# Performance of newly-employed trainee accountants in Gauteng, South Africa versus the skills expectations of employers: How big is the gap?

**Authors:**

**Rolien Kunz and Herman de Jager**

University of Pretoria, South Africa

**Corresponding author:**

Rolien Kunz, Economic and Management Sciences Building, University of Pretoria, Private Bag X20, Hatfield 0028, South Africa. Email: rolien.kunz@up.ac.za

## Abstract:

The objective of this paper is to determine whether the professional skills demonstrated by newly-employed first-year trainee accountants (i.e. their performance) meet the expectations of audit managers and, if they do not, to determine the size of the expectation–performance gap. A questionnaire was used to determine the expectations and the perceptions of the actual capabilities of trainee accountants among South African audit managers at large audit firms in Gauteng. The findings revealed that newly-employed first-year trainee accountants did not meet audit managers' expectations, with their expectations always exceeding their perceptions of performance. The professional skill with the largest expectation–performance gap was the ability to take responsibility for one's own development (37.9%) and that with the smallest gap was the ability to display honesty and integrity (9.4%).

## Keywords:

Expectation–performance gap, graduates, professional skills, South Africa, trainee accountants, work-readiness

Accounting education has not met the expectations of accounting practitioners since the late 1800s (Jackling and Watty, 2010; Nelson, 1995), and accelerating changes in the working environment in which accounting professionals operate are fuelling ongoing reconsiderations of the competencies required to operate successfully in this dynamic workplace (Barac, 2009a; Howieson, 2003; Jackling and De Lange, 2009). As a perhaps unconscious reaction to the accelerating rate of workplace change, accounting practitioners increasingly expect accounting graduates to possess not only the technical knowledge needed to perform their work, but also a broader range of professional skills that will help them to be successful (Crawford, Helliar and Monk, 2011; Evans, Gbadamosi, Wells and Scott, 2012; Helliar, Monk and Stevenson, 2006; Kavanagh and Drennan, 2008, Papadopoulos, 2010).

This paper focuses on the ability of newly-employed first-year trainee accountants to demonstrate this broader range of professional skills effectively, with reference to the *Professional Skills Review* (PSR) of the South African Institute of Chartered Accountants (SAICA) and SAICA's competency framework, which should be competently demonstrated during training contracts (SAICA, 2015). For reporting purposes the individual professional skills examined were grouped according to the four categories used in the PSR: business ethics; personal attributes; management and leadership; and information technology (IT) (SAICA, 2015). The objective of this paper is to determine whether the professional skills demonstrated by newly-employed first-year trainee accountants ('performance') meet the expectations of the audit managers and, if they do not, to determine the relative[1] size of the expectation–performance gap. This is investigated from a South African perspective, based on the perceptions of audit managers in large audit firms in Gauteng.

[1] Because the expectation–performance gaps determined in the paper are based on audit managers' perceptions of the professional skills demonstrated by trainee accountants, the size of the expectation–performance gaps are thus not absolute or exact, but rather relative.

According to a study conducted in New Zealand (Bui and Porter, 2010), there is a gap between accounting graduates' actual capabilities to demonstrate professional skills and the level of capability their employers expect from them when entering employment. Bui and Porter (2010) propose a framework for the gap, referring to it as the expectation–performance gap, testing the proposed framework in an accounting programme offered by a New Zealand university (Bui and Porter, 2010).

Accounting practitioners' expectations regarding the professional skills accounting graduates should possess immediately after graduation and at the beginning of their traineeship have been investigated in many countries (Bui and Porter, 2010; Crawford et al., 2011; Hancock, Howieson, Kavanagh, Kent, Tempone and Segal, 2009; Jackling and De Lange, 2009; Kavanagh and Drennan, 2008; Tempone, Kavanagh, Segal, Hancock, Howieson and Kent, 2012; Uyar and Gungormus, 2011), and a consensus appears to have been reached on the professional skills practitioners expect their recently graduated employees to be able to demonstrate – including, *inter alia*, critical thinking, communication and problem solving (Jackling and Watty, 2010). Research has also been conducted to determine the ranking of professional skills according to their importance within the accounting profession (Awayiga, Onumah and Tsamenyi, 2010; Barac, 2009a, 2009b), as well as the degree to which graduates should be exposed to (and should be able to demonstrate competence in) these skills within the first six months of their training contracts (Barac, 2009a, 2009b). The importance of these skills to the accounting profession, as well as the degree of exposure graduates are expected to have received at university, is thus known, but the specific levels of capability and competence expected of graduates entering training contracts have not yet been quantitatively determined. The key question is therefore whether graduates should already be fully capable of demonstrating professional skills (with no guidance at all), or whether there is an expectation by audit managers that graduates will need guidance and/or supervision when first required to demonstrate these skills during their

traineeship.

As the level (degree) of capability the accounting profession expects of its newly-employed graduates is unknown, the size of the expectation–performance gap (as suggested by Bui and Porter (2010)), is also unknown. Although earlier research has indicated that graduates' actual capabilities in professional skills did not meet the expectations of practitioners at the beginning of their traineeship (Bui and Porter, 2010; Hancock et al., 2009; Kavanagh and Drennan, 2008; Matsouka and Mihail, 2016; Van Romburgh and Van der Merwe, 2015), the extent of the expectation–performance gap worldwide, and in South Africa in particular, has not yet been determined or quantified.

This study extends current knowledge by setting a benchmark for the expectation–performance gap as perceived by audit managers with regard to the professional skills demonstrated by newly-employed first-year trainee accountants.

## Literature review

### *Calls for reform in accounting education*

There have been numerous calls for reform in accounting education. As far back as 1978, the American Institute of Chartered Accountants identified that insufficient attention was being given to professional skills in accounting education (Crawford et al., 2011). Subsequently, numerous international professional accounting bodies (*inter alia* from the USA, the UK and Australia) have conducted their own research and added their voices to the debate. Albrecht and Sack carried out a study, reported on in 2000 (Bui and Porter, 2010; De Lange, Marx and Van der Watt, 2013; Paisey and Paisey, 2007), in which the need for the development of professional skills was highlighted. The need for graduates to have technical knowledge and an increased emphasis on the need for professional skills were further highlighted by various standard setting and accrediting bodies, including the Education Committee of the International Federation of Accountants (IFAC) in 2002, and the UK's Quality Assurance Agency for Higher Education in 2007 (Bui and Porter,

2010; IFAC, 2014a).

The emphasis on professional skills continues to be driven by rising expectations among accounting practitioners and their clients as to what professional accountants do and how they should contribute to society (Howieson, 2003; IFAC, 2014b; Jackling and De Lange, 2009; Yu, Churuk and Chang, 2013). In order to meet these expectations it is crucial for universities to 'equip students with more versatile skills to enable them to become premier business advisors as opposed to merely custodians of technical knowledge' (Byrne and Flood, 2003: 210). As a result, initiatives to address the calls for reform, as discussed below, were launched by professional bodies and academic institutions to equip students with the professional skills needed to augment their technical knowledge (Crawford et al., 2011).

### *Initiatives to address the calls for reform*

Higher education institutions in South Africa have formulated (and continue to formulate) policies dealing with the development of professional skills (Barac and Du Plessis, 2014), changing the content and presentation of courses and introducing new courses (Mason, Williams and Cranmer, 2009). New teaching methods and initiatives have also been introduced (Barac and Du Plessis, 2014; Mason et al., 2009; Viviers, 2016a), and most are characterized by a notable shift away from the traditional concept of 'teaching' to embrace the concept of the 'facilitation of learning' (De Lange et al., 2013).

Professional bodies, including accounting bodies, have also shifted from a knowledge-based accreditation process to one requiring new applicants to demonstrate certain competencies identified in their competency frameworks before being registered as members (Steenkamp, 2012; Strauss-Keevy, 2014). These competency frameworks contain detailed descriptions of the competencies an entry-level accounting professional should possess, and place much more emphasis on the professional skills component of the competencies (Barac, 2009a) than was evident in previous curricula and professional

accreditation requirements. New members should still have the necessary technical knowledge, but professional skills such as problem-solving, an understanding of the role and effective use of IT, and communication and interpersonal skills, have increased in importance (Steenkamp, 2012; Uyar and Gungomus, 2011).

SAICA issued its first competency framework in 2008 (Barac, 2009b; Strauss-Keevy, 2014). It was based on the framework developed by the Canadian Institute of Chartered Accountants, and was revised and updated in 2014 (SAICA, not dated). SAICA's competency framework details the competencies of a CA(SA) at point of entry into the profession, and includes professional skills which are divided into the three broad categories of ethical behaviour and professionalism, personal attributes, and professional skills (SAICA, 2016).

### *Previous research*

Recently there has been a spate of studies in different countries that attempt to identify the professional skills considered most important by accounting practitioners, and to formalize which professional skills should be incorporated into university programmes. The studies identify a wide range of professional skills. Studies conducted in Australia found that the professional skills accounting practitioners required newly-graduated employees to possess were in the broadly defined areas of: communication (Hancock et al., 2009; Jackling and De Lange, 2009; Kavanagh and Drennan, 2008; Tempone et al., 2012); teamwork (Hancock et al., 2009; Jackling and De Lange, 2009; Kavanagh and Drennan, 2008; Tempone et al., 2012); interpersonal skills (Hancock et al., 2009); self-management (Hancock et al., 2009; Jackling and De Lange, 2009; Tempone et al., 2012); initiative – the ability to work on one's own (Hancock et al., 2009; Tempone et al., 2012); problem solving (Hancock et al., 2009; Tempone et al., 2012); client relationships (Hancock et al., 2009); planning (Hancock et al., 2009; Tempone et al., 2012); and ethics (Kavanagh and Drennan, 2008).

The expectation that graduates should be competent in communication and teamwork was echoed by accounting practitioners in various studies conducted in New Zealand (Bui and Porter, 2010; Low, Samkin and Liu, 2013). In addition, the New Zealand studies identified the importance of IT (Bui and Porter, 2010) and analytical skills (Low et al., 2013) – and the Big 4 audit firms in New Zealand (the four largest firms handling the vast majority of audits) added research skills to the list (Bui and Porter, 2010). A study conducted in Scotland, England and Wales found that the most important professional skills that should be taught at university, and which graduates were expected to demonstrate, were analytical, presentation and written communication skills (Crawford et al., 2011). The need for analytical skills was also reported in a study conducted in Australia, with knowledge of legislation and creative thinking added to the skills list but with team collaboration emerging as least important (Chaplin, 2017). Adding a further dimension, a study conducted in Turkey indicated that firm size had a significant impact on the specific mix of professional skills accounting practitioners expected from their recently graduated employees (Uyar and Gungormus, 2011). According to the same study, the Big 4 audit firms in Turkey perceived interpersonal communication skills and teamwork to be significantly more important than did smaller firms. Research conducted in Ghana took the investigation one step further, ranking the professional skills and finding that analytical/critical thinking was considered most important, followed by IT, professional behaviour and communication (Awayiga et al., 2010). In addition, that study also ranked the specific IT skills accounting practitioners required of their recently graduated employees (Awayiga et al., 2010).

In South Africa, Barac (2009a, 2009b) investigated the specific professional skills required of graduates within the first six months of their training contracts in the broad areas of communication, analytical, interpersonal and IT skills. According to this study, none of those skills was identified as 'extremely important'. However, expectations regarding

accounting graduates' IT capabilities ranged from 'extensive' with respect to spreadsheet software, to 'above average' for standard Internet software, accounting software, word processing software and audit working paper related software (Barac, 2009b). Some of the professional skills regarded as 'very important' correlated with the findings of studies conducted elsewhere in the world, and included communication skills, time management and teamwork (Barac, 2009b). Another South African study reported that employers regarded the development of professional skills at higher education institutions as a crucial part of the preparation of students for the workplace, rating as very important all 12 professional skills included in the study, including time management, verbal and written communication and teamwork. In addition employers thought that ethical awareness was the most important pervasive skill to which graduates should be exposed before entering the workplace (Viviers, 2016b).

It has further been reported that many of the professional skills accounting practitioners expect graduates to demonstrate are not being developed sufficiently in university accounting programmes (Bui and Porter, 2010; Hancock et al., 2009; Kavanagh and Drennan, 2008; Tempone et al., 2012; Van Romburgh and Van der Merwe, 2015). This manifests as an expectation–performance gap: that is, the professional skills that accounting practitioners expect graduates to possess on arrival and the actual professional skills they see being demonstrated are significantly different (Bui and Porter, 2010).

According to accounting practitioners worldwide, the professional skills that graduates most significantly lack are effective communication skills (Awayiga et al., 2010; Hancock et al., 2009). Writing skills are also generally 'poor': in particular, graduates lack the ability to write well-structured and concise business reports or appropriately expressed letters and emails to clients (Bui and Porter, 2010). Problem-solving skills (Awayiga et al., 2010; Hancock et al., 2009) have also been found to be underdeveloped and, according to Bui and Porter (2010), graduates' knowledge of

business is lower than expected. In general, recent graduates are seen as being unprepared for the work environment and rarely have much business awareness or real life experience (Bui and Porter, 2010; Kavanagh and Drennan, 2008).

In South Africa, a pilot study was conducted to identify skills deficiencies in graduates entering their training contracts; respondents found that generally graduates were not adequately equipped with the necessary professional skills (Van Romburgh and Van der Merwe, 2015); the skills in which graduates were most often deficient were communication (specifically writing skills), IT literacy, problem solving, critical thinking and time management.

From the above review of recent research it is clear that the accounting practitioners' expectations regarding the professional skills of recent graduates have been widely investigated, and that the list of expected skills is now fairly well defined (Awayiga et al., 2010; Barac, 2009a, 2009b; Bui and Porter, 2010; Crawford et al., 2011; Hancock et al., 2009; Jackling and De Lange, 2009; Kavanagh and Drennan, 2008; Low et al., 2013; Tempone et al., 2012; Uyar and Gungormus, 2011). This paper takes the research further by investigating the level of ability that audit managers expect of newly-employed first-year trainee accountants when they demonstrate their professional skills.

It is also clear that there is a gap between what accounting practitioners expect from recent graduates regarding their proficiency in professional skills, and the professional skills these graduates actually demonstrate (Anis, 2017; Awayiga et al., 2010; Bui and Porter, 2010; Hancock et al., 2009; Kavanagh and Drennan, 2008; Tempone et al., 2012; Van Romburgh and Van der Merwe, 2015).

## Research question

This paper contributes to the literature by both confirming the continuing presence of an expectation–performance gap in trainee accountants *and* determining the relative size of

that gap. It addresses the following research question:

> Do newly-employed first-year trainee accountants demonstrate professional skills at the level expected of them by audit managers and, if they do not meet that expectation, what is the relative size of the expectation–performance gap?

As already noted, the study focuses on the viewpoints of audit managers at large audit firms in Gauteng, South Africa. Its findings may assist SAICA to improve its competency framework and (re-)evaluate the effectiveness of the teaching and assessment of professional skills at accredited universities. The findings may also be used by accredited universities and academics to prompt reflection on ways to improve the manner in which professional skills are presented and assessed in their syllabi. Lastly, the findings could assist training officers at audit firms and other approved training providers to develop and implement appropriate professional skills training opportunities for trainee accountants to narrow the gap.

## Methodology

### *Data collection*

A survey-based research design, using a questionnaire as data collection instrument, was adopted as the study aimed to collect information from audit managers working with trainee accountants on a daily basis, who were willing and able to share the information with the researcher (Hofstee, 2006). The questionnaire sought to identify audit managers' expectations and perceptions of the actual capabilities of newly-employed first-year trainee accountants with regard to professional skills.

The questionnaire examined 22 key professional skills, identified in SAICA's PSR, which should be competently demonstrated during accountants' training contracts. The

PSR is used by training offices to evaluate and assess trainee accountants' professional skills during their training (SAICA, 2015). Although based on SAICA's PSR, the 22 professional skills addressed in the questionnaire included those identified in previous studies dealing with the skills graduates are expected to possess immediately after graduation, and certainly within the first six months of their training contracts (Awayiga et al., 2010; Barac, 2009a, 2009b; Bui and Porter, 2010; Crawford et al., 2011; Hancock et al., 2009; Jackling and De Lange, 2009; Kavanagh and Drennan, 2008; Low et al., 2013; Tempone et al., 2012; Uyar and Gungormus, 2011). For reporting purposes the 22 skills examined were grouped according to the four categories used in the PSR: business ethics; personal attributes; management and leadership; and IT (SAICA, 2015).

In order to ensure content validity, the PSR was discussed with accounting practitioners responsible for accountants' training at large firms employing more than one hundred trainee accountants.

Part 1 of the questionnaire solicited demographic information. Part 2 sought to identify respondents' expectations of the trainee accountants with respect to their abilities to demonstrate professional skills. Part 3 addressed respondents' perceptions of the actual capabilities of the trainee accountants with respect to their professional skills. The Likert-scale response options to the questions in Part 3 were: 1 – 'not capable'; 2 – 'capable with frequent supervision/intervention'; 3 – 'capable with limited/periodic supervision/intervention'; 4 – 'capable without supervision/intervention'. This is also the rating scale used by training offices when assessing trainee accountants' competencies during their training contracts (SAICA, 2012). In addition, two open-ended questions were included in the questionnaire, allowing respondents to add professional skills not included. The first open-ended question allowed respondents to identify any additional individual professional skills they expected the trainee accountants to be able to demonstrate. The second asked the respondents to describe any additional professional

skills they felt the trainee accountants should have been taught while at university, or that they felt the trainees needed but did not yet possess.

### *Target population*

A limitation of the pilot study performed by Van Romburgh and Van der Merwe (2015) to identify skills shortages in first-year trainee accountants in South Africa was that the large audit firms did not participate to the extent expected by the researchers. In order to address this lack of participation by the large audit firms, the questionnaires for the present study were distributed to 103 audit managers at four of the five largest audit firms in Gauteng, considered the business hub of South Africa, by their respective training officers. Hard copy questionnaires were given to the training officers for distribution to audit managers who worked with trainee accountants on a regular basis. This was followed up by reminder emails to the officers, with the questionnaire attached. As the purpose of the study was to determine audit managers' expectations and perceptions of the actual capabilities of *newly-employed first-year trainee accountants*, the audit managers completed the questionnaires before the end of the first three months of the training contracts.

### *Data analysis*

The quantitative data were captured into an electronic spreadsheet and subsequently analysed using statistical analysis application software (SPSS). Mean scores were calculated for the expected and actual levels of capability for each of the four professional skills categories, as well as for each of the individual professional skills. Once the expected and actual levels of competence had been identified, the expectation–performance gap could be calculated for the four professional skills categories and the 22 individual skills. The numerical differences were converted to percentages, making the size of the gap more generally accessible.

A one sample t-test was conducted for each of the individual skills to determine

whether the difference in the means of the expected level of capability and the actual level of capability was statistically significant. This test, which compares the mean of a single column of numbers (the differences) against a mean of zero, is applicable for the current sample size (n = 38) – it can be used even for extremely small sample sizes (De Winter, 2013). For samples larger than 30, the t-test values become closer and closer; therefore, the approximate significance value provided in SPSS can be used. As no specific constructs were measured because the data relate to competencies and sample size is small, Cronbach's alpha as a measure of internal consistency does not apply and would provide biased estimators (Field, 2009).

The responses to the open-ended questions were analysed to identify whether any clear themes emerged. The essence of the responses to both open-ended questions was that audit managers felt that universities should deal with professional skills in a more practical way.

### *Demographic profile of respondents*

The demographic information from the 38 completed questionnaires is presented in Table 1. Although the response rate was only 36.89%, the data collected are representative of the views of the audit managers on more than one newly-employed first-year trainee accountant (Abayadeera and Watty, 2014) and the findings should be interpreted with this in mind.

**Table 1. Demographic details of respondents.**

| | **Male** | **Female** | **Total N = 38** |
|---|---|---|---|
| Gender | 47% | 53% | 100% |
| | | | |
| *Years of experience as audit manager:* | | | |
| Less than 1 year | 13% | 16% | 29% |
| 1–2 years | 16% | 13% | 29% |
| 3–4 years | 5% | 11% | 16% |
| More than 4 years | 13% | 13% | 26% |

## Empirical results and findings

### *Expectations in demonstrating professional skills*

The respondents' expectations of the capability of the trainee accountants with respect to demonstrating each of the identified professional skills during the first three months of their training contracts are presented in Table 2.

**Table 2. Audit managers' expectations of individual professional skill levels.**

| | SD | M | MI* |
|---|---|---|---|
| ***Business ethics.*** **Acts ethically and in accordance with rules of professional conduct.** | 0.62 | 3.65 | MS |
| Displays honesty and integrity | 0.39 | 3.82 | MS |
| Maintains objectivity and independence | 0.53 | 3.76 | MS |
| Adheres to the rules of professional conduct, including the SAICA Code of Professional Conduct | 0.56 | 3.71 | MS |
| Applies ethical principles to business activities | 0.56 | 3.70 | MS |
| Protects the confidentiality of information | 0.65 | 3.68 | MS |
| Avoids conflict of interest | 0.67 | 3.63 | MS |
| Maintains and enhances the profession's reputation | 0.68 | 3.55 | MS |
| Carries out work with due care (*only individual skill in this category with a lower expectation (MS vs LS*) | 0.70 | 3.34 | LS |
| ***Personal attributes.*** **Maintains awareness of new developments, exercises initiative, communicates effectively and strives constantly to add value.** | 0.74 | 2.88 | LS |
| Takes responsibility for own development | 0.83 | 3.27 | LS |
| Communicates effectively in verbal format | 0.60 | 3.11 | LS |
| Communicates effectively in written format | 0.68 | 2.89 | LS |
| Asks appropriate and probing questions to obtain required information | 0.75 | 2.59 | LS |
| Responds and adapts to change | 0.55 | 2.55 | LS |
| ***Management and leadership.*** **Demonstrates an ability to manage and lead.** | 0.86 | 2.82 | LS |
| Works effectively with colleagues and clients from diverse backgrounds and cultures | 0.71 | 3.39 | LS |
| Collaborates with colleagues and works effectively as a team member | 0.87 | 3.03 | LS |
| Respects deadlines, manages time and organizes tasks logically | 0.85 | 2.82 | LS |
| Keeps abreast of global and local economic events through reading and interpreting the financial and business press | 0.80 | 2.79 | LS |
| Applies project management principles such as meeting deadlines, etc. | 0.75 | 2.62 | LS |
| Resolves conflict and negotiates appropriate solutions (*only individual professional skill for which audit managers expect to provide frequent supervision*) | 0.68 | 2.25 | FS |
| ***Information technology.*** **Uses IT as a means of working more efficiently and effectively.** | 0.81 | 3.03 | LS |
| Applies procedures and controls to ensure integrity and security of personal IT resources (e.g. password protection, back-up procedures, antivirus measures, etc.) | 0.73 | 3.21 | LS |
| Effectively uses the Internet as a source of information | 0.69 | 3.13 | LS |
| Effectively uses IT applications, including spreadsheets, word processing, presentations and email | 0.91 | 2.74 | LS |

*Note:* SD = standard deviation; M = mean value; MI = mean interpretation. Mean interpretation: MS = capable with minimum/without supervision (mean $\geq$ 3.5); LS = capable with limited supervision (mean $\geq$ 2.5 but < 3.5); FS = capable with frequent supervision (mean $\geq$ 1.5 but < 2.5); NC = not capable (mean $\geq$ 0 but < 1.5). The mean interpretation is based on mathematical rounding principles (e.g. a mean of 3.5, if rounded to the nearest 1, will be rounded to 4 whilst a mean of 3.4 will be rounded to 3).

For reporting purposes the 22 individual skills examined in the questionnaire were grouped according to the four categories used in the PSR: business ethics; personal attributes; management and leadership; and IT (SAICA, 2015). The findings shed light on whether newly-employed first-year trainee accountants should already be fully capable of demonstrating professional skills, with no guidance at all. Based on the calculated mean scores, it is evident that audit managers expect the highest level of capability to be in the business ethics category, which corresponds to the findings of Viviers (2016b), who reported that employers perceived ethical awareness as the most important pervasive skill to which graduates should be exposed before entering the workplace. In addition, the audit managers expected the trainee accountants to be able to demonstrate seven of the eight individual professional skills included in the business ethics category with a minimum of or without supervision. The exception was the ability to 'carry out work with due care', for which audit managers had a lower expectation: they expected the trainees to demonstrate this skill 'with limited supervision', as indicated by the highlighted individual professional skill in Table 2.

The mean scores further indicate that audit managers expected newly-employed first-year trainee accountants to demonstrate the remainder of the professional skills 'with limited supervision'. This correlates with the findings of Viviers (2016b), who noted that, *inter alia*, time management, verbal and written communication and teamwork were regarded as very important by employers, but it contradicts the finding by Chaplin (2017) that teamwork was regarded as least important by employers. The only individual skill for which audit managers expected to provide frequent supervision was the ability to 'resolve conflict and negotiate appropriate solutions' in the management and leadership professional skills category, as indicated by the highlighted individual professional skill in Table 2.

### *Expectation–performance gap*

The mean scores of the expected capabilities as presented above were compared to the mean scores of the perceived actual capabilities for each of the competencies in order to determine whether an expectation–performance gap existed.

To determine whether the differences between the means of the expected and perceived levels of capability were statistically significant, each individual professional skill was tested separately. The differences in the means were considered statistically significant if $p < 0.05$ (Viviers et al., 2016). The results indicate that the differences for all 22 individual professional skills are statistically significant, and that in all instances the expected levels are higher than the perceived actual levels: the mean differences are all positive and range between 0.37 and 1.16.

The results for the professional skills are presented in Table 3, which shows that newly-employed first-year trainee accountants do not meet audit managers' expectations as the differences are all positive: expectations always exceeded performance perceptions. This confirms and strengthens the findings of previous studies that many, and in this case all, of the professional skills accounting practitioners expect graduates to demonstrate are not developed sufficiently in university accounting programmes (Bui and Porter, 2010; Hancock et al., 2009; Kavanagh and Drennan, 2008; Tempone et al., 2012; Van Romburgh and Van der Merwe, 2015).

The seven individual professional skills showing the largest expectation–performance gap (as indicated by the seven highlighted individual professional skills in Table 3), were:

- 'takes responsibility for own development' (37.9%),
- 'communicates effectively in written format' (36.3%) – confirming the findings of Bui and Porter (2010) and Van Romburgh and Van der Merwe (2015) that graduates lacked deficiency in communication, and specifically writing skills,

**Table 3. Expectation–performance gap and statistical significance of the expected and actual means per individual professional skill.**

| | Expected M | Actual M | MI* | M Diff | % Diff | Sig. (2-tailed) |
|---|---|---|---|---|---|---|
| ***Business ethics.*** **Acts ethically and in accordance with rules of professional conduct.** | 3.65 | 3.02 | MS vs LS | 0.63 | 17.3% | |
| Displays honesty and integrity | 3.82 | 3.46 | MS vs LS | 0.45 | 9.4% | $p = 0.003$ |
| Maintains objectivity and independence | 3.76 | 3.26 | MS vs LS | 0.92 | 13.3% | $p = 0.000$ |
| Adheres to the rules of professional conduct, including the SAICA Code of Professional Conduct | 3.71 | 3.08 | MS vs LS | 0.50 | 17% | $p = 0.000$ |
| Applies ethical principles to business activities | 3.70 | 3.03 | MS vs LS | 0.55 | 18.1% | $p = 0.001$ |
| Protects the confidentiality of information | 3.68 | 3.03 | MS vs LS | 0.66 | 17.7% | $p = 0.000$ |
| Avoids conflict of interest | 3.63 | 3.08 | MS vs LS | 0.76 | 15.2% | $p = 0.000$ |
| Maintains and enhances the profession's reputation | 3.55 | 2.79 | MS vs LS | 0.63 | 21.4% | $p = 0.000$ |
| Carries out work with due care | 3.34 | 2.42 | LS vs LS | 0.66 | 27.5% | $p = 0.000$ |
| ***Personal attributes.*** **Maintains awareness of new developments, exercises initiative, communicates effectively and strives constantly to add value.** | 2.88 | 1.97 | LS vs FS | 0.91 | 31.6% | |
| Takes responsibility for own development | 3.27 | 2.03 | LS vs FS | 0.47 | 37.9% | $p = 0.000$ |
| Communicates effectively in verbal format | 3.11 | 2.16 | LS vs FS | 0.79 | 30.6% | $p = 0.000$ |
| Communicates effectively in written format | 2.89 | 1.84 | LS vs FS | 1.05 | 36.3% | $p = 0.000$ |
| Asks appropriate and probing questions to obtain required information | 2.59 | 1.74 | LS vs FS | 0.95 | 32.8% | $p = 0.000$ |
| Responds and adapts to change | 2.55 | 2.08 | LS vs FS | 1.16 | 18.4% | $p = 0.000$ |
| ***Management and leadership.*** **Demonstrates an ability to manage and lead.** | 2.82 | 2.13 | LS vs FS | 0.69 | 24.5% | |
| Works effectively with colleagues and clients from diverse backgrounds and cultures | 3.39 | 2.82 | LS vs LS | 0.95 | 16.8% | $p = 0.000$ |
| Collaborates with colleagues and works effectively as a team member | 3.03 | 2.50 | LS vs LS | 0.61 | 17.5% | $p = 0.000$ |
| Respects deadlines, manages time and organizes tasks logically | 2.82 | 1.92 | LS vs FS | 0.89 | 31.9% | $p = 0.000$ |
| Keeps abreast of global and local economic events through reading and interpreting the financial and business press | 2.79 | 1.84 | LS vs FS | 0.58 | 34.1% | $p = 0.001$ |
| Applies project management principles such as meeting deadlines, etc. | 2.62 | 1.95 | LS vs FS | 0.53 | 25.6% | $p = 0.005$ |
| Resolves conflict and negotiates appropriate solutions | 2.25 | 1.76 | FS vs FS | 0.37 | 21.8% | $p = 0.017$ |
| ***Information technology.*** **Uses IT as a means of working more efficiently and effectively.** | 3.03 | 2.26 | LS vs FS | 0.77 | 25.4% | |
| Applies procedures and controls to ensure integrity and security of personal IT resources (e.g. password protection, back-up procedures, antivirus measures, etc.) | 3.21 | 2.68 | LS vs LS | 0.89 | 16.5% | $p = 0.000$ |
| Effectively uses the Internet as a source of information | 3.13 | 2.22 | LS vs FS | 0.97 | 29.1% | $p = 0.000$ |
| Effectively uses IT applications, including spreadsheets, word processing, presentations and email. | 2.74 | 1.89 | FS vs LS | 0.61 | 31.0% | $p = 0.000$ |

*Note:* M = mean value, which also contains the results of the one sample t-tests; MI = mean interpretation. Mean interpretation: MS = capable with minimum/without supervision (mean $\geq$ 3.5); LS = capable with limited supervision (mean $\geq$ 2.5 but < 3.5); FS = capable with frequent supervision (mean $\geq$ 1.5 but < 2.5); NC = not capable (mean $\geq$ 0 but < 1.5). The mean interpretation is based on mathematical rounding principles (e.g. a mean of 3.5, if rounded to the nearest 1, will be rounded to 4 whilst a mean of 3.4 will be rounded to 3).

- ‘ keeps abreast of global and local economic events through reading and interpreting the financial and business press’ (34.1%), which links to graduates’ knowledge of business being lower than expected (Bui and Porter, 2010; Kavanagh and Drennan, 2008),
- ‘asks appropriate and probing questions to obtain required information’ (32.8%),
- ‘ respects deadlines, manages time and organizes tasks logically’ (31.9%), confirming that time management is a professional skill in which graduates were most often deficient ( Van Romburgh and Van der Merwe, 2015),
- ‘effectively uses IT applications including spreadsheets, word processing, presentations and e-mail’ (31%), a tendency which was also reported by Van Romburgh and Van der Merwe (2015), and
- ‘communicates effectively in verbal format’ (30.6%), which correlates to findings by Awayiga et al. (2010) and Hancock et al. (2009) that the professional skills graduates most significantly lack are effective communication skills.

The three individual professional skills showing the smallest expectation–performance gaps were the ability to display honesty and integrity (9.4%), the ability to maintain objectivity and independence (13.3%) and the ability to avoid conflict of interest (15.2%).

### *Additional professional skills expected by audit managers*

Themes emerging from responses to the open-ended questions indicated that audit managers felt that newly-employed first-year trainee accountants needed more exposure to practical professional skills whilst at university. The inclusion of more practical professional skills in university courses was the essence of the responses to both open-ended questions. Audit managers expected the trainees to have well-developed skills in the use of spreadsheets and word processing software (such as Excel™, advanced Excel™

and MSWord™), and significantly better developed verbal and written communication skills than they were currently able to demonstrate. The fact that these aspects, which had already been addressed in the questionnaire, were added by audit managers as part of their responses to the open-ended questions, highlights the importance of these particular skills for recent graduates.

## Summary and conclusion

There has been increasing emphasis in accounting education over the past few years on the development of the professional skills of trainee accountants before they formally enter the profession. This paper builds on previous studies, investigating the most important professional skills required and identifying those that are most lacking by quantifying the relative size of the shortfalls between expectation and performance.

The findings indicate that audit managers have different expectations for various individual professional skills. They expect newly-employed first-year trainee accountants to demonstrate the highest level of capability in business ethics skills. To meet audit firms' expectations, therefore, academics at accredited universities should, on a continuous basis, incorporate and emphasize business ethics and ethical conduct as part of their syllabuses. For their part, training officers at audit firms should continue the development of the trainee accountants' business ethics skills by highlighting their firm's expectations that trainee accountants will act ethically and in accordance with the rules of professional conduct with 'no guidance at all' on a continuous basis.

Audit managers, furthermore, expect newly-employed first-year trainee accountants to be capable of demonstrating seven of the 22 individual professional skills with minimal supervision or without supervision, and 14 with limited supervision, recognizing that only one of the skills should require 'frequent supervision' – specifically, the capability to 'resolve conflict and negotiate appropriate solutions' within the management and leadership professional skills category.

These high expectations should be taken into account by academics at accredited institutions to ensure that students are not only equipped with the necessary technical knowledge during their studies but that the requisite attention is also given to the development of their professional skills.

The audit managers' quantified expectations were then compared to their similarly quantified perceptions of the trainees' actual abilities to demonstrate professional skills, which enabled the calculation of the relative size of the expectation–performance gap. The results showed clearly that the managers' expectations were not being met, with their expectations exceeding perceived performance in all instances and with material expectation–performance gaps for all of the 22 individual professional skills investigated. In order to narrow the identified expectation–performance gaps, therefore, academics at accredited universities might incorporate and assess professional skills on a continuous basis, thereby developing the student's actual ability to demonstrate them. In addition, they should alert students to the importance of professional skills and the ability to demonstrate them. Training officers at audit firms should highlight and explain their firm's expectations with regard to professional skills by providing detailed guidance for newly-employed first-year trainee accountants on a continuous basis. In addition, audit firms should incorporate professional skills development into their programmes for trainee accountants.

The three individual professional skills showing the largest expectation–performance gaps were the trainee accountants' ability to take responsibility for their own development (37.9% gap), their ability to deliver effective written communication (36.3%), and their ability to keep abreast of global and local economic events through reading and interpreting the financial and business press (34.1%). Academics could narrow these gaps by introducing initiatives that encourage students to take responsibility for their own development, such as inquiry-based and self-directed learning and the facilitation of learning instead of teaching. In addition, greater attention could be paid to the development of writing skills by

incorporating it in as many technical knowledge areas as possible, dealing with it as part of the development of technical knowledge and not in isolation as a support subject. Introducing a research component in courses could be beneficial in developing students' ability to read and interpret information. Projects, as part of the teaching of technical knowledge, could also be used to incentivize students to keep up to date with economic developments.

At the other end of the spectrum, the three individual professional skills showing the smallest expectation–performance gaps were the ability to display honesty and integrity (9.4% gap), the ability to maintain objectivity and independence (13.3%) and the ability to avoid conflict of interest (15.2%).

A limitation of the study is that data were collected from audit managers at large audit firms in Gauteng only. The findings cannot therefore be generalized, as it must be acknowledged that managers' expectations at small and medium-sized firms, and even in large firms in other provinces, might differ from the data collected for this study (as reported by Uyar and Gungormus, 2011).

Areas for future research therefore include the expansion of the study to include large firms in other provinces and small and medium-sized audit firms and commercially focused training offices to determine whether there are differences with regard to the expectations and the extent of the expectation–performance gap based on the size and type of training offices and/or their locations. Once a holistic view of the professional skills expectation–performance gap of newly-employed first-year trainee accountants has been obtained, the shared responsibility of universities and training offices in the delivery of entry-level chartered accountants can be revisited to determine who holds responsibility for the various aspects of professional skills development (Keevy and Mare, 2018). Another avennue for future research would be to examine possible methods of equipping students with the required professional skills and ways in which the development of those skills could be

assessed.

## References


Anis A (2017) Auditors' and accounting educators' perceptions of accounting education gaps and audit quality in Egypt. *Journal of Accounting in Emerging Economies* 7(3): 337-351.

Abayadeera N and Watty K (2014) The expectation–performance gap in generic skills in accounting graduates: Evidence from Sri Lanka. *Asian Review of Accounting* 22: 56-72.

Awayiga JY, Onumah JM, and Tsamenyi M (2010) Knowledge and skills development of accounting graduates: the perceptions of graduates and employers in Ghana. *Accounting Education* 19(1-2): 139-158.

Barac K (2009a) South African training officers' perceptions of the knowledge and skills requirements of entry-level trainee accountants. *Meditari Accountancy Research* 17(2): 19-46.

Barac K (2009b) South African training officers' perceptions of skills requirements of entry-level trainee accountants. *South African Business Review* 13(1): 61-86.

Barac K and Du Plessis L (2014) Teaching pervasive skills to South African accounting students. *South African Business Review* 18(1): 53-79.

Bui B and Porter B (2010) The expectation–performance gap in accounting education: an exploratory study. *Accounting Education: An International Journal* 19(1-2): 23-50.

Byrne M and Flood B (2003) Defining the present and shaping the future: the changing nature of accounting education in Ireland. *Journal of Accounting Education* 21: 197-213.

Chaplin S (2017) Accounting education and the prerequisite skills of accounting graduates: are accounting firms' moving the boundaries? *Australian Accounting Review* 27(1): 61-70.

Crawford L, Helliar C and Monk EA (2011) Generic skills in audit education. *Accounting Education: An International Journal* 20(2): 115-131.

De Lange R, Marx B and Van der Watt A (2013) Sustainability in education: an evaluation of a new teaching and learning strategy in chartered accountancy studies – a student perspective. *Journal of Economic and Financial Sciences:* 6(2), 285-308.

De Winter JCF (2013) Using the Student's t-test with extremely small sample sizes.

*Practical Assessment, Research and Evaluation:* 18(10), 1-12.

Evans C, Gbadamosi G, Wells J and Scott I (2012) Balancing the Yin and Yang: the role of universities in developing softer skills in accountancy. *Industry & Higher Education:* 26(1), 63-70.

Field A (2009) *Discovering statistics using SPSS.* London: SAGE.

Hancock P, Howieson B, Kavanagh M, Kent J, Tempone I and Segal N (2009) Accounting for the future: more than numbers. Whole report.

Helliar CV, Monk EA, and Stevenson LA (2006) The skill-set of trainee auditors. Paper presented: *National Auditing Conference, University of Manchester*, March 2006.

Hofstee E (2006) *Constructing a good dissertation: a practical guide to finishing a Master's, MBA or PhD on schedule.* South Africa: EPE.

Howieson B (2003) Accounting practice in the new millennium: is accounting education ready to meet the challenge. *The British Accounting Review*: 35, 69-103.

International Federation of Accountants (IFAC) (2014a) Framework for International Education Standards for Professional Accountants (Frame). New York. IFAC.

International Federation of Accountants (IFAC) (2014b) International Education Standard (IES) 3 Initial Professional Development – Professional Skills (Revised). New York. IFAC.

Jackling B and De Lange P (2009) Do accounting graduates' skills meet the expectations of employers? A matter of convergence or divergence. *Accounting Education: An International Journal:* 18(4-5), 369-385.

Jackling B and Watty K (2010) Generic skills. *Accounting Education:* 19(1-2), 1-3.

Kavanagh MH and Drennan L (2008) What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting and Finance*: 48, 279-300.

Keevy M and Mare DJ (2018) Pervasive skills development for aspirant chartered accountants: Academic versus training programmes. *Journal of Economic and Financial Sciences*: 11(1), a155.

Low M, Samkin G and Liu C (2013) Accounting education and the provision of soft skills: implications of the recent NZICA CA academic requirement changes. *E-Journal of Business Education and Scholarship of Teaching:* 7(1), 1-33.

Mason G Williams G and Cranmer S (2009) Employability skills initiatives in higher education: what effects do they have on graduate labour market outcomes?. *Education Economics:* 17(1), 1-30.

Matsouka K and Mihail DM (2016) Graduates' employability: What do graduates and employers think. *Industry & Higher Education:* 30(5), 321-326.

Nelson IT (1995) What's new about accounting education? An historical perspective on the change movement. *Accounting Horizons*: 9(4), 62-75.

Paisey C and Paisey NJ (2007) Balancing the vocational and academic dimensions of accounting education: the case for a core curriculum. *Journal of Vocational Education and Training:* 59(1), 89-105.

Papadopoulos T (2010) Beyond discipline and technical knowledge: industry perspectives on the business curriculum. *Industry and Higher Education*: 24(2), 109-114.

South African Institute of Chartered Accountants (SAICA) (Not dated) Examinations Information what will be examined. [Online] Available from: https://www.saica.co.za/LearnersStudents/Examinations/Informationonwhatwillbeexamined/CompetencyFramework/tabid/780/language/en-ZA/Default.aspx [Accessed 19/04/2016].

South African Institute of Chartered Accountants (SAICA) (2012) The rating scale used to assess technical competencies and professional skills. [Online] Available from: https://www.saica.co.za/Training/Training/AssessmentofTrainees/tabid/420/language/en-ZA/Default.aspx [Accessed 27/11/2015]

South African Institute of Chartered Accountants (SAICA) (2015) The professional skills review. [Online] Available from: https://www.saica.co.za/Training/Training/AssessmentofTrainees/tabid/420/language/en-ZA/Default.aspx [Accessed 27/11/2015].

South African Institute of Chartered Accountants (SAICA) (2016) Competency Framework Detailed Guidance for Academic Programme. Kengray, Johannesburg, South Africa. [Online] Available from: https://www.saica.co.za/LearnersStudents/Examinations/Informationonwhatwillbeexamined/CompetencyFramework/tabid/780/language/en-ZA/Default.aspx[Accessed 07/10/2018].

Steenkamp G (2012) Student perceptions regarding the new training programme for chartered accountants. *Journal of Economic and Financial Sciences*: 5(2), 485-502.

Strauss-Keevy M (2014) Education programmes' responsibilities regarding pervasive skills. *Journal of Economic and Financial Sciences*: 7(2), 415-432.

Tempone I, Kavanagh M, Segal N, Hancock P, Howieson B and Kent J (2012) Desirable generic attributes for accounting graduates into the twenty-first century. *Accounting Research Journal*: 25(1), 41-55.

Uyar A and Gungormus AH (2011) Professional knowledge and skills required for accounting majors who intend to become auditors: perceptions of external auditors. *Business and Economics Research Journal*: 2(3), 33-49.

Van Romburgh H and Van der Merwe N (2015) A pilot study to identify skills shortages that exist in first-year trainee accountants in South Africa. *Industry and Higher Education*: 29(2), 141-149.

Viviers HA (2016a) Qualitative evaluation of the design variables of a teaching intervention to expose accounting students to pervasive skills. *Industry and Higher Education*: 30(6), 402-414.

Viviers HA (2016b) Taking stock of South African accounting students' pervasive skills development: are we making progress? *South African Journal of Higher Education*: 30(2), 242-263.

Viviers HA, Fouché JP and Reitsma GM (2016) Developing soft skills (also known as pervasive skills): Usefulness of an educational game. *Meditari Accountancy Research*: 24(3), 368-389.

Yu S, Churuk N and Chang A (2013) Are students ready for their future accounting careers? Insights from observed perception gaps among employers, interns, and alumni. *Global Perspectives on Accounting Education:* 10, 1-15.