perceptions of respondents, entering trainee internal auditors actually possess the highest level of capability for 'Information Technology' (55.4%), 'Punctuality' (54.7%) and 'Cultural sensitivity' (53.7%).

Table 53: The top 10 technical and behavioural skills (combined), ranked according to expected level of capability

Technical and behavioural skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Work ethic	81.6%	52.1%	29.5	< 0.001	1.04	Large
Punctuality	81.4%	54.7%	26.7	< 0.001	0.97	Large
Professional ethics	78.9%	53.0%	26.0	< 0.001	1.13	Large
Self-motivation	78.8%	49.8%	28.9	< 0.001	1.02	Large
Self-discipline	78.2%	49.5%	28.8	< 0.001	0.99	Large
Internal audit standards and practice advisories	76.8%	36.0%	40.9	< 0.001	1.54	Large
Teamwork	76.3%	50.7%	25.6	< 0.001	1.04	Large
Self-confidence	74.9%	51.8%	23.2	< 0.001	0.84	Large
Internal auditing	74.2%	51.1%	23.2	< 0.001	1.08	Large
Oral communication skills	73.3%	46.5%	26.8	< 0.001	1.17	Large

As mentioned previously, 'Information Technology' is perceived by respondents to be a skill where entering trainee internal auditors (on average) demonstrate a higher perceived actual level of capability than the expected level of capability.

The ten skills (technical and behavioural) with the largest differences are listed in Table 55. The mean differences reported for the 10 technical and behavioural skills in Table 55 are significant ($p < 0.001$), with 'large' effect-sizes above 25.0 ($d > 0.80$).

'Information Technology' skills are perceived by respondents to be the skills which entering trainee internal auditors possess in greatest measure. The actual level of capability is scored higher than the expected level of capability (and highest of all technical and behavioural skills), confirming that in one skills area at least (Information Technology), these trainee internal auditors have exceeded employers' expectations. This finding is most easily explained by and attributable to the technology-saturated culture that today's youth (students) were born into.

Table 54: The top 10 technical and behavioural skills (combined), ranked according to actual level of capability

Technical and behavioural skills	Level of capability			Significance of difference (p)	d	Effect size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Information Technology	54.7%	55.4%	-0.7	0.733	-0.03	Not sign.
Punctuality	81.4%	54.7%	26.7	0.000	0.97	Large
Cultural sensitivity	68.6%	53.7%	14.9	0.000	0.61	Medium
Professional ethics	78.9%	53.0%	26.0	0.000	1.13	Large
Work ethic	81.6%	52.1%	29.5	0.000	1.04	Large
Self-confidence	74.9%	51.8%	23.2	0.000	0.84	Large
Internal auditing	74.2%	51.1%	23.2	0.000	1.08	Large
Teamwork	76.3%	50.7%	25.6	0.000	1.04	Large
Self-motivation	78.8%	49.8%	28.9	0.000	1.02	Large
Self-discipline	78.2%	49.5%	28.8	0.000	0.99	Large

The high actual capability score achieved for 'Cultural sensitivity' (53.7%) appears to be in response to the South African context where political correctness, and thus cultural sensitivity, are regarded as important and very close to top-of-mind for most younger South Africans.

Except for the 'Internal audit standards and practice advisories' and 'Professional ethics' skills, all the skills listed in Table 55 (which ranks skills according to the size of the expectation gaps (mean differences)) are from the *behavioural skills* category.

Of the top ten technical and behavioural skills ranked according to the size of the mean differences, eight are also included in the top ten skills ranked according to *expected* level of capability (refer to Table 53). These eight skills are 'Internal audit standards and practice advisories', 'Work ethic', 'Self-motivation', 'Self-discipline', 'Oral communication skills', 'Punctuality', 'Listening skills', 'Professional ethics' and 'Teamwork'.

It is thus clear that, from an employer's perspective, behavioural skills are regarded as the most important skills that entering trainee internal auditors should possess, and that, at this level, behavioural (pervasive) skills are more important than technical skills. The question can thus be asked: are universities that offer formal internal audit educational programmes in the RSA sufficiently focused on the fundamental skills, the *critical cross-field outcomes*, which the South African educational authorities require to be part of formal educational programmes?

Table 55: The top 10 technical and behavioural skills ranked according to the differences between the expected and actual levels of capability

Technical and behavioural skills	Level of capability			Significance of difference (p)	d	Effect-size
	Expected (E)	Actual (A)	Difference of means (E - A)			
Internal audit standards and practice advisories	76.8%	36.0%	40.9	< 0.001	1.54	Large
Written communication skills	71.1%	38.8%	32.3	< 0.001	1.28	Large
Work ethic	81.6%	52.1%	29.5	< 0.001	1.04	Large
Self-motivation	78.8%	49.8%	28.9	< 0.001	1.02	Large
Self-discipline	78.2%	49.5%	28.8	< 0.001	0.99	Large
Oral communication skills	73.3%	46.5%	26.8	< 0.001	1.17	Large
Punctuality	81.4%	54.7%	26.7	< 0.001	0.97	Large
Listening skills	73.2%	47.0%	26.1	< 0.001	1.16	Large
Professional ethics	78.9%	53.0%	26.0	< 0.001	1.13	Large
Teamwork	76.3%	50.7%	25.6	< 0.001	1.04	Large

The top 10 technical and behavioural skills, whether ranked according to *expected* and *actual* perceived capabilities, or according to the *differences* between these expected and actual skills capability levels, all relate to the *fundamental skills* (critical cross-field outcomes) required by SAQA to be incorporated in all higher education qualifications. These critical cross-field outcomes are *generic outcomes* that guide and inform teaching and learning, regardless of discipline (SAQA 2006).

Universities in the RSA are thus required to incorporate the *critical cross-field outcomes* in the curricula of internal audit educational programmes (Bender, Daniels, Lazarus, Naude & Sattar 2006:40-46). Bender et al (2006:40-46) list the following critical cross-field outcomes that are required by the South African Qualifications Authority (SAQA) to be integrated into all formal educational programmes:

- "identifying and solving problems by using critical and creative thinking;
- working effectively with others as a member of a team, group, organisation and community;
- organising and managing oneself and one's activities responsibly and effectively;
- collecting, analysing, organising and critically evaluating information;
- communicating effectively using visual, mathematical and/or language skills in the modes of oral and/or written persuasion;
- using science and technology responsibly, effectively and critically, showing responsibility towards the environment and health of others;
- demonstrating an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation;
- contributing to the full personal development of each student and the social and economic development of society at large by making it the underlying intention of any programme of learning to make an individual aware of the importance of:

    - reflecting on and exploring a variety of strategies to learn more effectively;
    - participating as responsible citizens in the lives of local, national and global communities;
    - being culturally and aesthetically sensitive across a range of social contexts;
    - exploring education and career opportunities; and

- developing entrepreneurial opportunities."

The high mean [significant] differences (gaps) shown for the various skills in the above analyses and descriptions show that higher education institutions teaching internal auditing in the RSA are not fully compliant with SAQA's requirements in respect of the incorporation of critical cross-field outcomes in their teaching and learning practice models.

In addition, based on the 'large' expectation gaps between what the employers of recently graduated trainee internal auditors expect and what these trainees are capable of, it is not clear whether the internal audit educators nominally providing these capabilities are sufficiently aware of and sensitive to the *values* they are expected to demonstrate during the education of aspirant trainee internal auditors.

Examples of these values, specifically those espoused by the University of Pretoria (UP) (the only Centre of Internal Audit Excellence in the RSA), the Nelson Mandela Metropolitan University (NMMU) (currently the only residential university in the RSA offering a Postgraduate Diploma in Internal Auditing) and the DHET are shown in Table 56.

Table 56: Some viewpoints on the values of higher education

The University of Pretoria's values	**The NMMU's values**	**Values of the Department of Higher Education and Training (DHET)**
• The members of the University of Pretoria believe that: ○ our community of scholars must be founded on the pursuit of knowledge through research, teaching and learning, with membership acquired on the basis of intellectual merit, ability and the potential for excellence; and that ○ differing perspectives, arising from diverse backgrounds and histories that define our	• Respect for diversity • Ubuntu • Respect for the natural environment • Excellence • Integrity • Taking responsibility	The DHET is committed to: • Distinction and excellence in all our work efforts to develop a skilled and capable workforce for the country • Honesty, perseverance and commitment in providing differentiated education and training opportunities for all the people of South Africa • Efficiency of work habits and proficiency of all DHET employees in fulfilling the mandate of the department

identities, deepen scholarly inquiry and enrich academic debate. • We cherish: ○ academic freedom, creative and innovative thought, ethical standards and integrity, accountability and social justice; and ○ our staff and students as the University's core asset. • We foster: ○ an inquiry-led and evidence-based approach to creating knowledge; and ○ academic citizenship, whereby we commit ourselves to harnessing our intellectual abilities in the interest of our nation and humanity. • We recognise that: ○ in a resource-constrained world where vast disparities remain, the University must endeavour to produce graduates who appreciate the importance of community service, entrepreneurial endeavours and innovative actions in generating employment and development in our local communities.		• Teamwork, cooperation and solidarity in working with our partners in higher education and training to achieve the shared goals • Transformation imperatives by addressing social inequality, race, gender, age, geography, HIV/AIDS and disability issues in all our higher education and training institutions in order to normalise our institutions

(Sources: UP 2011c; NMMU 2013; DHET 2012:12)

The following section analyses and explains the findings of the research regarding the sourcing, recruiting and appointment of entering trainee internal auditors.

7.4 THE SOURCING, RECRUITING AND APPOINTMENT OF ENTERING TRAINEE INTERNAL AUDITORS

The perceptions of respondents with regard to the sourcing, recruiting and appointment of entering trainee internal auditors are analysed and described in the sections that follow. The conclusions drawn from the analysis could provide reasons that explain respondents' perceptions in respect of the technical and behavioural skills capabilities of entering trainee internal auditors.

The following section explains the respondents' perceptions with regard to the average number of entering trainee internal auditors appointed by their organisations each year.

7.4.1 Number of entering trainee internal auditors appointed by respondents' organisations

Respondents were requested to indicate the average number of entering trainee internal auditors their organisations appointed annually (Question B13 of the questionnaire).

Table 57: Average number of entering trainee internal auditors appointed by respondents' organisations per annum

Number appointed	Proportion	Distribution
None	25.4%	29
1 to 5	58.8%	67
6 to 10	7.9%	9
11 to 15	1.8%	2
16 to 20	4.4%	5
More than 20	1.8%	2
Total	**100%**	**114**

Table 57 and Figure 32 show that, on average, a majority of 61.0% of respondents' organisations appoint between one and five entering trainee internal auditors per annum. Seven per cent of respondents chose the '6 to 10' option; 2.0% chose the '11 to 15' option; 5.0% the '16 to 20' option; and 2.0% indicated that they appoint more than 20 entering trainee internal auditors on average per annum. However, more than one quarter of respondents indicated that they do not appoint any entering trainee internal auditors.

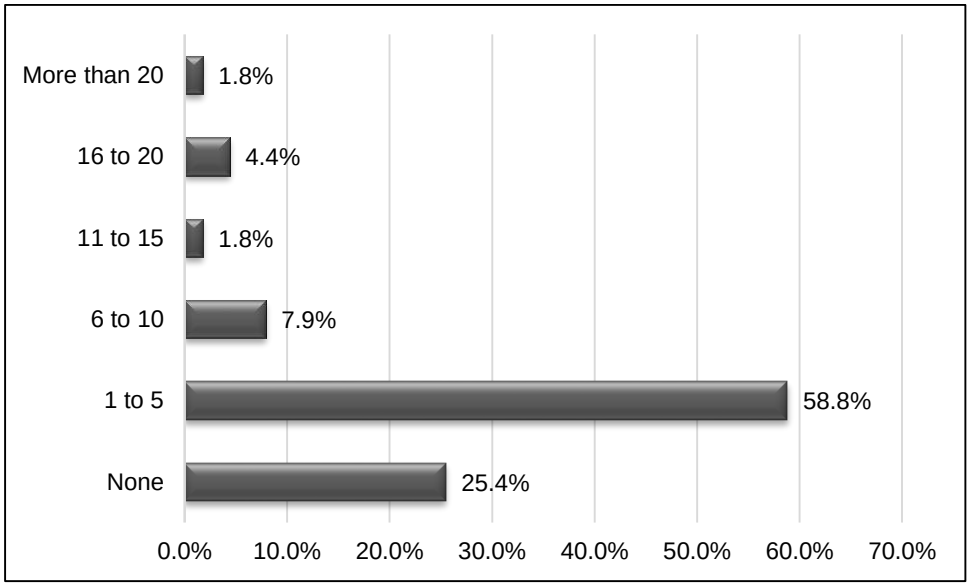


Figure 32: Average number of entering trainee internal auditors appointed per annum

A clear majority of respondents indicated that their organisations appoint between one and five recently graduated trainee internal auditors (on average) per year. More than 25% of respondents chose the 'None' option. Section 7.5.5 explains the reasons why these respondents' organisations do not appoint recently graduated trainee internal auditors.

In the light of the results presented in this section, namely that almost 75% of respondents' organisations do appoint entering trainee internal auditors, the following two important conclusions can be reached:

- The professional body of the internal audit profession, the IIA, is failing its members in that it provides no specific guidance for entering trainee internal auditors. The IIA (SA) should therefore consider incorporating an additional level into the Internal Auditors Competency Framework (IACF) specifically for entering trainee internal auditors, in order to provide better guidance to internal audit educators (whether members of university staff complements or training officers in individual firms) in respect of technical and behavioural skills capability levels.
- Providers of internal audit educational services (universities) in the RSA are also failing their internal audit graduates. They should better align their formal internal audit educational programmes with the needs of the employers of entering trainee internal auditors clearly in mind, and with the intention of fulfilling the requirements of SAQA with regard to imparting the skills underlying critical cross-field outcomes when re-considering the content of programme curricula.

The results of the findings in respect of respondents' organisations that do not appoint any entering trainee internal auditors are analysed and explained in section 7.4.3.

The following section addresses the preferences of respondents' organisations regarding the type of qualification they prefer when resourcing, recruiting and appointing entering trainee internal auditors.

7.4.2 The preferences of respondents' organisations in respect of the qualifications of recruited and appointed entering trainee internal auditors

Question B14 requested respondents to indicate the qualifications that their organisations prefer when appointing entering trainee internal auditors. Respondents could mark more than one option. Table 58 and Figure 33 show that a Diploma in Internal Auditing is preferred by 32.9% of

respondents, followed by the Postgraduate Diploma in Internal Auditing (24.4%), and the BTech in Internal Auditing (29.3%). Postgraduate qualifications such as master's degrees, MBA's and MBL's are not perceived as particularly appropriate qualifications for entering trainee internal auditors (0%).

The results reported in this section show that entering trainee internal auditors are usually in possession of an undergraduate (NQF Levels 6, 7 and 8) qualification. The expectations and the expectation gaps described in sections 7.2, 7.3 and 7.4 are thus only pertinent to these qualification types.

Table 58: Preferred qualifications when recruiting and appointing entering trainee internal auditors

Qualification	Proportion	Distribution
Diploma in Internal Auditing	32.9%	27
BTech in Internal Auditing	29.3%	24
BCom Internal Auditing	13.4%	11
BCom Honours Internal Auditing or Postgraduate Diploma (PGD) in Internal Auditing	24.4%	20
Master's degree	0.0%	0
MBA/MBL	0.0%	0
Total	**100%**	**82**

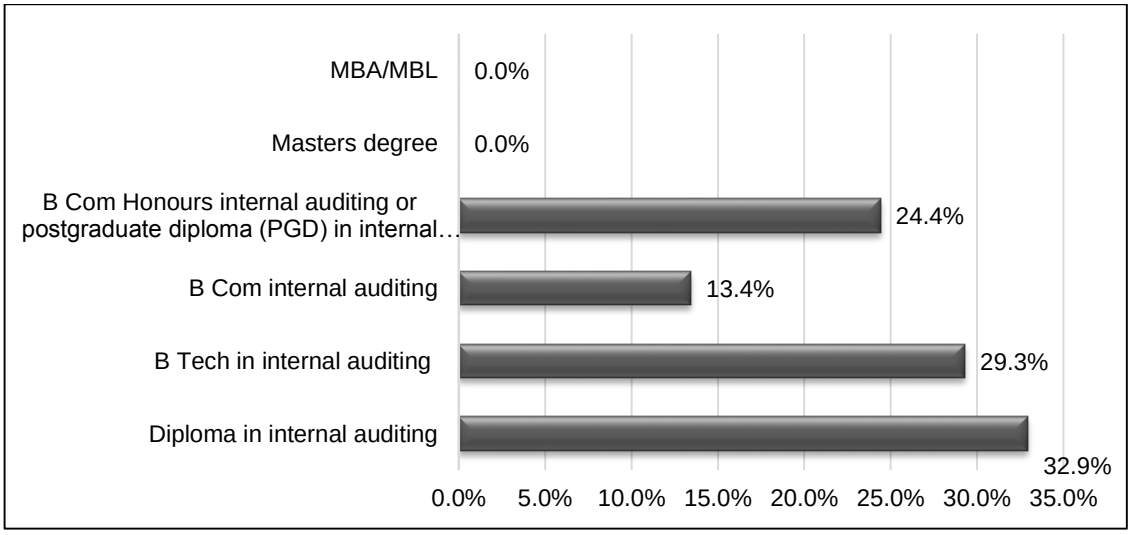


Figure 33: Preferred qualifications when recruiting and appointing entering trainee internal auditors

The following section describes the perceptions of respondents in respect of their awareness of the Internal Auditor Competency Framework.

7.4.3 Reasons why respondents' organisations do not appoint entering trainee internal auditors

Based on the responses to Question B13 of the questionnaire (refer to section 7.4.1), respondents were re-directed to Question B18 (the question discussed under this section) to indicate reasons why their organisations prefer not to appoint entering trainee internal auditors.

The reason receiving the highest percentage of support (26.5%) from respondents was the 'University graduates are not work-ready' option (refer to Table 59 and Figure 34). None of the respondents indicated that it is against their company's policy to appoint university graduates.

Table 59: Reasons for not appointing entering trainee internal auditors

Reason	Distribution	Proportion
University graduates are not work ready	9	26.5%
It is too expensive to train university graduates in technical and behavioural skills deficiencies	8	23.5%
Technical knowledge and/or skills are inadequate	7	20.6%
Behavioural skills are inadequate	3	8.8%
Company policy does not allow the appointment of university graduates	0	0.0%
Other	7	20.6%
Total	**34**	**100%**

Reasons other than those listed in the questionnaire provided by respondents include:

- "[B]udget constraints";
- "An unwillingness of senior management to grow the internal audit activity";
- "It takes too much time to train university graduates to be work-ready";

- "Our Department [is] too small to hire [entering trainee internal auditors] every year: new trainee[s] [are appointed] every three years";
- "Currently [there is a] moratorium on all new appointments";
- "[A] small team means capacity constraints"; and
- "Government has structured posts and only if there is a post available at a low [entering trainee internal auditor] level they will appoint them."

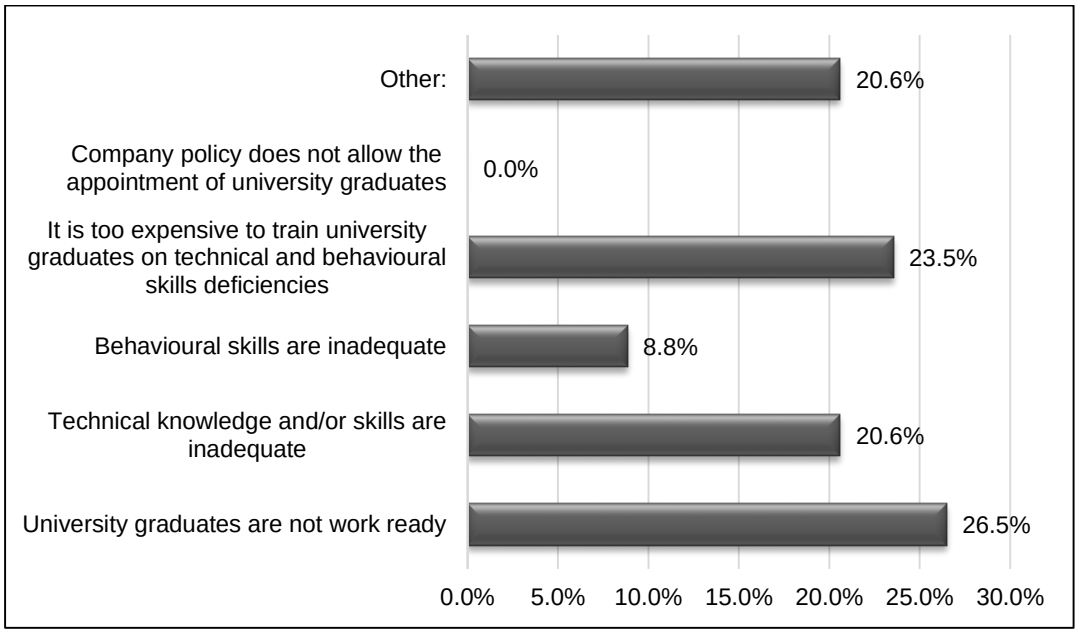


Figure 34: Reasons for not appointing entering trainee internal auditors

Apart from the 20.6% of respondents offering 'other' reasons, almost 80% of the respondents who indicated that their organisations do not appoint entering trainee internal auditors indicated that it was because university graduates are not work ready, that it is too costly to train them in order to be work-ready, and that graduates' technical and behavioural skills are inadequate – showing that none of these respondents regard the level of graduateness (and thus the work-readiness) of recently graduated entering trainee internal auditors to be adequate.

The following section summarises and concludes the findings reported in this chapter.

7.6 SUMMARY AND CONCLUSION

The objective of this chapter was to statistically analyse, describe, interpret and meaningfully present the research findings in respect of the technical and behavioural skills capabilities of entering trainee internal auditors. The presentation of the empirical findings of the study is divided into three sections, relating to the technical skills capabilities, behavioural skills capabilities, and sourcing, recruiting and appointing of entering trainee internal auditors.

The empirical component of the study, based on the research objective (refer to section 1.6), was performed using a quantitative research methodology. Data were collected by means of a questionnaire (reproduced as Annexure D) that was electronically distributed to the membership database of the IIA (SA). Respondents included internal auditors with more than three years' internal audit experience, and Chief Audit Executives (CAEs).

The findings reported in this chapter are based on the data collected through responses to Section B of the research questionnaire. This section included 'six point Likert-type scaled questions' which allowed respondents to indicate their perceptions of the expected and actual technical and behavioural skills capability levels of entering trainee internal auditors.

The significance (p-value), effect-size and internal consistency reliability of the statistically analysed results was ensured by employing acceptable statistical techniques, namely: 'paired sample t-tests', Cohen's *d* and Cronbach's Alpha respectively. Statistical software (IBM SPSS) and electronic spread sheets (Microsoft Excel) were used for the analysis of the data.

The differences between the means of the expected and actual technical and behavioural skills capability levels were used to determine whether an internal audit educational expectation gap exists. The meaningfulness

(effect-size) of these significant mean differences was used to determine the *extent* of the expectation gap.

The preferences of respondents' organisations with regard to the sourcing, recruiting and appointing of entering trainee internal auditors were obtained and statistically analysed.

The following section presents the conclusions reached in respect of perceptions regarding the technical skills capabilities of entering trainee internal auditors.

7.6.1 Conclusions: the technical skills capabilities of entering trainee internal auditors

Based on the analysis of the research data with regard to the technical skills capabilities of recently graduated trainee internal auditors, the following important conclusions can be reached:

- The comparison between the average expected and the actual accountancy-related capability levels of entering trainee internal auditors revealed a significant difference (expectation gap), with a large effect-size.
- 'Basic accounting skills' (basic bookkeeping) are perceived by respondents to be the most important accountancy-related skill.
- Of the accountancy-related skills, 'Basic accounting skills' scored the highest insofar as the difference between means is concerned.
- 'Public sector accounting standards (GRAP)' scored the lowest with regard to expected levels of capability.
- For 'Types of auditing', a significant difference is perceived to exist, with a large effect-size.
- 'Internal auditing' is ranked as the most important type of auditing skill, while the highest difference between expected and actual levels of skills capability is perceived for 'Operational auditing'.

- ‘Public sector auditing’ is perceived as the least important type of auditing.
- Under ‘Risk-related skills’, ‘Internal control assessment’ is regarded as the most important and is perceived to have the largest statistical mean difference.
- ‘Enterprise risk management’ is perceived as the least important risk-related skill.
- Technical skills related to ‘Knowledge areas’ are perceived by respondents to have a large, statistically significant expectation gap.
- ‘Professional ethics’ is scored ‘most important’ by respondents, while the largest mean difference (gap) is perceived for ‘Internal audit standards and practice advisories’.
- The ‘Public finance and administration’ knowledge area is perceived as least important.
- ‘Management skills’ are perceived to have a medium level, but statistically significant, expectation gap.
- Internal audit trainees are expected to have the highest level of capability for ’Managing of internal audit engagements’, for which the highest mean difference (greatest expectation gap) is perceived.
- The least important perceived management skill is ‘Managing the internal audit activity’.
- Legislation skills capabilities of entering trainee internal auditors are perceived as exhibiting (on average) a statistically significant, large expectation gap.
- The Companies Act is perceived as the most important legislation, with the largest mean difference between expected and actual levels of capability.
- The MFMA is perceived by respondents to be the least important legislation-related skill for entering trainee internal auditors to possess.
- In respect of ‘Internal audit tools and techniques’, a statistically significant and large mean difference is perceived by respondents.

- Respondents perceive 'Non-statistical sampling techniques' as most important, while CAATs (e.g. ACL, BarnOwl, IDEA, etc.) are perceived as having the largest statistically significant expectation gap.
- CAATs (e.g. ACL, BarnOwl, IDEA, etc.) are perceived to be the least important 'Internal audit tools and techniques' skill.
- A significant large expectation gap is perceived by respondents to exist for 'Tax-related knowledge areas'.
- 'Value Added Tax (VAT)' is scored as most important and with the largest expectation gap.
- The perceived least important of the tax-related skills is 'Companies Tax'.
- Of all the technical skills, respondents expect the highest level of capability for 'Professional ethics'. The technical skills that scored lowest in respect of expected level of capability is 'Control frameworks (COSO, COBIT, etc.)'.
- The technical skills with the highest mean difference (expectation gap) is 'Internal audit standards and practice advisories'.
- Entering trainee internal auditors possess the highest level of technical skills capability in 'Information Technology', while 'Value Added Tax' is perceived to be the lowest.
- The technical skill with the largest perceived mean difference (expectation gap) is 'Internal audit standards and practice advisories'.

The following section presents the conclusions reached in respect of the behavioural skills capability levels of entering trainee internal auditors.

7.6.2 Conclusions: the behavioural skills capabilities of entering trainee internal auditors

Based on the statistical analysis of the research data obtained with regard to the behavioural skills capabilities of recently graduated trainee internal auditors, the following important conclusions can be reached:

- With regard to interpersonal skills, a statistically significant and large expectation gap exists between the expected and the actual levels of capability of entering trainee internal auditors.
- Of the interpersonal skills, 'Teamwork' is scored as the most important for entering trainee internal auditors to possess, while 'Conflict management' is perceived as least important by respondents.
- The largest statistically significant skills capability expectation gap is perceived by respondents to exist for 'Written communication skills'.
- In respect of 'Personal characteristics', a significant, large expectation gap is perceived by respondents to exist.
- Respondents scored 'Work ethic' as the most important of the personal characteristics skills for entering trainee internal auditors to possess, while 'Leadership' is perceived as least important.
- The largest perceived statistically significant expectation gap exists for the 'Work ethic' attribute.
- Of all the behavioural skills included in the study, 'Work ethic' is scored highest in respect of the expected level of capability.
- 'Punctuality' is scored highest of all the behavioural skills in respect of the actual level of capability.
- Of all the behavioural skills, the largest significant difference (expectation gap) is perceived for 'Written communication skills'.

The following section presents the conclusions in respect of the skills capabilities of recently graduated trainee internal auditors with regard to sourcing, recruiting and appointment.

7.6.3 Conclusions: the sourcing, recruiting and appointment of entering trainee internal auditors

- In spite of large expectation gaps, participants' organisations still appoint entering trainee internal auditors.
- The highest proportion of respondents' organisations prefers to employ/recruit university graduates with a Diploma in Internal Auditing.
- More than one quarter of respondents' organisations do not appoint entering trainee internal auditors because these graduates are not work-ready.

7.6.4 Key findings in respect of the technical and behavioural skills possessed by entering trainee internal auditors

Considering and consolidating the findings and the descriptions thereof in the foregoing sections, there are two key findings, which are identified and described in the context of the research problem and objectives of this study:

Firstly the gap regarding Internal Audit Standards and Practice Advisories – the comparison between the expected and the actual skills capability levels concerning Internal Audit Standards and Practice Advisories revealed the highest difference compared to all other skills included in the analysis of this research. A significantly large difference (expectation gap) of 40.9 exists, which is 21.0% higher than the gap for the second largest significant difference, namely 'Written communication skills' (32.3).

Although the IIA Standards and the accompanying Practice Advisories are included in the syllabi of internal audit modules/courses of formal internal audit educational programmes, it seems that universities do not teach or assess these skills appropriately. The teaching of professional standards and the assessment thereof should be done by following a problem-based teaching modality.

Assessment of these skills should be incorporated in case study-type questions whereby the standards and practice advisories are integrated with the stages of the internal audit process. The ability to integrate and apply the IIA Standards and associated practice advisories is thus important.

Secondly the gap regarding behavioural skills – the analysis of the results regarding the expected and actual (technical and behavioural) skills capability levels of entering trainee internal auditors revealed that internal audit practitioners have the highest regard for the behavioural skills category. As reported in Table 52, respondents on average expect a level of capability of 69.0% for behavioural skills, compared to 53.1% for technical skills. In addition, respondents perceive the highest expectation gap to exist for behavioural skills (24.0), in comparison with technical skills (18.9).

The high actual capability level reported in respect of 'Cultural sensitivity' (53.7%) shows that trainee internal auditors in the RSA are already sensitised insofar as *political correctness* is concerned. However, based on the large *expectation gap* revealed in respect of behavioural skills, it seems that universities do not sufficiently focus on the incorporation of the required *critical cross-field outcomes* – fundamental skills – into the teaching programme and assessment of aspirant internal auditors.

Further to the critical cross-field outcomes, educators of aspirant internal auditors seem not to sufficiently respect or incorporate the *values* of their respective universities so that they become an integral part of the behavioural skills capabilities of graduates. These values are related to the behavioural skills capabilities that are not gained by students through formal class-room teaching practices, but rather through examples set by internal audit educators (lecturers). Typically, values related to behavioural and professional aspects of internal auditing include, for example, punctuality, professional ethics, professionalism, work ethic and cultural sensitivity.

In addition to the deductions and conclusions presented above, this chapter concludes that, based on the overall perceptions of respondents, entering trainee internal auditors do not possess sufficient levels of technical and behavioural skills capabilities that would enable them to meet the work-readiness expectations of the employers (respondents) of recently graduated trainee internal auditors.

The following chapter provides a summary of this research study, concludes the study, and makes recommendations relating to the findings as regards the skills capability and work-readiness of entering trainee internal auditors, and the conclusions presented in this chapter.

CHAPTER 8: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

Chapter 7 contains an analysis of the perceptions of respondents to the research questionnaire in respect of their expectations of the technical and behavioural skills capabilities of entering trainee internal auditors. The objective of this chapter is to draw conclusions from the findings reported in the previous chapters.

Firstly, an overview of the research is provided, followed by conclusions arising from the literature review and the empirical findings of the study. Based on these findings, and in the context of the research problem and the research study's primary and secondary objectives, recommendations are made.

The chapter outlines how the research question (problem) and the objective and secondary objectives of the study were addressed and usable conclusions arrived at. In addition, the limitations of the study will be identified and explained and, based on the findings of the research, suggestions for further research will be made. Finally, the contributions the study will make to academia and the internal audit profession will be identified and explained.

Figure 35 graphically illustrates the relation of this Chapter (the black box) to the rest of the study.

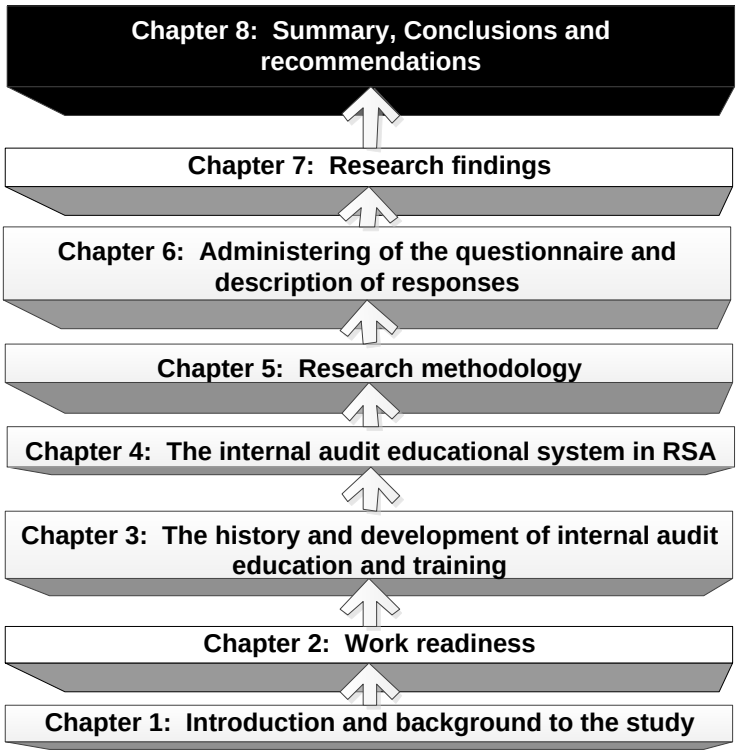


Figure 35: Chapter 8 in relation to the rest of the study

Table 60 includes and describes the abbreviations and acronyms used in this chapter.

Table 60: Abbreviations and acronyms used in Chapter 8

Acronym	Description
ARC	Academic Relations Committee
CAE	Chief Audit Executive
CPD	Continuous Professional Development
IAEP	Internal Audit Education Partner
IIA	Institute of Internal Auditors
IIA (Global)	Institute of Internal Auditors (Global)
IIA (SA)	Institute of Internal Auditors (South Africa)
LSU	Louisiana State University
LSUCIA	Louisiana State University Centre for Internal Auditing
PFMA	Public Finance Management Act, 1999 (Act No. 1 of 1999)
RSA	Republic of South Africa
SOX	Sarbanes Oxley Act of 2002

The following section provides an overview and summary of the research aspect of the study.

8.2 OVERVIEW OF THE RESEARCH

Chapter 1 outlined the research conducted in respect of the research problem addressed by the study. The chapter explained the research objective, justified the need for the research, and briefly outlined the research methodology. In addition, the secondary research objectives that were to guide the research were listed and explained.

Chapters 2 to 4 studied literature relating to the research problem, the research objective, and the associated secondary research objectives, providing justification for the need for the research study.

Based on the research objective, literature was consulted to place work-readiness in the context of the research problem, as a key component of the research. The history and development of the internal audit profession, and the evolvement and development of formal internal audit education and training, were reviewed and a better understanding of the relation between these two constructs was achieved.

Continuing the extensive literature review, Chapter 5 reported on published literature that was consulted in order to decide on the most appropriate methodology for this research. The conclusions reached in this respect led to the adoption of a non-experimental descriptive quantitative research methodology in respect of the empirical component of the study.

Based on the findings and conclusions drawn therefrom in the literature review, a research questionnaire was designed to specifically address the study's research problem and research objective. The process of the administration and distribution of the research instrument was outlined in Chapter 6.

The data obtained from respondents were statistically analysed and interpreted in Chapters 6 and 7, and final conclusions are presented in the current chapter, Chapter 8. In combination with the results obtained through the literature review, the statistically analysed findings included in Chapters 6, 7 and 8 provide solutions and answers to the secondary research objectives of the study.

This chapter concludes the study. The following sections list and explain the conclusions reached in the non-empirical and empirical components of the research.

8.3 CONCLUSIONS DERIVED FROM THE LITERATURE REVIEW COMPONENT OF THE RESEARCH

Chapters 2, 3 and 4 provided literary evidence justifying the need for this study, and substantiated the conclusions reached in respect of the research question (problem), the research objective, and the secondary research objectives (refer to sections 1.5, 1.6 and 1.7). The literature review was conducted according to the three main aspects of the study's research problem. These categories are: work-readiness, the development of internal audit education and training, and internal audit education in the RSA. The conclusions drawn from the literature review are listed below:

- The knowledge of and ability to apply the technical and behavioural skills that are needed in order to perform 'entry level' tasks, as well as the ability to adapt to the requirements of formal employment in this sector of the economy, is referred to as work-readiness. Employers of entering trainee internal auditors expect these skills to be provided by universities through their formal internal audit educational programmes.

- The internal audit profession and the internal audit education providers (universities) are interdependent, and the sustainability of each depends on the sustainability of the other. The development and growth of the profession is currently vigorous and healthy as a result of the sound relationships fostered by the IIA, specifically its Academic Relations Committee (ARC), as it oversees the academic affairs of the internal audit profession.
- The ARC is in favour of internship programmes in order to equip internal audit students with more than just the theoretical, on-campus knowledge they are acquiring.
- Since 1984 the ground-breaking contributions made by Sumners of the LSU Centre for Internal Auditing, with its successful workplace-engaged educational programme, has set the tone for internal audit education internationally. All LSU Centre for Internal Auditing graduates are placed at internal audit employers for internships on completion of their internal audit qualification.
- It was only after the 1990s that internal audit educational programmes in the RSA began transforming from 'second class' technikon qualifications (National Diplomas) to 'first class' sought-after qualifications (ranging from diplomas to doctorate degrees) now offered by almost all universities in the RSA.
- The development of internal audit education in the RSA has been further fuelled by a number of corporate governance and financial management regulatory codes such as the Public Finance Management Act (PFMA), the King Reports on Governance (King I, II and III) and the Sarbanes Oxley Act (SOX 2002).

The findings in respect of the above "themes" were taken into consideration during the planning of the empirical research and the determination of the methodology and research design of the study. The following section outlines the conclusions reached on completion of the empirical component of the research.

8.4 CONCLUSIONS IN RESPECT OF THE EMPIRICAL RESEARCH RESULTS

The first part of the empirical research (Section A of the questionnaire) obtained the biographical data of the participants. The following section provides conclusions with regard to the biographical information of participants and the reliability of their responses.

8.4.1 Biographical information of respondents

The internal audit manager respondents' profiles were analysed in order to determine the integrity, validity and reliability of the responses of these respondents. The profiles identified their highest academic qualifications; professional qualifications; the type of university where they obtained their highest academic qualification; the main focus of their highest academic qualification; the IIA (SA) Region they reside in; the economic sector that their organisations operate in; and finally, the positions held by respondents in their organisations. Based on these findings, the responses of participants with less than three years' internal audit experience (trainee internal auditors) were excluded from the statistical analysis of the data obtained through the empirical component of the research. Respondents who have more than three years' internal audit experience, and CAEs, were included as they were recognised as being in sufficiently senior positions to ensure the reliability and integrity of their responses. Based on the demographical information of the respondents, it was concluded that the quality and representativeness of their views and perceptions were ensured.

The average profile of respondents was compared to the average profile of the respondents to another internal audit research project also conducted in the RSA. It was concluded that the two average profiles were sufficiently similar to accept the representativeness of the responses received from the participants in this research.

The following section draws conclusions from the findings in respect of the technical skills capabilities of entering trainee internal auditors.

8.4.2 Technical and behavioural skills capabilities of entering trainee internal auditors

The empirical component of the study obtained respondents' perceptions of the work-readiness expectations of employers of entering trainee internal auditors. The empirical findings in respect of the technical skills capabilities of entering trainee internal auditors were statistically analysed and interpreted in an attempt to find a solution to the research problem and to achieve the study's research objective, as outlined in Section 1.6.

The mean differences between the *expected* level of capability and the level of capability *actually* possessed by entering trainee internal auditors, as perceived by internal audit manager respondents, were statistically determined and tested for significance and effect size – with the objective to firstly, determine whether an internal audit educational expectation gap exists and secondly, if that is the case, to determine the extent thereof.

Chapter 7 provided a statistical analysis and interpretation of the research findings that relate to technical skills capabilities, and is based on the expected and actual levels of capability of entering trainee internal auditors. Technical skills capabilities form an integral part of the ultimate work-readiness of an internal auditor.

Based on the findings reported in Chapter 7, it can be concluded that, on average, entering trainee internal auditors do not possess sufficiently well-developed levels of capability in respect of technical and behavioural skills. It can be further concluded that universities do not provide employers with sufficiently *work-ready* internal audit graduates, and that a large *internal audit educational expectation gap* exists insofar as their *technical* and *behavioural skills* capabilities are concerned.

The following section presents conclusions on the overall work-readiness of entering trainee internal auditors

8.4.3 Work-readiness of entering trainee internal auditors

Section 2.3 emphasised that technical and behavioural skills form the foundation of personal growth, and that the development of intellectual ability should be stimulated by university education. In light of the argument presented in section 2.3.1, namely that work-readiness can be defined as an *enhanced capacity to ensure employment or employability,* the study obtained the perceptions of internal audit managers in respect of practices concerning the sourcing, recruiting and appointment of entering trainee internal auditors.

Based on the study's statistically analysed results in respect of these practices, it can be concluded that, in spite of the large expectation gap revealed by this research, almost 75% of respondents' organisations do annually appoint entering trainee internal auditors. In addition, respondents from those organisations that do not appoint university graduates are of the opinion that recently graduated trainee internal auditors are not sufficiently work-ready – hence their refusal to employ recently graduated trainee internal auditors.

The answer to the research question (problem) of the study is outlined in the following section.

8.5 ADDRESSING THE RESEARCH QUESTION (PROBLEM)

The research question (problem) of the study focuses on whether an internal audit educational gap exists between the technical and behavioural skills expected by employers (in internal audit practice) and the technical and behavioural skills transferred through the formal internal audit educational programmes offered by universities in the RSA. Through the research conducted in the study and the findings reported in respect of the results of the research, it is resolved that a *large internal audit educational expectation gap does exist* in the RSA.

The following section outlines and describes how the research objective and the associated secondary research objectives were achieved.

8.6 ACHIEVEMENT OF THE PRIMARY RESEARCH OBJECTIVE AND THE SECONDARY RESEARCH OBJECTIVES OF THE STUDY

The research objective of the study was to determine whether a gap exists between what universities in the RSA provide and what employers expect from entering trainee internal auditors, and to obtain an understanding of the nature and extent of this presumed expectation gap with specific reference to the technical and behavioural skills capabilities of entering trainee internal auditors.

The following section indicates how the above objective was achieved.

8.6.1 Achievement of the research objective of the study

The research objective has been achieved in that the statistically justified findings prove that an expectation gap exists, and that the extent thereof is significantly large.

8.5.3 Answering the secondary research objectives of the study

The answers to the secondary research objectives are based on literary evidence and the statistically analysed data obtained from internal audit managers responding to the research questionnaire. The secondary research objectives of the study were answered as indicated below.

8.5.3.1 To conceptualise work-readiness in the context of the research problem and objective of this study (refer to Chapter 2)

Through an extensive literature review of theory in respect of work readiness, it was possible to place the research problem and objective of this study in context with work-readiness (refer to Chapter 2). It was concluded that the work-readiness of entering trainee internal auditors could be related to the levels of their technical and behavioural skills capabilities.

8.5.3.2 To examine the history and development of the internal audit profession

The examination of the literature provided evidence in respect of the history and the rapid development of the internal audit profession over the last few decades (refer to Chapter 3). The rapid expansion of this profession supported the belief that the existence of an internal audit educational expectation gap was possible – based on the relatively young age of the internal audit profession in the RSA and globally. The literature provided evidence that confirmed the need for this research.

8.5.3.3 To obtain an understanding of the development of the educational system and the *status quo* in internal audit education in the RSA.

Developments in education in the RSA have experienced exciting times over the last decade-and-a-half, especially in the light of the political developments and changes since the RSA's first democratic elections in 1994. The literature consulted shows that these drastic changes could be a contributing factor to the existence of an internal audit educational expectation gap.

Pre-emptively recognising the importance of this research, the RSA government realised the deficiencies in the national educational system and introduced interventions in an attempt to improve the level of work-readiness of university graduates (refer to Chapter 4).

8.5.3.4 To examine and evaluate the nature of existing internal audit educational programmes to determine the existing knowledge and skills content in order to assist in the design of the research questionnaire

The results of the literature review substantiate the contention that the quality and rigor of internal audit education in the RSA is beyond question. Two universities in the RSA are endorsed by the IIA as IAEP programmes (refer to Chapter 4).

The research questionnaire was designed and questions formulated after taking into account the theoretical background obtained in respect of the *status quo* in internal audit education and training.

8.5.3.5 To obtain respondents' views and perceptions of the technical and behavioural skills expectations they have of recently graduated entering trainee internal auditors

The research questionnaire was distributed to the population of the study, data were collected, statistically analysed and interpreted, and findings were reported. Conclusions in respect of the reported findings were drawn in the context of the research problem and objective of the study (refer to Chapters 7 and 8), including this last research question.

The following section discusses recommendations based on the findings of the research.

8.6 RECOMMENDATIONS

Based on the findings and conclusions outlined above, the following recommendations are made in the context of the study's research question (problem) and research objectives:

a) The IIA (Global) should consider updating its guidance documentation to include *entry level trainee internal auditors*, especially in respect of guidance that relates to curriculum content as well as competence requirements concerning internal auditors.

b) The IIA (SA) should take note of the deficiency in the IIA's Internal Auditor Competency Framework, and update the curricula of their formal internal audit learnership programmes and CPD training modules/courses.

c) Universities in the RSA offering formal internal audit educational programmes should re-design the curricula of these programmes, as well as the teaching practice models used to transfer knowledge and skills, in order to integrate workplace experience with class-room teaching modality types. Typically, this would for example include workplace based education.

d) Universities offering formal internal audit educational programmes should consider forming stronger partnerships with internal audit practice (employers) through, for example, effective advisory boards. Effective advisory boards could be instrumental in addressing the *internal audit educational expectation gap* reported in the findings of this research.

e) Universities in the RSA that have not yet had their degrees endorsed by the IIA as Internal Audit Educational Partner (IAEP) programmes, should consider the recently introduced entry level endorsement of the IIA, namely the *IAEP Awareness* level.

The following section lists the limitations of the research and provides suggestions for further research.

8.7 LIMITATIONS OF THE RESEARCH AND SUGGESTIONS FOR FURTHER RESEARCH

This research revolved around a specific research objective and secondary research objectives within defined scope limitations. These limitations are outlined in the following section.

8.7.1 Limitations of the research

In addition to the scope limitations explained in Chapter 5, the following limitations of the study have been identified and should be borne in mind when considering the findings, conclusions and recommendations:

a) The findings of the study are based on *perceptions* of respondents and not factual and verifiable information.

b) Limited published information is available with regard to the work-readiness of, and work-readiness guidance for, entering trainee internal auditors.

c) Previous research could not be identified or obtained in respect of *internal audit educational expectation gaps*, specifically in the RSA.

d) The research design included the use of an e-survey which has specific risks and limiting factors associated with its use.

e) The research, including the findings, conclusions and recommendations, is limited to the perceptions of respondents within the geographical boundaries of the RSA.

f) Internal auditors who are not members of the IIA were not included in the research, as the IIA (SA) membership database provided the population from which the information for this research was obtained.

g) The perceptions of internal audit educator respondents in the RSA were not obtained.

h) The perceptions of trainee internal auditor respondents were obtained but excluded from the analysis of the research findings and conclusions as these results contradicted the findings based on the perceptions of internal audit managers and CAEs.

i) Factors that could affect the social well-being and work-readiness of university graduates, such as socio-political and other matters affecting the quality of the school and tertiary educational systems in the RSA, were also not considered.

j) The results of this research are based on the reasoning that appropriate university education instils an acceptable level of work-readiness. Other role players' contributions to and responsibilities for achieving work-readiness of entering trainee internal auditors were not included in this research.

The following section identifies areas for further research.

8.7.2 Suggestions for further research

The following areas suggest themselves for further research and relate to the research question (problem and research objectives) of the study:

a) Further research should be considered on the implementation of interventions as part of teaching practice models at university level, and as part of training programmes in the workplace, in order to address the *internal audit educational expectation gaps* in the RSA.

b) The suggested implementation by the IIA of a formal and compulsory traineeship programme for internal audit trainees should be subjected to further research.

c) Universities require a pass-mark of 50% for all modules contained in the curriculum of formal internal audit educational programmes. Based on the high level of expected capability reported in this research, further research should be considered to determine whether this pass requirement is sufficient to satisfy the requirements of the internal audit profession in respect of skills capability levels, and whether a higher pass requirement could contribute to improving the work-readiness of entering trainee internal auditors.

d) As distance learning universities do not have the on-campus component that residential universities have, the work-readiness of the graduates from their internal audit educational programmes should be considered for further research. It is not clear whether students enrolled for the internal auditing programmes at these universities are employed by and in internal audit activities, or even if they are employed at all. Whether these students are employed in internal audit activities should be researched, and the level of capability of entering trainee internal auditors who graduated from a distance learning university could be compared to those of students

who went through an internal audit educational programme at a residential university.

e) The regulation, through legislation, of the internal audit profession in the RSA should be researched further.

The following section explains the contribution of the findings of this research in respect of the development of new knowledge and expertise.

8.8 CONTRIBUTION OF THE STUDY

The findings of this research contribute to the limited existing published research by providing new knowledge in respect of what employers of entering trainee internal auditors desire in the RSA, with specific reference to employers' work-readiness expectations of these recently graduated entering trainee internal auditors.

In addition to the contribution in respect of work-readiness expectations concerning entering trainee internal auditors, this study makes contributions to the confirmation of the existence of an *internal audit educational expectation gap,* the gap between the desires of employers of recently graduated trainee internal auditors, and what universities provide these graduates with in respect of *technical and behavioural skills capabilities* – which make up the work-readiness of entering trainee internal auditors. The contributions are summarised below.

Resulting from the findings and recommendations of this research, and in the context of the research question (problem), research objective and secondary research objectives of the study, the following specific contributions made by this research are highlighted:

a) The international professional body of the internal audit profession, the IIA (Global), should be able to provide valuable information and up-to-date and complete guidance to universities in respect of skills, competencies and, specifically, work-readiness (capability) expectations insofar as the content of the curricula of formal internal audit educational programmes are concerned.

b) New knowledge in respect of the graduateness and work-readiness of internal auditors resulted from the findings and conclusions of this research – increasing the knowledge base of published research with regard to internal audit education.

c) The findings of this research could form the basis of and motivation for the development of formal traineeship programmes in the internal audit profession in the RSA.

d) The findings of this research contribute by providing a reliable benchmark to the IIA in respect of the content of formal Continuing Professional Development (CPD) training modules/courses, as well as formal IIA learnership programmes.

e) This research makes an important and valuable contribution in respect of the design and re-design of the curricula of new and existing internal audit educational programmes, especially in the light of the recent developments and demands of higher education and training legislation in the RSA.

The following section summarises and concludes the study.

8.9 SUMMARY AND CLOSURE

Internal auditing as a profession is currently receiving the acknowledgment it deserves, following a time (before 1990), especially in the RSA, during which the internal audit profession operated largely in the background, and certainly in the shadow of, the external audit profession. Internal auditing has become a sought-after profession which is corroborated by the constant growth in membership numbers of the IIA (SA). The IIA (SA) is one of the largest institutes of the internal audit profession in the world and plays an important role in the development of the profession, both in the RSA and globally.

These developments have resulted in increased demands for better quality university graduates – for entering trainee internal auditors who are work-ready from the moment they enter the profession. It is in the light of these fast-paced developments in the internal audit profession that the research problem of this study was identified, i.e. to determine whether an internal audit educational expectation gap exists.

Several conclusions have been reached and recommendations made based on the scientifically based findings in respect of the research problem. These findings, conclusions and recommendations make valuable contributions in respect of the development of new knowledge and expertise insofar as the capability expectations of employers of entering trainee internal auditors are concerned. The major contributions of this research are outlined below.

The results of this research provide the IIA (Global) and its ARC with work-readiness guidelines for re-designing the recommended internal audit educational curriculum.

Furthermore, the results of the research are useful and valuable to educational institutions in the RSA, in that scientifically obtained information is provided that enables these institutions to better align their formal internal audit educational programmes with the work-readiness expectations (graduateness) of the industry their graduates are about to enter.

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SAICA *see* South African Institute of Chartered Accountants.

SANTED *see* South Africa-Norway tertiary education development.

SAQA *see* South African Qualifications Authority.

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TUT *see* Tshwane University of Technology.

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ANNEXURES TO THE RESEARCH STUDY

ANNEXURE A: ETHICAL CLEARANCE APPROVAL

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

FACULTY OF ECONOMIC AND
MANAGEMENT SCIENCES

RESEARCH ETHICS COMMITTEE

Tel: +27 12 420-2306
E-mail: anske.grobler@up.ac.za

30 November 2011

Prof H de Jager
Department of Auditing

Dear Professor de Jager

Project:	***An educational framework incorporating work integrated learning for internal audit students at tertiary institutions***
Researcher:	**H Fourie**
Student No:	**85691187**
Supervisor:	**Prof H de Jager**
Department:	**Auditing**

Thank you for the application you submitted to the Committee for Research Ethics, Faculty of Economic and Management Sciences.

The student is commended for well-structured and comprehensive application, which was judged to be of a high standard.

I have pleasure in informing you that the Committee formally approved the above study on 30 November 2011. The approval is subject to the candidate abiding by the principles and parameters set out in his application and research proposal in the actual execution of the research.

The approval does not imply that the researcher, student or lecturer is relieved of any accountability in terms of the Codes of Research Ethics of the University of Pretoria if action is taken beyond the approved proposal.

The Committee requests you to convey the approval to Mr Fourie.

We wish you success with the project.

Sincerely

PROF AF GROBLER
CHAIR: COMMITTEE FOR RESEARCH ETHICS

Members:
Prof AF Grobler (Chair); Dr N Barkhuizen; Prof C de Villiers; Prof JHvH de Wet; Mr T Gerber; Prof JF Kirsten; Prof B Lubbe; Ms K Plant; Prof M Stiglingh; Prof C Thornhill; Prof R van Eyden; Prof J van Vuuren
***Ex officio* members:**
Chair: Research Committee; Prof SR van Jaarsveld, Faculty of Law

ANNEXURE B: APPROVAL OF RESEARCH TITLE

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

POSTGRADUATE COMMITTEE

Tel: +27 12 420 5439
Email: stella.nkomo@up.ac.za

19 June 2013

Prof K Barac
Department of Auditing

Dear Professor Barac

TITLE REGISTRATION: H FOURIE, STUDENT NO. 85691187

This serves to advise that the following revised title, submitted for the research of the above candidate, was approved on an *ad hoc* basis by the Postgraduate Committee on 19 June 2013:

Work readiness of university graduates: an internal audit educational expectation gap in South Africa

We wish you success with the project.

Sincerely

PROF SM NKOMO
CHAIR: POSTGRADUATE COMMITTEE

cc: Prof H de Jager

ANNEXURE C: COVERING E-MAIL MESSAGE

Dear internal audit colleague

Attached please find a brief summary of the doctorate survey of the **work readiness** of entering trainee internal auditors (graduates).

Your cooperation and participation in providing me with your valuable opinion will be highly appreciated.

Please follow the link below to participate in the survey:

Internal audit education survey

If you have difficulty with the above link, you can copy and paste the following link into your web browser:

https://docs.google.com/forms/d/1Gp0AcWV0KV75nEp3FDOkFon1rWH7FSTc9o33jy1mTwo/viewform

Many thanks

Houdini Fourie

The document attached to the covering e-mail above, is as follows:

WORK READINESS: AN INTERNAL AUDIT EDUCATIONAL EXPECTATION GAP IN SOUTH AFRICA

This research study is conducted as part of the requirements for the DCom Internal Auditing at the University of Pretoria.

The Internal Audit profession is regarded as a fast growing profession globally. Developments globally and locally create more expectations of internal auditors and, as a result (on the part of the employers), also of entering internal audit trainees. Universities in South Africa, the providers of the graduates who enter the job market, transfer skills and competencies that are included in the curricula of their formal internal audit educational programmes.

Employers have to spent large amounts of money to train entering internal auditors on work-related skills in order to be work ready. This study seeks to investigate whether an expectation gap exists between the needs of the internal audit profession as employers of the entering trainee internal auditors (graduates), and the syllabus content of the curriculum of formal internal audit educational programmes. Apart from determining the nature of the expectation gap, this study seeks to investigate the extent of the expectation gap. Clearly defined information in respect of such an expectation gap would enable universities to amend the curricula of their formal internal audit educational programmes to better address the expectations of the employers of their internal audit graduates. The research question of this study is:

Does an expectation gap exist between the expected knowledge and competence levels, as well as the skills profiles of university graduates (entering internal audit trainees), by the employers (internal audit practice) in South Africa versus what is provided by universities?

RESEARCH OBJECTIVES

*Following on from the research question of the study, the primary objectives of the research are firstly to obtain an understanding of the existence, nature and scope of the expectation gap [the gap between **what universities provide** in respect of technical and behavioural skills versus **what is expected by the employers** of the students graduating from these universities] and secondly to determine the extent of the expectation gap.*

The questionnaire obtains the opinions of the employers of internal audit graduates on their work readiness when they begin their internal audit careers. In addition, the questionnaire obtains the opinions of internal audit trainees in respect of their experiences with regard to their level of capability as entering internal audit trainees. Possible deficiencies in respect of technical and behavioural skills in formal internal audit educational programmes can also be identified.

The value of the research is that universities will be able to, based on the findings of this study, enhance their formal internal audit educational programmes in order to provide more work ready entering internal audit trainees.

ANNEXURE D: RESEARCH INSTRUMENT

Doctorate candidate: Houdini Fourie (hfourie@nmmu.ac.za) Tel: 041 504 2182
Qualification: D Com Internal Auditing.
Institution: Department of Auditing, University of Pretoria.
Promoter: Prof. Herman de Jager (herman.dejager@up.ac.za) Tel: 012 420 4427

This doctorate study aims to determine whether a gap exist between the expectations of employers of entering trainee internal auditors and their level of work readiness with specific reference to technical and behavioural skills capabilities.

Please do not hesitate to contact the researcher or the promoter to clarify any matters that may arise when participating in the research.

Participation in this survey is voluntary and anonymous.

Section A: Biographical Information

1 I hereby give consent to participate in the survey and I understand that my personal identification information is not required and that the opinions and perceptions provided in this questionnaire are for research purposes only.*

- ○ Yes
- ○ No

2 Please select the highest academic (university) qualification that you have obtained:*

- ○ Matric (Grade 12)
- ○ Diploma or National Diploma (3 year)
- ○ Bachelors degree (3 year)
- ○ BTech
- ○ Honours degree
- ○ Postgraduate diploma
- ○ MBA/MBL
- ○ Master's degree
- ○ DBA/DBL
- ○ Doctorate degree
- ○ Other: _____

3 Please mark all the professional qualifications that you hold:*

- ☐ CA (SA)
- ☐ CCSA
- ☐ CIA
- ☐ CISA
- ☐ CIMA
- ☐ CRMA
- ☐ Professional Accountant
- ☐ Registered Auditor (RA)
- ☐ Registered Government Auditor (RGA)
- ☐ None
- ☐ Other:

4 At which of the following higher education institution types did you obtain your highest academic qualification?*

- ○ Technikon
- ○ University of Technology
- ○ University
- ○ Other:

5 Please indicate the main focus of your highest academic qualification:*

- ○ Accounting
- ○ Auditing
- ○ Business Management
- ○ Information Technology
- ○ Internal auditing
- ○ Management
- ○ Managerial Accounting (or equivalent)
- ○ Other:

6 Which one of the following IIA (SA) Regions do you reside in?*

- ○ Border Kei
- ○ Central
- ○ Johannesburg
- ○ Kwazulu-Natal
- ○ Limpopo
- ○ Mpumalanga
- ○ Northern Cape
- ○ North West
- ○ Port Elizabeth
- ○ Pretoria
- ○ Western Cape

7 Please indicate the economic sector of the organisation that you are currently employed with:*

- ○ Education
- ○ Financial services (Banking, Insurance, etc.)
- ○ Internal audit service provider
- ○ External audit firm providing internal audit services
- ○ Manufacturing
- ○ Mining
- ○ Retail
- ○ Services (Accounting, Medical, Legal, etc.)
- ○ Local government
- ○ Public Sector: National department
- ○ Public sector: Provincial government
- ○ Public entity
- ○ Constitutional Institution
- ○ Other:

8 Please indicate your current position in the organisation:*

- Internal audit trainee with less than 1 year's internal audit experience
- Internal audit trainee with more than 1 year's but less than 3 years' internal audit experience
- Internal auditor with more than 3 years' but less than 5 years' internal audit experience
- Internal auditor with 5 years’ or more internal audit experience
- Chief audit executive

Section B: Work-readiness of entering internal audit trainees

Work-readiness in the context of this survey refers to an entering internal audit trainee's expected capabilities when commencing their careers after graduating from university. These capabilities refer to those technical and behavioural skills that entering trainee internal auditors are expected to possess.

Technical skills capabilities of entering internal audit trainees

Technical skills in the context of this survey refers to those skills that entering trainee internal auditors should possess to perform entry level internal audit engagements. Please note that questions in this section are paired and should be answered as such, for example Question 1a) and 1b). In question 1a), you are requested to indicate the level of capability that YOU EXPECT of ENTERING INTERNAL AUDIT TRAINEES. The following question, 1b), requests that you RATE the ACTUAL level of capability that you have experienced of entering internal audit trainees.

1a) Please indicate the lowest level of capability that YOU EXPECT of entering trainee internal auditors in respect of the following accountancy-related skills:*

Accountancy-related skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Basic accounting skills (bookkeeping)	☐	☐	☐	☐	☐	☐
Company Annual Financial Statements (AFS)	☐	☐	☐	☐	☐	☐
Cost Accounting	☐	☐	☐	☐	☐	☐
IFRS Accounting Standards	☐	☐	☐	☐	☐	☐
Managerial Accounting and Finance (MAF)	☐	☐	☐	☐	☐	☐
Public Sector Accounting (GRAP)	☐	☐	☐	☐	☐	☐
Year-end adjustments	☐	☐	☐	☐	☐	☐

1b) Please rate the level of capability that entering trainee internal auditors ACTUALLY POSSESS in respect of the following accountancy-related skills:*

Accountancy-related skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Basic accounting skills (bookkeeping)	☐	☐	☐	☐	☐	☐
Company Annual Financial Statements (AFS)	☐	☐	☐	☐	☐	☐
Cost Accounting	☐	☐	☐	☐	☐	☐
IFRS Accounting Standards	☐	☐	☐	☐	☐	☐
Managerial Accounting and Finance (MAF)	☐	☐	☐	☐	☐	☐
Public Sector Accounting (GRAP)	☐	☐	☐	☐	☐	☐
Year-end adjustments	☐	☐	☐	☐	☐	☐

2a) Please indicate the lowest level of capability that YOU EXPECT of entering trainee internal auditors in respect of the following types of Auditing:*

Types of Auditing	Level of capability					
	0%	20%	40%	60%	80%	100%
Financial Auditing	☐	☐	☐	☐	☐	☐
Fraud/Forensic Auditing	☐	☐	☐	☐	☐	☐
Internal Auditing	☐	☐	☐	☐	☐	☐
IT/IS Auditing	☐	☐	☐	☐	☐	☐
Operational Auditing	☐	☐	☐	☐	☐	☐
Public Sector Auditing	☐	☐	☐	☐	☐	☐

2b) Please rate the level of capability that entering trainee internal auditors ACTUALLY POSSESS in respect of the following types of Auditing:*

Types of Auditing	Level of capability					
	0%	20%	40%	60%	80%	100%
Financial Auditing	☐	☐	☐	☐	☐	☐
Fraud/Forensic Auditing	☐	☐	☐	☐	☐	☐
Internal Auditing	☐	☐	☐	☐	☐	☐
IT/IS Auditing	☐	☐	☐	☐	☐	☐
Operational Auditing	☐	☐	☐	☐	☐	☐
Public Sector Auditing	☐	☐	☐	☐	☐	☐

3a) Please indicate the lowest level of capability that YOU EXPECT of entering trainee internal auditors in respect of the following risk-related skills:*

Risk-related skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Control frameworks (COSO, COBIT, etc.)	☐	☐	☐	☐	☐	☐
Enterprise Risk Management (ERM)	☐	☐	☐	☐	☐	☐
Internal Control Assessment	☐	☐	☐	☐	☐	☐
Risk Management	☐	☐	☐	☐	☐	☐

3b) Please rate the level of capability that entering trainee internal auditors ACTUALLY POSSESS in respect of the following risk-related skills:*

Risk-related skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Control frameworks (COSO, COBIT, etc.)	☐	☐	☐	☐	☐	☐
Enterprise Risk Management (ERM)	☐	☐	☐	☐	☐	☐
Internal Control Assessment	☐	☐	☐	☐	☐	☐
Risk Management	☐	☐	☐	☐	☐	☐

4a) Please indicate the lowest level of knowledge that YOU EXPECT of entering trainee internal auditors in respect of the following knowledge areas:*

Knowledge areas	Level of capability					
	0%	20%	40%	60%	80%	100%
Business management	☐	☐	☐	☐	☐	☐
Economics	☐	☐	☐	☐	☐	☐
Governance codes and legislation (e.g. King, SOX)	☐	☐	☐	☐	☐	☐
Internal audit standards and practice advisories	☐	☐	☐	☐	☐	☐
Information Technology	☐	☐	☐	☐	☐	☐
Professional ethics	☐	☐	☐	☐	☐	☐
Project management	☐	☐	☐	☐	☐	☐
Public sector finance and administration	☐	☐	☐	☐	☐	☐
Strategic planning	☐	☐	☐	☐	☐	☐

4b) Please rate the level of knowledge that entering trainee internal auditors ACTUALLY POSSESS in respect of the following knowledge areas:*

Knowledge areas	Level of capability					
	0%	20%	40%	60%	80%	100%
Business management	☐	☐	☐	☐	☐	☐
Economics	☐	☐	☐	☐	☐	☐
Governance codes and legislation (e.g. King, SOX)	☐	☐	☐	☐	☐	☐
Internal audit standards and practice advisories	☐	☐	☐	☐	☐	☐
Information technology	☐	☐	☐	☐	☐	☐
Professional ethics	☐	☐	☐	☐	☐	☐
Project management	☐	☐	☐	☐	☐	☐
Public sector finance and administration	☐	☐	☐	☐	☐	☐
Strategic planning	☐	☐	☐	☐	☐	☐

5a) Please indicate the lowest level of capability that YOU EXPECT of entering trainee internal auditors in respect of the following management skills:*

Management skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Human resource management	☐	☐	☐	☐	☐	☐
Managing internal audit engagements	☐	☐	☐	☐	☐	☐
Managing the internal audit activity	☐	☐	☐	☐	☐	☐

5b) Please indicate the level of capability that entering trainee internal auditors ACTUALLY POSSESS in respect of the following management skills:*

Management skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Human resource management	☐	☐	☐	☐	☐	☐
Managing internal audit engagements	☐	☐	☐	☐	☐	☐
Managing the internal audit activity	☐	☐	☐	☐	☐	☐

6a) Please indicate the lowest level of knowledge that YOU EXPECT of entering trainee internal auditors in respect of the following legislation:*

Legislation	Level of capability					
	0%	20%	40%	60%	80%	100%
Constitution of the RSA	☐	☐	☐	☐	☐	☐
Companies Act	☐	☐	☐	☐	☐	☐
Municipal Finance Management Act (MFMA)	☐	☐	☐	☐	☐	☐
Public Finance Management Act (PFMA)	☐	☐	☐	☐	☐	☐

6b) Please rate the level of knowledge that entering trainee internal auditors ACTUALLY POSSESS in respect of the following legislation:*

Legislation	Level of capability					
	0%	20%	40%	60%	80%	100%
Constitution of the RSA	☐	☐	☐	☐	☐	☐
Companies Act	☐	☐	☐	☐	☐	☐
Municipal Finance Management Act (MFMA)	☐	☐	☐	☐	☐	☐
Public Finance Management Act (PFMA)	☐	☐	☐	☐	☐	☐

7a) Please indicate the lowest level of capability that YOU EXPECT of entering trainee internal auditors in respect of internal audit tools and techniques:*

Internal audit tools and techniques	Level of capability					
	0%	20%	40%	60%	80%	100%
CAATs (e.g. ACL, BarnOwl, IDEA)	☐	☐	☐	☐	☐	☐
Non-statistical sampling techniques	☐	☐	☐	☐	☐	☐
Statistical analysis techniques	☐	☐	☐	☐	☐	☐
Statistical sampling techniques	☐	☐	☐	☐	☐	☐

7b) Please rate the level of capability that entering trainee internal auditors ACTUALLY POSSESS in respect of internal audit tools and techniques:*

Internal audit tools and techniques	Level of capability					
	0%	20%	40%	60%	80%	100%
CAATs (e.g. ACL, BarnOwl, IDEA)	☐	☐	☐	☐	☐	☐
Non-statistical sampling techniques	☐	☐	☐	☐	☐	☐
Statistical analysis techniques	☐	☐	☐	☐	☐	☐
Statistical sampling techniques	☐	☐	☐	☐	☐	☐

8a) Please indicate the lowest level of knowledge that YOU EXPECT of entering trainee internal auditors in respect of the following tax-related knowledge areas:*

Tax-related knowledge areas	Level of capability					
	0%	20%	40%	60%	80%	100 %
Companies Tax	☐	☐	☐	☐	☐	☐
Tax on individuals (PAYE)	☐	☐	☐	☐	☐	☐
Value Added Tax (VAT)	☐	☐	☐	☐	☐	☐

8b) Please rate the level of knowledge that entering trainee internal auditors ACTUALLY POSSESS in respect of the following tax-related knowledge areas:*

Tax related knowledge areas	Level of capability					
	0%	20%	40%	60%	80%	100 %
Companies Tax	☐	☐	☐	☐	☐	☐
Tax on individuals (PAYE)	☐	☐	☐	☐	☐	☐
Value Added Tax (VAT)	☐	☐	☐	☐	☐	☐

9 Please provide technical skills that you regard as important for entering trainee internal auditors to possess, but that are not listed in the questions above.

Behavioural skills capabilities of entering internal audit trainees

Behavioural skills, in the context of this survey, refer to the non-technical 'soft skills' (including attitudes and characteristics) that entering trainee internal auditors are expected to possess.

10a) Please indicate the lowest level of capability that YOU EXPECT of entering trainee internal auditors in respect of the following interpersonal skills:*

Interpersonal skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Conflict management	☐	☐	☐	☐	☐	☐
Listening skills	☐	☐	☐	☐	☐	☐
Negotiation skills	☐	☐	☐	☐	☐	☐
Oral communication skills	☐	☐	☐	☐	☐	☐
Teamwork	☐	☐	☐	☐	☐	☐
Written communication skills	☐	☐	☐	☐	☐	☐

10b) Please indicate the level of capability that entering trainee internal auditors ACTUALLY POSSESS in respect of the following interpersonal skills:*

Interpersonal skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Conflict management	☐	☐	☐	☐	☐	☐
Listening skills	☐	☐	☐	☐	☐	☐
Negotiation skills	☐	☐	☐	☐	☐	☐
Oral communication skills	☐	☐	☐	☐	☐	☐
Teamwork	☐	☐	☐	☐	☐	☐
Written communication skills	☐	☐	☐	☐	☐	☐

11a) Please indicate the lowest level of capability that YOU EXPECT of entering trainee internal auditors in respect of the following characteristics:*

Characteristics	Level of capability					
	0%	20%	40%	60%	80%	100%
Adaptability	☐	☐	☐	☐	☐	☐
Critical thinking	☐	☐	☐	☐	☐	☐
Cultural sensitivity	☐	☐	☐	☐	☐	☐
Governance and ethics sensitivity	☐	☐	☐	☐	☐	☐
Judgement	☐	☐	☐	☐	☐	☐
Leadership	☐	☐	☐	☐	☐	☐
Maturity	☐	☐	☐	☐	☐	☐
Problem identification and solving skills	☐	☐	☐	☐	☐	☐
Punctuality	☐	☐	☐	☐	☐	☐
Self-confidence	☐	☐	☐	☐	☐	☐
Self-discipline	☐	☐	☐	☐	☐	☐
Self-motivation	☐	☐	☐	☐	☐	☐
Work ethic	☐	☐	☐	☐	☐	☐

11b) Please rate the level of capability that entering trainee internal auditors ACTUALLY POSSESS in respect of the following characteristics:*

Characteristics	Level of capability					
	0%	20%	40%	60%	80%	100%
Adaptability	☐	☐	☐	☐	☐	☐
Critical thinking	☐	☐	☐	☐	☐	☐
Cultural sensitivity	☐	☐	☐	☐	☐	☐
Governance and ethics sensitivity	☐	☐	☐	☐	☐	☐
Judgement	☐	☐	☐	☐	☐	☐
Leadership	☐	☐	☐	☐	☐	☐
Maturity	☐	☐	☐	☐	☐	☐
Problem identification and solving skills	☐	☐	☐	☐	☐	☐
Punctuality	☐	☐	☐	☐	☐	☐
Self-confidence	☐	☐	☐	☐	☐	☐
Self-discipline	☐	☐	☐	☐	☐	☐
Self-motivation	☐	☐	☐	☐	☐	☐
Work ethic	☐	☐	☐	☐	☐	☐

12 Please provide behavioural skills that you regard as important for entering trainee internal auditors to possess, but that are not included in the questions above

Appointment of entering trainee internal auditors (university graduates)

13 On average, how many entering trainee internal auditors are appointed by your organisation per year?*

- ○ None
- ○ 1 to 5
- ○ 6 to 10
- ○ 11 to 15
- ○ 16 to 20
- ○ More than 20

My organisation appoints entering trainee internal auditors

14 My organisation prefers qualified entering trainee internal auditors with a:*

Choose all that apply

- ☐ Diploma in Internal Auditing
- ☐ BTech in Internal Auditing
- ☐ B Com Internal Auditing
- ☐ B Com Honours Internal Auditing or Postgraduate Diploma (PGD) in Internal Auditing
- ☐ Master's degree
- ☐ MBA/MBL
- ☐ Other:

15 Where does your organisation source or recruit entering trainee internal auditors from?*

Choose all that apply

- ☐ Advertisements on my organisation's web site
- ☐ Personnel agencies
- ☐ Printed media
- ☐ Direct from universities
- ☐ Social media (e.g. Facebook, Linked-in, etc.)
- ☐ Other:

16 Are you aware of the IIA's Internal Auditor Competency Framework?*

- Yes
- No

17 Do you consult the IIA's Internal Auditor Competency Framework when mentoring internal audit trainees?*

Select a value from a range of 1, Never, to 5, Always:	1	2	3	4	5	
Never						Always

My organisation does not appoint entering trainee internal auditors

18 My organisation prefers not to appoint entering trainee internal auditors (university graduates) because:*

Choose all that apply

- University graduates are not work ready
- Technical knowledge and/or skills are inadequate
- Behavioural skills are inadequate
- It is too expensive to train university graduates on technical and behavioural skills deficiencies
- Company policy does not allow the appointment of university graduates
- Other:

Section C: Internal audit trainees' experience of work readiness preparation during university education

Experience and perceptions in respect of the adequacy and sufficiency of technical and behavioural skills content of formal internal audit educational programmes:

Technical skills

Technical skills in the context of this survey refer to those skills that entering trainee internal auditors should possess to perform entry level internal audit engagements. Please note that questions in this section are paired and should be answered as such, for example Question 1a) and 1b). In Question 1a), you are requested to indicate the level of capability that YOU ACTUALLY POSSESSED. The following question, Question 1b), requests that you indicate the level of capability that you WERE REQUIRED (or expected) to possess in respect of the particular skill directly after graduating from university in order to be more work ready as an entering internal audit trainee.

1a) Please indicate the level of capability that YOU ACTUALLY POSSESSED as entering trainee internal auditor in respect of the following accountancy-related skills:*

Accountancy-related skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Basic accounting skills (bookkeeping)	☐	☐	☐	☐	☐	☐
Company Annual Financial Statements (AFS)	☐	☐	☐	☐	☐	☐
Cost Accounting	☐	☐	☐	☐	☐	☐
IFRS Accounting Standards	☐	☐	☐	☐	☐	☐
Managerial Accounting and Finance (MAF)	☐	☐	☐	☐	☐	☐
Public Sector Accounting (GRAP)	☐	☐	☐	☐	☐	☐
Year-en adjustments	☐	☐	☐	☐	☐	☐

1b) Please indicate the level of capability that YOU WERE REQUIRED TO POSSESS as entering trainee internal auditor in respect of the following accountancy-related skills in order to be more work ready:*

Accountancy-related skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Basic accounting skills (bookkeeping)	☐	☐	☐	☐	☐	☐
Company Annual Financial Statements (AFS)	☐	☐	☐	☐	☐	☐
Cost Accounting	☐	☐	☐	☐	☐	☐
IFRS Accounting Standards	☐	☐	☐	☐	☐	☐
Managerial Accounting and Finance (MAF)	☐	☐	☐	☐	☐	☐
Public Sector Accounting (GRAP)	☐	☐	☐	☐	☐	☐
Year-en adjustments	☐	☐	☐	☐	☐	☐

2a) Please indicate the level of capability that YOU ACTUALLY POSSESSED as entering trainee internal auditor in respect of the following types of Auditing:*

Types of Auditing	Level of capability					
	0%	20%	40%	60%	80%	100%
Financial Auditing	☐	☐	☐	☐	☐	☐
Fraud/Forensic Auditing	☐	☐	☐	☐	☐	☐
Internal Auditing	☐	☐	☐	☐	☐	☐
IT/IS Auditing	☐	☐	☐	☐	☐	☐
Operational Auditing	☐	☐	☐	☐	☐	☐
Public Sector Auditing	☐	☐	☐	☐	☐	☐

2b) Please indicate the level of capability that YOU WERE REQUIRED TO POSSESS as entering trainee internal auditor in respect of the following types of Auditing:*

Types of Auditing	Level of capability					
	0%	20%	40%	60%	80%	100%
Financial Auditing	☐	☐	☐	☐	☐	☐
Fraud/Forensic Auditing	☐	☐	☐	☐	☐	☐
Internal Auditing	☐	☐	☐	☐	☐	☐
IT/IS Auditing	☐	☐	☐	☐	☐	☐
Operational Auditing	☐	☐	☐	☐	☐	☐
Public Sector Auditing	☐	☐	☐	☐	☐	☐

3a) Please indicate the level of capability that YOU ACTUALLY POSSESSED as entering trainee internal auditor in respect of the following risk-related skills:*

Risk-related skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Control frameworks (COSO, COBIT, etc.)	☐	☐	☐	☐	☐	☐
Enterprise Risk Management (ERM)	☐	☐	☐	☐	☐	☐
Internal Control Assessment	☐	☐	☐	☐	☐	☐
Risk Management	☐	☐	☐	☐	☐	☐

3b) Please indicate the level of capability that YOU WERE REQUIRED TO possess as entring internal audit trainee in respect of the following risk-related skills:*

Risk-related skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Control frameworks (COSO, COBIT, etc.)	☐	☐	☐	☐	☐	☐
Enterprise Risk Management (ERM)	☐	☐	☐	☐	☐	☐
Internal Control Assessment	☐	☐	☐	☐	☐	☐
Risk Management	☐	☐	☐	☐	☐	☐

4a) Please indicate the lowest level of knowledge that YOU ACTUALLY POSSESSED in respect of the following knowledge areas:*

Knowledge areas	Level of capability					
	0%	20%	40%	60%	80%	100%
Business management	☐	☐	☐	☐	☐	☐
Economics	☐	☐	☐	☐	☐	☐
Governance codes and legislation (e.g. King, SOX)	☐	☐	☐	☐	☐	☐
Internal audit standards and practice advisories	☐	☐	☐	☐	☐	☐
Information technology	☐	☐	☐	☐	☐	☐
Professional ethics	☐	☐	☐	☐	☐	☐
Project management	☐	☐	☐	☐	☐	☐
Public sector finance and administration	☐	☐	☐	☐	☐	☐
Strategic planning	☐	☐	☐	☐	☐	☐

4b) Please indicate the level of knowledge that you were REQUIRED to possess as entering trainee internal auditor in respect of the following knowledge areas:*

Knowledge areas	Level of capability					
	0%	20%	40%	60%	80%	100%
Business management	☐	☐	☐	☐	☐	☐
Economics	☐	☐	☐	☐	☐	☐
Governance codes and legislation (e.g. King, SOX)	☐	☐	☐	☐	☐	☐
Internal audit standards and practice advisories	☐	☐	☐	☐	☐	☐
Information technology	☐	☐	☐	☐	☐	☐
Professional ethics	☐	☐	☐	☐	☐	☐
Project management	☐	☐	☐	☐	☐	☐
Public sector finance and administration	☐	☐	☐	☐	☐	☐
Strategic planning	☐	☐	☐	☐	☐	☐

5a) Please indicate the lowest level of capability that you ACTUALLY POSSESSED as entering trainee internal auditor in respect of the following management skills:*

Management skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Human resource management	☐	☐	☐	☐	☐	☐
Managing internal audit engagements	☐	☐	☐	☐	☐	☐
Managing the internal audit activity	☐	☐	☐	☐	☐	☐

5b) Please indicate the lowest level of capability that you WERE REQUIRED TO POSSESS as entering trainee internal auditor in respect of the following management skills:*

Management skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Human resource management	☐	☐	☐	☐	☐	☐
Managing internal audit engagements	☐	☐	☐	☐	☐	☐
Managing the internal audit activity	☐	☐	☐	☐	☐	☐

6a) Please indicate the level of knowledge that that you ACTUALLY POSSESSED as entering trainee internal auditor in respect of the following legislation:*

Legislation	Level of capability					
	0%	20%	40%	60%	80%	100%
Constitution of the RSA	☐	☐	☐	☐	☐	☐
Companies Act	☐	☐	☐	☐	☐	☐
Municipal Finance Management Act (MFMA)	☐	☐	☐	☐	☐	☐
Public Finance Management Act (PFMA)	☐	☐	☐	☐	☐	☐

6b) Please indicate the lowest level of knowledge that you WERE REQUIRED to possess as entering trainee internal auditor in respect of the following legislation:*

Legislation	Level of capability					
	0%	20%	40%	60%	80%	100%
Constitution of the RSA	☐	☐	☐	☐	☐	☐
Companies Act	☐	☐	☐	☐	☐	☐
Municipal Finance Management Act (MFMA)	☐	☐	☐	☐	☐	☐
Public Finance Management Act (PFMA)	☐	☐	☐	☐	☐	☐

7a) Please indicate the level of capability that you ACTUALLY POSSESSED as entering trainee internal auditor in respect of the internal audit tools and techniques:*

Internal audit tools and techniques	Level of capability					
	0%	20%	40%	60%	80%	100%
CAATs (e.g. ACL, BarnOwl, IDEA)	☐	☐	☐	☐	☐	☐
Non-statistical sampling techniques	☐	☐	☐	☐	☐	☐
Statistical analysis techniques	☐	☐	☐	☐	☐	☐
Statistical sampling techniques	☐	☐	☐	☐	☐	☐

7b) Please indicate the level of capability that you were REQUIRED TO possess entering trainee internal auditor in respect of the internal audit tools and techniques:*

Internal audit tools and techniques	Level of capability					
	0%	20%	40%	60%	80%	100%
CAATs (e.g. ACL, BarnOwl, IDEA)	☐	☐	☐	☐	☐	☐
Non-statistical sampling techniques	☐	☐	☐	☐	☐	☐
Statistical analysis techniques	☐	☐	☐	☐	☐	☐
Statistical sampling techniques	☐	☐	☐	☐	☐	☐

8a) Please indicate the level of knowledge that you ACTUALLY POSSESSED as entering trainee internal auditor in respect of the following tax-related knowledge areas:*

Tax-related knowledge areas	Level of capability					
	0%	20%	40%	60%	80%	100 %
Companies Tax	☐	☐	☐	☐	☐	☐
Tax on individuals (PAYE)	☐	☐	☐	☐	☐	☐
Value Added Tax (VAT)	☐	☐	☐	☐	☐	☐

8b) Please indicate the level of knowledge that YOU WERE REQUIRED TO possess as entering trainee internal auditor in respect of the following tax-related knowledge areas:*

Tax-related knowledge areas	Level of capability					
	0%	20%	40%	60%	80%	100 %
Companies Tax	☐	☐	☐	☐	☐	☐
Tax on individuals (PAYE)	☐	☐	☐	☐	☐	☐
Value Added Tax (VAT)	☐	☐	☐	☐	☐	☐

9 Please provide technical skills that you regard as important for entering trainee internal auditors to possess, but that are not listed in the questions above.

Behavioural skills

Behavioural skills in the context of this survey refer to the non-technical 'soft skills' (including attitudes and characteristics) that internal auditors are expected to possess.

10a) Please indicate the level of capability that YOU ACTUALLY POSSESSED as entering trainee internal auditor in respect of the following interpersonal skills:*

Interpersonal skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Conflict management	☐	☐	☐	☐	☐	☐
Listening skills	☐	☐	☐	☐	☐	☐
Negotiation skills	☐	☐	☐	☐	☐	☐
Oral communication skills	☐	☐	☐	☐	☐	☐
Teamwork	☐	☐	☐	☐	☐	☐
Written communication skills	☐	☐	☐	☐	☐	☐

10b) Please indicate the level of capability that YOU WERE REQUIRED TO POSSESS as entering trainee internal auditor in respect of the following interpersonal skills:*

Interpersonal skills	Level of capability					
	0%	20%	40%	60%	80%	100%
Conflict management	☐	☐	☐	☐	☐	☐
Listening skills	☐	☐	☐	☐	☐	☐
Negotiation skills	☐	☐	☐	☐	☐	☐
Oral communication skills	☐	☐	☐	☐	☐	☐
Teamwork	☐	☐	☐	☐	☐	☐
Written communication skills	☐	☐	☐	☐	☐	☐

11a) Please indicate the level of capability that YOU ACTUALLY POSSESSED as entering trainee internal auditor in respect of the following characteristics:*

Characteristics	Level of capability					
	0%	20%	40%	60%	80%	100%
Adaptability	☐	☐	☐	☐	☐	☐
Critical thinking	☐	☐	☐	☐	☐	☐
Cultural sensitivity	☐	☐	☐	☐	☐	☐
Governance and ethics sensitivity	☐	☐	☐	☐	☐	☐
Judgement	☐	☐	☐	☐	☐	☐
Leadership	☐	☐	☐	☐	☐	☐
Maturity	☐	☐	☐	☐	☐	☐
Problem identification and solving skills	☐	☐	☐	☐	☐	☐
Punctuality	☐	☐	☐	☐	☐	☐
Self-confidence	☐	☐	☐	☐	☐	☐
Self-discipline	☐	☐	☐	☐	☐	☐
Self-motivation	☐	☐	☐	☐	☐	☐
Work ethic	☐	☐	☐	☐	☐	☐

11b) Please indicate the level of capability that YOU WERE REQUIRED to POSSESS as entering trainee internal auditor in respect of the following characteristics:*

Characteristics	Level of capability					
	0%	20%	40%	60%	80%	100%
Adaptability	☐	☐	☐	☐	☐	☐
Critical thinking	☐	☐	☐	☐	☐	☐
Cultural sensitivity	☐	☐	☐	☐	☐	☐
Governance and ethics sensitivity	☐	☐	☐	☐	☐	☐
Judgement	☐	☐	☐	☐	☐	☐
Leadership	☐	☐	☐	☐	☐	☐
Maturity	☐	☐	☐	☐	☐	☐
Problem identification and solving skills	☐	☐	☐	☐	☐	☐
Punctuality	☐	☐	☐	☐	☐	☐
Self-confidence	☐	☐	☐	☐	☐	☐
Self-discipline	☐	☐	☐	☐	☐	☐
Self-motivation	☐	☐	☐	☐	☐	☐
Work ethic	☐	☐	☐	☐	☐	☐

12 Please provide behavioural skills that you regard as important for entering trainee internal auditors to possess, but that are not included in the questions above