

**THE USE OF CASE STUDIES FOR PERVASIVE SKILLS TRAINING IN ODL
ACCOUNTING EDUCATION**

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**THE USE OF CASE STUDIES FOR PERVASIVE SKILLS TRAINING IN ODL
ACCOUNTING EDUCATION**

by

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THE USE OF CASE STUDIES FOR PERVASIVE SKILLS TRAINING IN ODL ACCOUNTING EDUCATION

I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

YReyneke

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June 2016

DATE

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ABSTRACT

Studies relating to recent curriculum changes implemented by SAICA and CIMA with an increased focus on pervasive skills are limited. The problem addressed in this study related to the challenge faced by ODL accounting education institutions to deliver practice-ready accounting graduates.

This study explored accounting educators' and students' perception of whether pervasive skills can be developed effectively through the use of case studies in an ODL environment. The study aimed to determine whether ODL accounting departments should introduce a dedicated case study-based module as part of their curriculum. The perceived level at which case studies should be introduced, challenges and the benefits of case studies in light of their pervasive skills development potential were considered in an ODL environment.

The study revealed that the case study-based approach is effective and that a staggered approach to introducing case studies in existing accounting-related modules tailored for different difficulty levels, would be appropriate.

Key words

Accounting education

Case studies

Case study-based examination

Case study-based module

CIMA

Distance education

Management accounting

ODL

ODL accounting education

Pervasive skills

Professional accounting qualification

SAICA

ABBREVIATIONS AND ACRONYMS

AAA	-	American Accounting Association
ACCA	-	Association of Chartered Certified Accountants
ACMA	-	Associate Chartered Management Accountant
AICPA	-	American Institute of Certified Public Accountants
ANOVA	-	analysis of variance
APC	-	Assessment of Professional Competence
CA	-	Chartered accountant
CA ANZ	-	Chartered Accountants Australia and New Zealand
CA(SA)	-	A chartered accountant (South Africa) registered with SAICA
CAS	-	College of Accounting Sciences
CAS1501	-	Perspectives on Accountancy
CCF	-	Core competency framework
CGMA	-	Chartered Global Management Accountant
CICA	-	Canadian Institute of Chartered Accountants
CIMA	-	Chartered Institute of Management Accountants
CMA	-	Chartered management accountant
COD	-	Chair of department
CPA	-	Certified public accountant
CPA Canada	-	Chartered Professional Accountants of Canada
CPD	-	Continuing professional development
CTA	-	Certificate of Theory in Accounting
EFA	-	exploratory factor analysis
ERP	-	Enterprise resource planning
HEI	-	higher education institution
IAESB	-	International Accounting Education Standards Board
ICAA	-	Institute of Chartered Accountants in Australia
ICAEW	-	Institute of Chartered Accountants in England and Wales
IES	-	International Education Standard
IFAC	-	International Federation of Accountants
IRBA	-	Independent Regulatory Board for Auditors
IRC	-	Integrated Reporting Committee

ABBREVIATIONS AND ACRONYMS (continued)

IT	-	Information technology
JSE	-	Johannesburg Stock Exchange
King III	-	King Code of Governance of 2009
MAC3701	-	Application of Management Accounting Techniques
NQF	-	National Qualifications Framework
NZICA	-	New Zealand Institute of Chartered Accountants
ODL	-	Open distance learning
p-value	-	probability value
SAAA	-	Southern African Accounting Association
SAICA	-	South African Institute of Chartered Accountants
SAS JMP	-	Statistical Analysis System Jump
SDL	-	self-directed learning
SEC	-	Securities and Exchange Commission
SPSS	-	Statistical Package for the Social Science
TOPCIMA	-	Test of Professional Competence in Management Accounting
UFE	-	Uniform Evaluation
UJ	-	University of Johannesburg
UK	-	the United Kingdom
Unisa	-	University of South Africa
URL	-	Uniform reference locator
USA	-	United States of America

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND INFORMATION ON THE STUDY

This chapter provides the contextual background to this study by framing the problem on which the study was based and justifying the rationale for conducting the research.

The fast-changing environment, globalisation, new legislation, rapid improvements in information technology (IT) and the economic meltdown, have changed the accounting workplace. As a result of these changes, employers are now looking for graduates with a diverse set of skills and attributes. Students studying towards a professional accounting qualification have to develop a wide range of skills to cope with the changing work environment (Albrecht & Sack 2000:2-3; De Lange, Jackling & Gut 2006:365; Gammie, Gammie & Cargill 2002:64; Hassall & Milne 2004:135; Howieson 2003:79-80; Wessels 2008:147). In recent years, accountants' competencies have been disputed in the light of severe changes in the business environment (Barac 2009:20). In these volatile circumstances, one would expect accounting education to equip accounting graduates with the necessary skills and technical knowledge required by the demanding accounting profession and employers.

Accounting education has been the subject of much debate (Mohamed & Lashine 2003:3). There are a number of serious issues that are causing concern for accounting education, which could be compromised if these issues are not addressed and properly resolved (Albrecht & Sack 2000:1; Cheng 2007:582; Humphrey 2005:347; Wilton 2008:143). The issues, according to Albrecht and Sack (2000:1), include deteriorating quality and a decline in the number of accounting students, as well as a perception by students that accounting degrees are not as valuable as in the past. Another issue mentioned by Albrecht and Sack (2000:1) is that accounting leaders and practising accountants perceive accounting education as

“outdated, broken, and [it] needs to be modified significantly”. These issues call for innovative changes in accounting education. University education should enable accounting graduates to perform to a satisfactory standard and enable them to handle challenging situations that they might encounter during their professional accounting career (Gonzalo & Garvey 2005:431).

In order to cope with the demands of employers and professional bodies, accounting graduates require technical and a range of other skills (Arquero Montaña, Cardoso & Joyce 2004:191; De Lange et al 2006:366; Gammie et al 2002:64; Palmer, Ziegenfuss & Pinsker 2004:895). For ease of reference, when referring to the non-technical skills perceived to be required by accounting graduates, the term “pervasive skills” will be used throughout this study. This study focused on accounting students studying towards obtaining a professional accounting or management accounting qualification in South Africa. The South African Institute of Chartered Accountants (SAICA) is a leading professional body of accountants in this country and the Institute refers in its competency framework to skills required by a chartered accountant (CA [SA]), as pervasive skills (SAICA 2010a). In this study, chartered accountants were referred to as CAs. SAICA defines pervasive skills as those that include, communication, interpersonal and problem-solving skills. This will be elaborated on in section 2.3. For the purposes of this study, pervasive skills included other definitions of these skills such as vocational skills (Arquero Montaña, Anes, Hassall & Joyce 2001), higher-order skills (Wilton 2008; CIMA 2012), soft skills (Barac 2009; De Villiers 2010), professional skills (Van der Merwe 2013), generic skills (Barrie 2004:262; Hancock, Howieson, Kavanagh, Kent, Tempone & Segal 2009:14) and meta-skills (Gammie et al 2002).

In an effort to improve the pervasive skills of accounting graduates, the increasing use of case studies has been evident in accounting education in the past few years. It has been suggested that solving problems and exercising judgement in case studies enhances the development of communication, intellectual and interpersonal skills (Cheng 2007:582; Weil, Oyelere & Rainsbury 2004:139). Stainbank (2010:82) has also noted that case studies are a valuable tool for developing certain pervasive skills in students, for instance, “analytical”, “critical thinking” and “judgement skills”.

Since professional accounting bodies and accounting practice worldwide are now requiring more enhanced pervasive skills from accounting graduates, the use of case studies in the assessment of accounting students has increased. This has also led to an increase in the use of case studies in the learning material developed by educators (Weil, Oyelere, Yeoh & Firer 2001:123).

The Chartered Institute of Management Accountants (CIMA), a professional international management accounting body, used to ensure that students would develop both their technical ability and their professional capacity by means of a final case study-based examination (Roos 2009:50). Eligible members of CIMA can earn the associate chartered management accountant (ACMA) and chartered global management accountant (CGMA) designation when they successfully complete their CIMA studies as well as the required practical work experience. The current CIMA syllabus is divided into three progressive levels, namely the operational, management and strategic levels (CIMA 2016). The pre-2015 case study-based examination assessed the students' ability to demonstrate higher-level skills, for instance, synthesis, analysis and evaluation, and skills in effectively presenting and communicating information to users in a unique presentation that promotes professionalism (CIMA 2012). Students wishing to register as members of CIMA needed to pass this final test of competence, case study-based examination in addition to acquiring relevant practical work experience. This examination is referred to as the Test of Professional Competence in Management Accounting (TOPCIMA). CIMA introduced a new syllabus in January 2015 in order to bridge the skills gap of newly qualified finance professionals and to make their students more employable (CIMA 2016). CIMA also changed its assessment methods from January 2015, whereby it now incorporates case study assessments into all of its subjects, one on every level, that is, the Operational Case Study Examination, the Management Case Study Examination and the Strategic Case Study Examination (CIMA 2014c). There is thus a shift towards an increased focus on pervasive skills such as business acumen, and peoples and leadership skills (CIMA 2014a). The case study examinations reflect real-life work situations, which makes it possible to test a wider range of knowledge and skills and thus contribute to CIMA's wider goal of enhancing the "employability" of its students (CIMA 2016).

In 2012, SAICA published its intention to also implement a final case study-based examination for trainee accountants eligible to become qualified CAs (SAICA 2013a). This Assessment of Professional Competence (APC) Examination was introduced in November 2014 (Oliver 2012). The reason for changing the examination process to a multidisciplinary case study was to ensure that the CA(SA) qualification remains relevant and keeps up with evolving business needs and international trends (SAICA 2013a). This new format of the examination allows SAICA to increase the assessment of pervasive skills (Oliver 2012).

Accounting education should maintain a healthy balance between knowledge and skills to ensure that competent graduates are developed who are ready for the demanding needs of the accounting profession (Barac 2009:20; De Lange et al 2006:366). As early as the 1990s, Hassall, Lewis and Broadbent (1998:326) discussed the urgent need to alter the current accounting education methods and approaches. They highlighted the fact that graduates are increasingly expected to demonstrate pervasive skills, while at the same time being knowledgeable about an expanded technical workload. The balance between skills development and knowledge was thus emphasised. Rebele (2002:24) also suggested that the accounting profession is putting pressure on higher education to develop generic pervasive skills. Humphrey (2005:346-349) drew a similar conclusion, noting that under- and postgraduate curricula and their relationship with professional accounting bodies should be revised. A question that needs to be addressed is whether tertiary institutions do enough to ensure that the accounting graduates develop the necessary pervasive skills to prepare them for the case study-based examination and thus the awaiting workplace (Fouché 2013:138; Van der Merwe 2013:1137). Accounting educators have identified the need for competency development and they have an obligation to react to changes facing the accounting profession (Els 2007:392). The use of case studies is therefore one of the techniques recommended to improve and enhance various competencies (Boyce, Williams, Kelly & Yee 2001:38; Gobeil & Phillips 2001:205; Weil et al 2004:140).

Worldwide, tertiary institutions have to focus more on the enhancement of pervasive skills because of the indirect pressure placed on them by the relevant professional accounting bodies (Van der Merwe 2013:1137; Velayutham 2008:29). Because accounting educators now also have to stimulate awareness of the social context of accounting, in addition to providing the normal technical competency training (Cullen, Richardson & O'Brian 2004:251), it seems that teaching with the use of the case study method is regarded as a possible solution to many perceived weaknesses in accounting education. This study considered, inter alia, whether open distance learning (ODL) institutions should incorporate changes into their current accountancy curricula, perhaps by introducing a dedicated case study-based module, to meet the needs of different stakeholders. Refer to section 2.9 for a further explanation of ODL and distance education.

1.2 LITERATURE REVIEW

A need has been identified for increased competency development of accounting graduates. This view is supported by various South African and international authors (Barac 2009:19; Bolt-Lee & Foster 2003:33; De Villiers 2010:1-22; Fouché 2013:137; Kavanagh & Drennan 2008:279; Mohamed & Lashine 2003:3; Shuttleworth 2012:244; Wessels & Steenkamp 2009:120). The literature review in this study first considered accounting graduates' current knowledge and pervasive skills as required by training officers and employers throughout the world. It then explored the introduction of case studies in accounting education from the students' viewpoint, and a discussion of the views of accounting educators concluded the literature review.

1.2.1 Training officers' and employers' views on skills development

Using a structured web-based questionnaire, Barac's (2009:19) study determined training officers' perceptions of knowledge and skills requirements for South African trainee accountants. Responses were received from 143 training officers. It was found that there is a need for the development of trainees' communication, analytical, interpersonal and computer skills. A shift has been identified towards the

development of competencies that exceed technical knowledge currently taught at universities.

In a study to clarify whether employers' expectations, specifically accounting practitioners' expectations, for accounting training are being met, Koornhof and Lubbe (2002:10) interviewed South African trainee accountants and training officers. It was found that the expectations were mostly met with regard to the technical and theoretical knowledge of students, but the pervasive skills of students were found to be lacking. This was identified as an area that could be improved by universities. Participating trainee accountants in their study suggested that universities should assist students to improve their writing, communication and people skills (Koornhof & Lubbe 2002:10-14).

A study performed by Bui and Porter (2010:23-25, 34) in New Zealand investigated how accounting education fails to equip accounting graduates with the necessary knowledge, skills and personal attributes that employers and the accounting profession require. Employers from small, medium and large accounting firms were interviewed to determine what the desired competencies were that they expect to find in accounting graduates. All of the employers who were interviewed stated that communication and writing skills are important. One partner of an accounting firm even stated that universities do not teach these skills to their students. Computing skills were also identified as a skill not currently taught by universities. However, based on empirical research conducted, using a discussion forum, interviews and questionnaires to students and employers, Gammie et al (2002:65) concluded that universities should not be considered as substitute employment and training organisations. They acknowledged that accounting graduates will not obtain all the skills required by the profession during their university education.

1.2.2 Students' perceptions of case studies to enhance skills development

According to Ballantine and McCourt Larres (2004:172), case studies not only develop accounting students' technical skills, but also allow for the acquisition of pervasive skills. They supported this statement with the following example: In cash-flow reporting, technical knowledge is gained, for instance, when calculating the

difference between accrual accounting and cash accounting when producing a cash flow report, while communication skills are developed when a student is expected to present the information (Ballantine & McCourt Larres 2004:172). They expound that in a cash-flow reporting case study scenario, wider business complexities should be considered and in doing so, students enhance other pervasive skills such as judgement, problem solving and critical analysis. The undergraduate management accounting students in their study were exposed to case study-based teaching and they reported that benefits were experienced as a result, for example, the awareness of more than one answer to questions and insight into complex real-world business decisions (Ballantine & McCourt Larres 2004:187).

Other studies also conducted among undergraduate students across the world have confirmed that students perceived their pervasive skills to have been enriched through case study-based teaching and by exposure to case studies as part of their learning experience (Arquero Montaña et al 2004:193, 194; Bamber & Bamber 2006:267-290; Bui & Porter 2010:42; Cullen et al 2004:257; Doran, Healy, McCutcheon & O'Callaghan 2011:259; Lane & Shellard 2009:34-43; McGuigan, Weil, Kern & Hu 2012:177; Stainbank 2010:79-80; Van der Merwe 2013:1142; Wells, Gerbic, Kranenburg & Bygrave 2009:414-416).

Postgraduate students in the studies of Ahmad and Sulaiman (2013:173), Weil et al (2001:123) and Weil et al (2004:140) found case studies to be a valuable tool for pervasive skills development. They explained, for example, that case studies helped them to realise there is often more than one solution to a problem, exposed them to real-life complexity in the form of decision making and helped them to realise that situations can be evaluated from multiple perspectives.

These studies were all conducted at residential institutions. It is therefore also necessary to explore the perceptions of students at an ODL institution on the use of case studies when teaching accounting students.

1.2.3 Educators' views on case studies in teaching

In a study by Stonham (1995:230), it was strongly suggested that some educators

conveniently make use of case studies in the management education field because of the fact that there are usually teaching notes available for case studies, and “they are a godsend for laziness” rather than being used for the perceived benefits that students can enjoy. Another shortcoming of the case study method also mentioned by Stonham (1995:230) is that it tends to focus on static past situations. Many cases, according to Ellet (2007:14), have descriptive information in the case study that “serves as noise to distract the reader and make a case confusing”.

Healy and McCutcheon (2010:565) conducted a study to assess the experience that accounting educators have in teaching case studies. The study also determined the scope and method of teaching with the use of case studies. It was found that the perception of student roles, the attitudes of educators and the benefits to be realised from case-based teaching influence the approach to the case study method. Healy and McCutcheon (2010:565) commented further that the use of case studies is an “enriching teaching experience” for both the educators and the students. It improves the educators’ and students’ learning and promotes personal change. They also suggested that further research in different institutional contexts would provide additional insights.

In a comprehensive literature review, Parkinson (2008:5) presented an examination of different features of case studies, for instance, real versus fictional, long versus short, complete versus incomplete, complex versus straightforward, decision focus, educational purpose and method of analysis. He came to the conclusion that there is a place for case studies in accounting education, but that the educator should consider factors such as learning objectives and contextual factors. They should also ensure that the type of case selected fits the specific group of students.

Tuition courses for CIMA students are scarce in Southern Africa in comparison with the courses offered in the United Kingdom (UK) (Roos 2009:60). Questionnaires were distributed to students registered to write examinations with CIMA in Southern Africa at the May 2006 examination sitting. In examining factors affecting South African students’ success in CIMA examinations, Roos (2009) found that tuition was a significant variable affecting students’ success. Students who attended part-time

classes were more likely to pass the examinations. Although this is to be expected, it clearly demonstrates the need for accounting tuition to address the competencies required by CIMA. The SAICA Qualifying Examinations' pass rates for accounting students who studied at ODL institutions are usually lower than the pass rates at residential universities where students attend classes (SAICA 2016:6; SAICA 2015:6). In a study conducted by Berry, Leonard, Lötter, Shuttleworth and Viviers (2011), attention was drawn to numerous limitations experienced by students in an ODL system. This indicates that there are unique challenges that distance education institutions face and it would be interesting to determine how an ODL institution should develop case study-based modules to further develop their students' competencies.

1.3 PROBLEM STATEMENT

As discussed earlier, CIMA already uses a final case study-based examination to assess the competency and skills of its students. SAICA also introduced final case study-based examinations in November 2014 to assess its eligible members. Accounting educators at tertiary institutions therefore have to focus more on the enhancement of pervasive skills because of the indirect pressure placed on them by these accounting bodies. It is clear from the above that the possibility of using case studies in accounting and management accounting education at university level merits more attention. According to Weil et al (2004:140), "research into the usefulness or effectiveness of case studies is limited". This statement specifically refers to the use of case studies in accounting education.

The problem addressed in this study relates to the challenge faced by accounting education in an ODL institution to deliver well-rounded accounting graduates for the profession. The use of case studies has been suggested as a possible way to address this problem. The following questions come to mind:

- Should ODL accounting departments in South Africa introduce a dedicated case study-based module as part of their curriculum, or should it be incorporated into existing accounting-related modules?

- Should case studies be implemented as part of the undergraduate or postgraduate curriculum?
- Does the use of case studies in ODL accounting education pose specific challenges and would students ultimately benefit from it?

1.4 RESEARCH OBJECTIVES

The objectives of this study were to

- determine whether accounting educators at an ODL institution perceive a need for the introduction of a case study-based module to develop well-prepared accounting graduates ready for the workplace
- evaluate the perception of ODL accounting educators and students of the challenges and benefits of introducing a case study-based module or more case studies into the existing syllabus focusing on developing pervasive skills required for the workplace

1.5 THESIS STATEMENT

Incorporating a case study-based module into ODL accounting education would be a solution to the pervasive skills development conundrum that ODL accounting graduates in South Africa currently face.

1.6 DELINEATION AND LIMITATIONS

The delineations and limitations of the study are explicated below:

- This study was limited to the use of case studies in accounting education in South Africa.
- Data was collected from accounting educators, that is, management members of the College of Accounting Sciences (CAS), at an ODL institution in South Africa.
- Data was collected from students at only one ODL university.
- The study was limited to the perceptions of undergraduate ODL accounting students since a questionnaire was distributed to third-year students only.

- This study focused on two professional accounting bodies in South Africa, namely SAICA and CIMA.

1.7 EXPLANATION OF KEY TERMS

- Accountants - For the purpose of this study, the term “accountants” includes bookkeepers, financial accountants, management accountants, certified public accountants, auditors and tax practitioners.
- case study - A method to facilitate problem solving and decision making in simulated situations (Ballantine & McCourt Larres 2004:172) or “a particular instance of something used or analysed in order to illustrate a thesis or principle” (Oxford Dictionary 2015a).
- case study-based examination - A form of assessment whereby a real business environment is simulated aimed at testing the application of knowledge and pervasive skills.
- case study-based module - A module that incorporates many level-appropriate case studies and allows for integration of different accounting related subjects and focuses on enhancing certain pervasive skills of students in order to produce better prepared, practice-ready students.
- distance education - “A set of methods or processes for teaching a diverse range of students located at different places and physically separated from the learning institution, their tutors/teachers as well as other students” (Unisa 2008:1).
- ODL - Open distance learning, consisting of multiple dimensions aiming to overcome any form of distance between students and the institution, educators, study material and fellow-students (Unisa 2008:2).

- pervasive skills - “Personal attributes that enable someone to interact effectively and harmoniously with other people” (Oxford Dictionary 2015b). Pervasive skills include, for instance, communication, interpersonal and problem-solving skills. This term will encompass other definitions of these skills such as vocational, higher-order, soft and meta-skills (Arquero Montaña et al 2001; Barac 2009; CIMA 2012; De Villiers 2010; Gammie et al 2002; SAICA 2010a; Wilton 2008).
- professional accounting qualification - Qualification with a professional accounting body, for instance SAICA or CIMA.
- students - Specifically focusing on students preparing for a professional accounting qualification
- trainee accountant - Someone who is training for the accounting profession or for a particular accounting job.
- training officer - Training officers registered with professional accounting bodies such as SAICA or CIMA who employs trainee accountants who are training towards becoming professional accountants.
- training programme - Practical training programme (“articles”) for prospective CAs(SA).

1.8 RESEARCH METHOD

The study was underpinned by transcendental realism theory using a concurrent mixed-method approach - both quantitative and qualitative data were collected.

Quantitative: Conducting a web-based survey among third-year management accounting students at Unisa (University of South Africa).

Qualitative: Conducting semi-structured in-depth interviews with Unisa CAS management as well as an interview with Professor Paul Prinsloo, an ODL specialist.

Permission for this study was obtained from the Unisa Ethics Review Committee as well as the Senate Research and Innovation Higher Degrees Committee.

Literature review

A thorough literature review of books, professional bodies' websites, theses and articles in academic journals was conducted in order to determine the pervasive skills required by accounting graduates as well as the benefits of the use of case studies in accounting education. The literature was then further explored in order to determine whether there is a perceived need for the introduction of a dedicated case study-based module as part of accounting students' tertiary education towards becoming professional accountants.

Interviews

An interview can be defined as an organised exchange of words (Gillman 2000; Ritchie & Lewis 2003). By conducting an interview, the prospect of offering rich data occurs and an opportunity emerges for different methods of data analysis (Newton 2010:2). Interview questions should be clearly structured (Cohen, Manion & Morrison 2007:129). Trust is important and should be kept intact throughout the interview through professionalism and respect (Newton 2010:6).

In the current study, a pilot study was conducted with Professor Paul Prinsloo. One of Professor Paul Prinsloo's key research interests is ODL. He is regarded as a specialist in the field of ODL and his insights, ideas and suggestions were therefore deemed valuable to include in this study and to inform the compilation of the final interview schedule and questionnaire.

Qualitative research, specifically the semi-structured one-to-one interview method, was used to gain a detailed picture of Unisa's CAS management members' perceptions of the viability of introducing case studies or a case study-based module

in an ODL accounting environment (see appendix B for the interview schedule). The researcher had a set of predetermined open-ended questions, but was also guided by the interviewees' responses in order to learn more about their role in teaching or enhancing ODL students' pervasive skills. The duration of these interviews was approximately 30 minutes.

The interviews were recorded with a digital voice recorder for subsequent transcription. All the tapes were transcribed verbatim and all the transcripts were saved on a password-protected computer. The transcription of the data remained strictly confidential. Data was analysed through an inductive thematic analysis method.

During the interviews, management members of CAS, including chairs of departments (CODs) at Unisa (purposive sampling) were asked whether they believe there is a need for the introduction of a case study-based module (focusing on enhancing certain pervasive skills) in order to produce better prepared, practice-ready students. The interviews also determined whether ODL accounting educators in the respective departments had such a module in place and whether they perceived such a module to be beneficial to students as well as the future employers of these students. Unisa was selected because it is Africa's leading and largest distance learning institution (Unisa 2013). Members of management in CAS were chosen as they can be regarded as the "voice of the academics" (Barac & Du Plessis 2014:61) included in the respective departments. Data saturation determined the sample size referring to the point where the same information is repeatedly being reported and no new themes emerge (Monette, Sullivan & De Jong 2005:242). Nobody in the group was excluded on the basis of race, age or gender.

Operational measures were applied to ensure trustworthiness. The primary researcher conducted the interviews (credibility). In-depth discussions were held and the results were contextualised in the literature (transferability). The researcher kept an audit trail of the study in case an auditor wished to verify the trustworthiness of the findings (conformability). The research process was clearly presented and all aspects of the study were described (dependability). No interviewees were excluded on the

basis of race, age or gender (authenticity).

Questionnaire

A study was also conducted by means of a self-administered structured web-based questionnaire to third-year ODL students to determine their perceptions of the challenges and benefits of introducing a case study-based module or more case studies in the existing study material, as well as determining the pervasive skills that can potentially be further developed by case studies. The sample chosen for the empirical survey comprised third-year management accounting students enrolled for the subject MAC3701, Application of Management Accounting Techniques, at Unisa in South Africa. MAC3701 is an undergraduate module included in the curriculum of students registered for the Bachelor of Accounting Sciences in Financial Accounting as well as the Bachelor of Accounting Sciences in Management Accounting qualifications (Unisa 2016a). Obtaining these degrees allows students to enrol for the Postgraduate Diploma in Accounting Sciences or the Postgraduate Diploma in Management Accounting (Unisa 2016a). According to Healy and McCutcheon (2010:563), case studies should be introduced at the right student level, preferably at a more advanced level as it is harder for students at first- or second-year level to apply their knowledge. Further reasons for selecting these students are elaborated on in chapter 4 (see section 4.5.2). Only students with MyLife e-mail addresses enrolled for the module MAC3701 were invited to participate in the survey.

A dedicated uniform reference locator (URL) was established. A hyperlink to the URL where the questionnaire was hosted was e-mailed to the MAC3701 students. The invitation to participate in the online survey was sent out via an online research software tool called SurveyMonkey.

The informed consent of both CAS management and the students was obtained before they commenced answering the questions. They were made aware of the fact that their privacy and confidentiality would be guaranteed and that they could withdraw or choose not to participate at any time during the interview or survey. (See appendix C for the questionnaire and appendix B for the interview schedule). The sampling, data gathering and processing of the relevant data was conducted in a

manner that respected the rights and integrity of all parties as stipulated in the Unisa Policy on Research Ethics.

A qualified statistician helped to analyse the quantitative data. The raw data was exported from SurveyMonkey for further analysis, into statistical packages, namely Statistical Analysis System Jump (SAS JMP, version 11) and the Statistical Package for the Social Science (SPSS, version 23), and was converted into an appropriate format for statistical analysis.

The trustworthiness of the data was ensured by including pretesting and applying reliability and validity measures.

1.9 SIGNIFICANCE OF THE STUDY

Researching the use of case studies in accounting education in South Africa, specifically with regard to ODL should contribute towards the existing body of knowledge. Unisa is the largest and leading distance education institution in the Southern Hemisphere (Unisa 2013). Unisa is accredited by SAICA and from the recently published APC 2014 and 2015 results documents available on SAICA's website, it is evident that Unisa produces the largest number of students who pass the final test of competence examination of SAICA (SAICA 2015; SAICA 2016). Unisa is also accredited by CIMA, the largest management accounting body in the world (Unisa 2015).

According to Barac (2009:24), there is limited research on the skills of South African trainee accountants, apart from a study conducted by Koornhof and Lubbe in 2002. Weil et al (2001) posit that empirical research performed on the use of case studies in accounting education is restricted. A study conducted by Low, Samkin and Liu (2013:1) showed that accounting graduates, employers and professional accounting body representatives all believed that tertiary accounting education forms an integral part of addressing the pervasive skills development need of accounting graduates.

At a theoretical level, the findings of this study should be significant because it will contribute to the existing body of knowledge by focusing on the use of case studies in accounting education in the South African context, which is regarded as a fairly unexplored area. South Africa has a shortage of accountants and CAs (Marshall 2014; Pricewaterhouse Coopers 2012; SAICA 2012). Accountants are twelfth on the official list of top 100 scarce skills (Republic of South Africa 2014:17). A literature review performed by De Lange, Marx and Van der Watt (2013:287) on South African academic databases revealed that “to date, little research has been done on appropriate and effective teaching and learning strategies and the practices within the accounting programmes offered by the SAICA-accredited higher education institutions (HEIs) (as required by the SAICA Competency Framework)”. Skilled accountants play a vital role in the economy, and Singh (2013:103) suggests that tools that assist educators to better round and develop accounting students would be informative for professional accounting bodies and employers.

There is a paucity of studies on the recent intended curriculum changes implemented by both SAICA and CIMA to increase their eligible members’ pervasive skills requirements. CIMA’s new syllabus, implemented in January 2015, is aimed at enhancing its students’ employability (CIMA 2014a). SAICA’s current competency framework now includes pervasive skills, and the APC case study-based examination was introduced from November 2014, which will allow SAICA to increase the assessment of professional and pervasive skills (Oliver 2012).

It is worth researching any skills development possibilities of accountants as these highly skilled professionals contribute towards an economy’s prosperity. In the words of Van der Merwe (2013:1144), “[a]ccountants play a significant role in the economies of any country and, hence, it is essential that every effort is made to prepare them sufficiently for the workplace.”

A study of ODL accounting students’ perceptions of the challenges and benefits of introducing a case study-based module as part of their training towards becoming a professional accountant would enable ODL accounting educators to further improve

their teaching through the use of case studies and perhaps even to address the scarce skills shortage.

1.10 CHAPTER OVERVIEW

Chapter 1: Introduction

This chapter introduced the study by providing background information and a short literature review. The research problem was also identified. The significance of the study in its setting and the broader context was justified, as well as the reasons for conducting the study and the aim of the research.

Chapter 2: Important pervasive skills required by accounting graduates

From the literature review conducted in this chapter, it is clear that skills development is a global problem. This part of the literature review provides an overview of recent literature worldwide focusing on the different pervasive qualities and skills required by accounting graduates.

Chapter 3: The use of case studies in accounting education

This part of the literature review makes clear arguments for and against using case studies in accounting education in light of their pervasive skills development attributes. The different perspectives of students and educators are also explored. The question whether case studies should be taught in a separate module or integrated into the existing modules is examined.

Chapter 4: Research method

The focus in chapter 4 is on the research design employed in the study and also the context in which the study was conducted, together with the aim of the research. The literature review and empirical research are described.

Literature: A thorough literature review was conducted, making use of journals, professional bodies' websites, theses and books on the subject.

The empirical survey was conducted through interviews and a questionnaire:

An interview was held with Professor Paul Prinsloo, a specialist in the field of ODL (purposive sampling) for pretesting purposes. His insights, ideas and suggestions were deemed valuable to incorporate into this study and to inform the compilation of the final interview schedule and questionnaire. Interviews were held with CAS management members of Unisa to determine whether there is a perceived need for the introduction of a case study-based module to enhance the pervasive skills of accounting graduates. A questionnaire was sent to third-year ODL students to determine their perceptions on this matter. The challenges and benefits of using case studies for pervasive skills development in an ODL environment is explored in this chapter.

Chapter 5: Presentation and analysis of the research findings

This chapter focuses on the analysis and presentation of the research findings. It reveals the answers to the questions posed in the problem statement and the research objectives formulated in chapter 1.

Chapter 6: Summary, conclusions and recommendations

Finally, in chapter 6, conclusions are drawn and the recommendations made on the basis of the findings of the study.

CHAPTER 2

IMPORTANT PERVASIVE SKILLS REQUIRED BY ACCOUNTING GRADUATES

2.1 INTRODUCTION

The research problem as well as the research objectives, namely evaluating the perceptions of ODL accounting educators and students on the need to implement a case study-based module focusing on integrating pervasive skills development with technical accounting knowledge, was introduced in the previous chapter. This enhanced understanding should benefit educators, curriculum designers and faculty who are responsible for reviewing and updating accounting curricula by improving their understanding of the skills required by accounting graduates in the 21st century.

From the introductory literature review conducted in chapter 1, it is clear that skills development in the accounting field is a global problem that merits immediate attention. Accounting educators have to ensure that accounting graduates are equipped not only with technical knowledge competencies, but also with pervasive qualities and skills (non-technical competencies). In this chapter, the balance between technical knowledge requirements and pervasive skill requirements is considered. Before one can investigate whether the introduction of a case study-based module could be a possible solution to the pervasive skills development conundrum, a thorough understanding of the pervasive skills needed by accountants is required. Exploring the existing body of knowledge on the pervasive qualities and skills required by accountants should give educators and students insight into the challenges facing accounting education.

This chapter first provides an overview of the role of the accountant in the changing business environment. It then briefly defines pervasive skills as required by the accounting profession. The focus then shifts to the need for skills development in accounting. This chapter mainly focuses on the pervasive qualities and skills required by professional accountants and how these skills can be developed. Finally, the

development of the pervasive skills of accounting graduates in an ODL environment is discussed. The unique challenges of the ODL environment are also elaborated upon.

2.2 THE ROLE OF THE ACCOUNTANT IN THE CHANGING BUSINESS ENVIRONMENT

The business environment is constantly changing as a result of, inter alia, globalisation, new legislation, business complexity, improved technology, high-profile corporate failures and the economic meltdown (Barac 2009:20; Barac & Du Plessis 2014:54; Botes 2005:67; Fouché 2013:137; Goretzki, Strauss & Weber 2013:41; Järvenpää 2007:100; Kavanagh & Drennan 2008:279; Knyviené 2014:159; Low et al 2013:2; Mohamed & Lashine 2003:7; Pan & Perera 2012:92; Shuttleworth 2012:247; Sorensen 2009:1271; Yazdifar & Tsamenyi 2005:181). Changes in the economy understandably also affect the role players in the business environment (Botes 2005:68, Järvenpää 2007:100; Shuttleworth 2012:247; Sorensen 2009:1271; Yazdifar & Tsamenyi 2005:181). During the past few years, there have been active academic and professional discussions on the changing role of accountants, particularly management accountants (Järvenpää 2007:99,131). Sulaiman and Mitchell (2005:423) postulate that an understanding of change is essential in order to grasp real-world accounting.

As early as the 1990s, Siegel and Sorensen (1999:8) explained that the nature of accounting work was changing from collecting information to interpreting it and becoming more involved in decision making. Albrecht and Sack (2000:2-3) emphasise that because of the changing business world, accountants need to master various pervasive skills, including the ability to communicate, coordinate, work under pressure and solve problems. Accountants seem to be increasingly involved in assisting management, guiding organisations and operations and making strategic choices (Burns & Baldvinsdottir 2005:726; Sorensen 2009:1271; Shuttleworth 2012:247). “The traditional ‘bean-counter’ stereotype, characterised by routine work such as recording, data inputting and reporting seems to have been replaced by the ‘business partner’, that has been depicted as willing and capable to provide more

added value to the decision-making and control” (Goretzki et al 2013:41). This phenomenon was reflected by Järvenpää (2007:100) in yet another way, when he reiterated that accountants used to be labelled as “scorekeepers” and “watchdogs” and have now become increasingly active in making decisions (business partner). The term “business partner” describes the new role of the accountant as being more management oriented. Accountants should be innovative and they should have the ability to exercise their own judgement (Shuttleworth 2012:247).

The introduction of new accounting techniques has contributed to the changing role of accountants (Emsley 2005:169; Järvenpää 2007:100; Yazdifar & Tsamenyi 2005:181). Accountants now have to, inter alia, make future cash-flow projections and no longer only deliver historical analyses and aggregates of historical events (Boer 2000:320). Role change of accountants may also arise from closer collaboration and participation between managers and accountants (Burns & Baldvinsdottir 2005:726; Coad & Herbert 2009:184; Fauré & Rouleau 2011:167-168; Järvenpää 2007:100). This, in turn, leads to accountants increasingly assisting with decision making, thereby adding value to management and effectively improving their professional view (Ezzamel & Burns 2005:758; Järvenpää 2007:100).

Based on a number of studies conducted by professional accounting associations around the world, Parker (2002:3) has summarised the drivers that have led to the changing role of accountants. These professional accounting associations include the American Institute of Certified Public Accountants (AICPA), the Institute of Chartered Accountants in Australia (ICAA), the Institute of Chartered Accountants in England and Wales (ICAEW) and the New Zealand Institute of Chartered Accountants (NZICA). ICAA amalgamated with NZICA to become Chartered Accountants Australia and New Zealand (CA ANZ) which was formally implemented on 31 December 2014 (CA ANZ 2016). The key driving forces that Parker (2002:3) identified include business internationalisation and globalisation; non-accounting competitors and alliances expansion; the knowledge-based economy; IT; more informed consumers placing less value on traditional accounting services; calls for broader scope accountability; and changing work patterns and attitudes. These driving forces will be briefly explained in the paragraphs below.

As a result of business internationalisation and globalisation, the whereabouts of business and management is no longer that important. The world has become one giant marketplace. Information is more readily available (Albrecht & Sack 2000:5; Botes 2005:76; Brevis-Landsberg 2012:179; Hill 2003:6; Howieson 2003:72; Makhanya 2012:28; Mohamed & Lashine 2003:3; Parker 2002:3; Shuttleworth 2012:244; Siegel & Sorensen 1999:15). Management and accounting work is becoming increasingly multidisciplinary (Howieson 2003:76; Parker 2002:3). “Globalisation has created the need for managers and employees with cultural intelligence and cross-cultural competencies” is a comment made by Brevis-Landsberg (2012:179). According to Botes (2005:77), globalisation has the effect that qualifications become portable and universally accepted. Local accounting professionals now have to compete internationally.

There is also an increase in the number of non-accounting rivals and alliances (Albrecht & Sack 2000:6). Banks, financial planners and other finance companies have increased their horizons and are now working in the accounting marketplace. It has become so important for some large and medium accounting practices to market and present themselves as multidisciplinary business advisors that they are willing to abandon their certified public accountant (CPA) or CA designations (Parker 2002:3).

The knowledge-based economy is now aware that organisational success is measured in financial and non-financial terms and that not only financial but also intellectual resources are important to organisations (Brevis-Landsberg 2012:181; Hill 2003:6; Howieson 2003:72; Parker 2002:3). Knowledge workers are highly regarded for their analytical and judgement skills, their presentation of information, continual reskilling, and their innovation and flexibility. Accountants are encouraged to develop an array of skills and encouraged to become lifelong learners (Hassall, Joyce, Arquero Montaña & Donoso Anes 2005:386; Parker 2002:4; SAICA 2010a).

Rapid developments in IT are one of the main drivers of the changing role of accountants (Albrecht & Sack 2000:5; Barac 2009:20; Hill 2003:6; Howieson 2003:72; Järvenpää 2007:100; Mohamed & Lashine 2003:3; Parker 2002:304). IT frees up accountants from routine “number crunching” to advanced advisory and

decision-making roles (Parker 2002:3-4). IT has also introduced electronic commerce, virtual organisations and more advanced business information systems (Albrecht & Sack 2000:5; Howieson 2003:79; Parker 2002:4). The implementation of the modern financial and operational control systems and software packages impacts on the accountants' role, moving towards advisory and decision-making roles (Järvenpää 2007:100). Enterprise resource planning (ERP) systems turn non-accountants into hybrid accountants, who make financial accounting more solid (Dechow & Mouritsen 2005:730). According to Brevis-Landsberg (2012:179), the internet and IT challenge managers and employees (including accountants) to be adjustable, adaptable and well informed on the latest developments.

Consumers of accounting services are placing less value on traditional accounting, auditing and tax services but rather assess products and services via both financial and non-financial operating performance indicators (Albrecht & Sack 2000:8,12; Howieson 2003:72; Parker 2002:4). Managers and employees (including accountants) are expected to continually improve their services (Brevis-Landsberg 2012:180). According to Howieson (2003:75), because of increasing global competition, accountants have to be experts in knowledge management and they have to think in such a way that they go the extra mile and continually provide their clients with services that add value.

The new role of the accountant, directly contributing to the decision-making process and aiming to add value to organisations, comes with the responsibility of developing a new set of unique skills (Albrecht & Sack 2000:2-3; Beard, Schwieger & Surendan 2008:230; De Lange et al 2006:365; Gammie et al 2002:64; Hassall & Milne 2004:135; Howieson 2003:79-80; Wessels 2008:147). This view was supported by McGregor (2000:3) in his address to the Southern African Accounting Association (SAAA), where he stated that South Africa has to respond to global competitive pressure by acquiring increased levels of knowledge, skills and expertise. South Africa has seen specific changes such as new legislation (e.g. the new South African Companies Act, 71 of 2008), the 2007 financial crises and the development of concepts such as "transformation" and "sustainability" (Fouché 2013:137). As mentioned in the background section in chapter 1, the results of these changes are

that employers are now looking for graduates with a diverse set of skills and attributes. It is therefore necessary to explore the literature to gain a better understanding of these skills and ways to transfer them to accounting students.

2.3 DEFINING PERVASIVE SKILLS

It is not only the role of the accountant in the business environment that has changed significantly over the past few years. The competencies required from professional accountants, for example, CAs, CPAs and chartered management accountants (CMAs), have also changed. Technical accounting knowledge will always remain important, but there is an increased relevance of “non-technical” or “professional skills”, also otherwise known as pervasive skills (Steenkamp 2012:485). For ease of reference, the term “pervasive skills” is used in this study for skills referred to by other researchers as vocational skills, meta-skills, generic skills, higher-order skills, employability skills or soft skills, as mentioned in chapter 1. Accounting specialists worldwide, including professional associations in Canada, South Africa, Australia and New Zealand, and the International Federation of Accountants (IFAC), have recognised the importance of competency in a broad range of skills to ensure success in the accounting profession (Manly, McKnight & Thomas 2008:3). IFAC, for example, is a global organisation for the accountancy profession and represents approximately 2.5 million accountants in different spheres of the economy (IFAC 2014a).

It is not easy to define pervasive skills, because the concept differs between different disciplines, various contexts and perhaps also between different continents (De Villiers 2010:2). According to the Oxford Dictionary (2015b), pervasive skills (“soft skills”) are defined as “personal attributes that enable someone to interact effectively and harmoniously with other people”. Based on De Villiers’ (2010:3) literature review, there are two conceptual domains of competencies, namely cognitive intelligence competencies and emotional intelligence competencies. According to De Villiers (2010:3), these soft (pervasive) skills include people skills, staffing, coordinating, negotiating, diversity sensitivity, social complexity, social judgement, interaction, networking, supervision, social responsibility, ethics, moral values and integrity,

flexibility and adaptability, corporate culture, influence, communication, leadership and self-management. The term “soft skills” is described by Dixon, Belnap, Albrecht and Lee (2010:35) as a combination of interpersonal and social skills, and includes, for example, the ability to communicate, coordinate, work under pressure and solve problems.

In the frequently asked questions document on the website of the Chartered Professional Accountants of Canada (CPA Canada), pervasive qualities and skills refer to professional attributes and expertise required by Chartered Professional Accountants (CPAs) for all of their tasks (CPA Canada 2014a). These skills are relevant as explained in this document as they include creation, analysis, evaluation, and synthesis of information and ideas; problem-solving and decision-making skills; communication and management skills; and proficiency in technology. These skills also enable accountants to make efficient and effective decisions through asking relevant questions and applying their minds to unique problems in unique situations. Professional judgement is necessary for the development of these professional skills. This document also highlights the fact that professional skills will be complemented by real-life experience (CPA Canada 2014a). Pervasive qualities and skills aid CPAs to successfully use their technical knowledge and to become forward-thinking professionals who think rationally, conduct objective analysis, conclude suitably and communicate effectively and efficiently (CPA Canada 2014b:21).

The view of SAICA is similar in that pervasive skills include personal and professional skills, such as leadership, communication and ethics (Steenkamp 2012:481). Pervasive qualities and skills are defined as the professional qualities and skills that are expected of CAs (SAICA 2010b:18). These skills are concisely summarised as “the ‘how’ of a CA’s work” (SAICA 2010b:18). CIMA’s competency framework also includes pervasive skills. Section 2.6 elaborates on these expected skills by professional bodies.

2.4 THE PERVASIVE SKILLS GAP IN ACCOUNTING

Since the 1990s, various stakeholders have recognised that accounting graduates do not have the knowledge, skills and personal attributes required by the accounting profession in the rapidly changing business environment (Bui & Porter 2010:23). The gap between the skills desired by employers and those currently developed in accounting graduates is often debated and in the spotlight (Botes 2005:10; Bui & Porter 2010:23; De Villiers 2010:1-22; Gammie et al 2002:63; Jackling & De Lange 2009:371; Low et al 2013:1; Wessels & Steenkamp 2009:120). New skills are required by entry accountants as a result of numerous changes in the corporate world, and accountants are now expected to do more than merely duplicating knowledge (Fouché 2013:137, 146; Gammie et al 2002:63). Various studies (Coetzee & Oberholzer 2009:421; Fouché 2013:137; Jackling & De Lange 2009:369; Wells et al 2009:404) highlight the fact that trainee accountants do not have the pervasive skills required by the accounting profession.

A need for pervasive skills among accounting students has been identified across the globe (Albrecht & Sack 2000:55; Barac & Du Plessis 2014:53; Gammie et al 2002:63; Howieson 2003:79-80). The same phenomenon is evident among South African graduates (Barac 2009:19, Coetzee & Oberholzer 2009:421; Stainbank 2010:79). The literature indicates that current accounting education is not meeting the demands of the profession and that a “skills gap” is developing at the employer/graduate interface (Albrecht & Sack 2000; Arquero Montaña et al 2001:310; De Lange et al 2006:365; Gammie et al 2002:63; Jackling & De Lange 2009:381).

Numerous researchers have explored accounting graduates' perception of the skills gap. According to Jackling and De Lange (2009:381), current undergraduate accounting programmes do not deliver accounting graduates with the skills required by their employers. A survey conducted among 322 accounting graduates from three Australian universities and 28 practitioners in Australia suggests that extensive training is needed before accounting graduates can become satisfactorily equipped for the workplace (Kavanagh & Drennan 2008:296).

De Lange et al (2006:365) conducted a survey among 310 accounting graduates from two universities in Australia. The aim of this study was to determine the graduates' perception of the skills required by the accounting profession and the emphasis placed on the development of these skills in the accounting curriculum. Respondents in this survey felt that there is a lack of emphasis on most of the pervasive skills required, particularly computing/IT skills, and interpersonal and communication skills. Jackling and De Lange (2009:374, 381) conducted another study among both accounting graduates and employers that revealed differences between what graduates feel is taught at university and the required skills sought by employers. This divergence illustrates a need for a greater focus on pervasive skills in universities that will equip graduates for employment (Jackling & De Lange 2009:381).

A study conducted by Fouché (2013:143) among first-year South African accounting students at the North-West University investigated whether the perceived emphasis in accounting education was still more inclined towards technical subject content. The survey was conducted in 2006, before the introduction of the 2008 SAICA competency framework, with 177 participants. The questionnaire dealt with the technical and pervasive skills required by entry-level accountants. The results revealed that students' perceived the accounting subject content addressed in their studies to be the most effective. However, these students felt less competent in the technical knowledge of other disciplines (subject fields linked to accounting such as commercial law and economics). They also did not feel as comfortable with using technology and communication skills. The respondents felt that they lacked experience in developing personal attributes and dealing with ethical issues. Innovative teaching methodologies, such as using multimedia and technology, group work, practical experiences that make learning relevant and case studies, were perceived as being the worst addressed in their accounting studies (Fouché 2013:144, 145).

As mentioned earlier in chapter 1, Barac's (2009:19) study researched training officers' perceptions of knowledge and skills requirements for South African trainee accountants. It was found that there is a need for the development of trainees'

communication, analytical, interpersonal and computer skills. The evidence in Barac's (2009) study supports the findings of Fouché (2013:146).

It is questionable whether accounting educators have the ability to develop the pervasive qualities and skills needed by accounting graduates (Keevy 2013:5). A study among accounting academics involved in SAICA-accredited academic programmes was conducted by Keevy (2013:5). She investigated accounting educators' perceptions of the awareness of and the ability to deliver pervasive qualities and skills to aspirant professional accountants. Her study revealed that although academics are aware of the expectation to deliver pervasive qualities and skills, they do not regard themselves as being best suited to ensure that graduates are equipped with these competencies.

In light of the recent changes to the competencies required by professional accounting bodies, it would be interesting to determine whether accounting educators perceive a need for the introduction of a case study-based module to develop well-prepared accounting graduates ready for the workplace. The topic of pervasive skills training in an ODL environment is considered in section 2.9.

2.5 THE ROLE OF EDUCATION AND EDUCATORS IN DEVELOPING STUDENTS' PERVASIVE SKILLS

As a result of the identified skills gap, professional accounting bodies and employers of accounting graduates have called for accounting education to narrow the gap by addressing the perceived skills shortages (Ballantine & McCourt Larres 2004:172; Ballantine & McCourt Larres 2009:388; Bui & Porter 2010:23; Hassall et al 2005:388). Reasons for the failure of accounting education to provide graduates with the desired competencies fall into the following four broad categories identified by Bui and Porter (2010:27): "differences in the expectations of accounting academics and employers; students' perceptions of accounting programmes and the profession, and their ability and aptitude; institutional constraints; and the ineffectiveness of university teaching".

Educational institutions play a vital role in supplying the business world with accounting graduates who are knowledgeable, ethical, responsible and financially literate (Shuttleworth 2012:243). Because of high unemployment levels, adult illiteracy and socioeconomic inequalities in South Africa, it is imperative that universities function optimally (Letseka & Karel 2015:65). Enhancing pervasive skills through formal education has become compulsory and is no longer optional (Shuttleworth 2012:259). Educational institutions throughout the world have to shift their attention to the enhancement of pervasive skills because of indirect pressure placed on them by the relevant professional accounting bodies (Van der Merwe 2013:1137, Velayutham 2008:29). The growing emphasis on the need for the pervasive skills development of accounting graduates necessitates tertiary institutions to provide accounting graduates opportunities to further develop these pervasive skills (Dixon et al 2010:36-38). An important goal of accounting education is to ensure that accounting graduates are ready for the workplace (Low et al 2013:4; Zraa, Kavanagh & Hartle 2011:3). Employers assume that it is universities' responsibility to prepare students to become competent well-rounded employees (Bui & Porter 2010:24). A revised approach towards accounting education is needed in tertiary institutions to address the renewed calls for the training of accountants with a more comprehensive range of skills expected by employers and the overall economy (Arquero Montaña et al 2001:310; De Lange et al 2006:365-366; Dixon et al 2010:36-38; Gammie et al 2002:64; Howieson 2003:79).

According to Bui and Porter (2010:24), the gap between skills required from employees and skills possessed by accounting graduates is also a result of students' perceptions of accountants. Milliard (2003:13) established that students brand accountants as mere bean-counters and describe accounting work as boring. Diller-Haas (2004:1) explained that the picture painted by the old accounting curriculum - "emphasising memorisation of accounting pronouncements and the mechanics of recording transactions" - does not reflect the reality of the current environment. She went so far as to say that this distorted view discourages students from majoring in accounting. She explains that the focus on memorising technical knowledge leaves little time for developing the skills that most employers seek. Her survey of accounting programmes in the New York City metropolitan area found that the

majority (71%) of the accounting programmes still used a traditional curriculum.

Universities focus on technical competence instead of pervasive skills (Albrecht & Sack 2000:55; Burns, Hopper & Yazdifar 2004:20; Woronoff 2009). This view is supported by Cooper, Everett and Neu (2005:379), who stated that there is too much emphasis on repetition learning of technical material with a lack of attention to broader educational issues. Boyce et al (2001:55) argue, that the accounting profession has an in-built fondness for technical orientation with a reduced scope to include pervasive skills development in the accounting curricula.

Graduates also perceive the focus of their accounting education to be on the development of technical skills and not pervasive skills (Jackling & De Lange 2009:376). A shift has been identified towards the development of competencies that exceed the technical knowledge currently promoted at universities (Barac 2009:19; Francisco, Kelly & Parham 2003:28; Manly et al 2008:3; Paisey & Paisey 2010:89; Shuttleworth 2012:243). Although Francisco et al (2003:28) posit that critical thinking skills, written and oral communication skills and the ability to make decisions are included in accounting education, they also mention that for years the focus was mainly on the accounting curriculum and not on critical thinking skills. Because of the need for accountants to be able to analyse, contextualise, learn, reason, solve problems, make decisions and think creatively, critical thinking skills are discussed in more detail in section 2.6.

Standard setting and accrediting bodies such as IFAC have recognised the importance of accounting graduates possessing not only technical accounting competencies, but also organisational, business and personal competencies (Bui & Porter 2010:24). Although many universities have incorporated the preparation of pervasive skills into their accounting curricula, this practice has not been without its critics (Manly et al 2008:3). Blanthorne, Bhamornsiri and Guinn (2003:64-65) provided evidence that among entry-level accountants in public accounting, technical skills remain the most important for advancement.

In a study conducted by Low et al (2013:13), 50 accounting graduates gave their opinions on the importance, development and use of pervasive skills. Just less than half of the participants indicated that their tertiary institution should and already does provide pervasive skills development, while a lower number of participants felt this should still be improved, and a few participants indicated that this could be developed only to a certain extent. According to more than one of the participants in Low et al's study (2013:14), certain research courses in the degree encouraged the use of pervasive skills. One of the participants in this study stated that development not only occurs in the university work context, but also in life in general. Another participant supported this view by mentioning that "soft skills are something people acquire by way of experience and time." More than one student in Low et al's (2013:15) study indicated that pervasive skills are developed through work experience. Respondents in their (2013:16) study indicated that they had gained most of their pervasive skills through activities conducted at the university (university group work; university presentations; university courses; tutoring) as opposed to activities that occurred outside the university (part-time jobs; extra-curricular activities; personal experience). Unisa ODL students' solicited opinions on the importance, development, gaining and use of pervasive skills by means of a questionnaire are discussed later, and the results reported in chapter 5.

The literature contains examples of researchers who do not believe that educators are solely responsible for pervasive skills development. According to Gammie et al (2002:65), employers' demands to equip students with the necessary pervasive skills should not be blindly accepted. Gammie et al (2002:65) commented that although it makes sense that employers would prefer graduates to be in a position where they add value to the organisation, employers share the responsibility of including pervasive skills in their training programmes. Donovan (2005:445) suggested a partnership between universities and the accounting profession in developing pervasive skills and argued that the profession can provide a real-world environment for learning. It is not the exclusive responsibility of higher education to develop pervasive skills in accounting graduates - various stakeholders, including the students themselves, need to share this responsibility (Shuttleworth, Berry, Lötter, Viviers & Leonard 2013:1525).

Fouché (2013:138) eloquently states that “accounting lecturers themselves may well be one of the biggest threats to the accounting profession”. He maintains that accounting education might be to blame for not developing students with the necessary skills required by professional accounting bodies and employers. In a study conducted by Hassall et al (2005:387, 390), both Spanish and UK employers regarded the lack of relevant corporate accounting experience of educators a barrier in the development of pervasive skills. They also felt that academics’ abilities and attitudes are a major constraint. Interestingly enough, these employers did not regard heavy teaching loads, lack of economic resources and the attitudes of students as barriers to pervasive skills development. According to Hassall et al (2005:379), the purpose of accounting education has shifted from focusing on only technical skills to also include non-accounting capabilities and pervasive skills. Boyd, Boyd and Boyd (2000:36) state that educators try to avoid change. This might be because it is regarded as time-consuming to adjust to change. It is also difficult to adjust to change as it is usually not known or familiar and causes distress.

It is argued that pervasive skills teaching should be built into all undergraduate accounting programmes as opposed to the introduction of a dedicated skills development module. It is further suggested that an integrated approach should be followed, whereby technical and pervasive skills should be developed simultaneously (Arquero Montaña et al 2001:299; De Villiers 2010:14; Hassall, Joyce, Arquero Montaña & Donoso Anes 2003:88). The professional accounting body, SAICA, suggests that the teaching of some pervasive skills and qualities (such as communication, problem solving, teamwork and time management) should be addressed across all the accounting modules (SAICA 2010b:16). They further suggest that other pervasive skills and qualities could be addressed in a dedicated module (such as legal concepts and IT).

2.6 PERVASIVE QUALITIES AND SKILLS REQUIRED BY PROFESSIONAL ACCOUNTING BODIES

Throughout the globe, professional accounting bodies increasingly incorporate

pervasive skills into their professional training programmes because these skills are becoming progressively important. According to Fouché (2013:147), these institutions should shift their focus away from the overloaded technical knowledge requirements prescribed in their syllabi and more towards pervasive skills. Background information on the different pervasive skills listed by the respective professional accounting bodies will be briefly discussed in table 2.1 below. The professional accounting bodies depicted in table 2.1 are SAICA, CIMA, AICPA, the Association of Chartered Certified Accountants (ACCA), NZICA, ICAA, the Chartered Accountants of Canada (CICA) and Certified Management Accountants (CMA). AICPA and CIMA entered a joint venture in 2011 and launched the CGMA designation in 2012 (CGMA 2016). Although AICPA has its own competency framework, those members wishing to enhance their credentials with the CGMA designation have to consider the CGMA Competency Framework (AICPA 2016:1). CIMA makes use of the CGMA competency framework (CIMA 2014d).

Table 2.1: Background information on the introduction of pervasive skills by different professional accounting bodies and standard-setting boards

SAICA	<ul style="list-style-type: none"> - Introduced a new competency framework in 2008 (SAICA 2010b:8). This was updated in 2014 and was applicable from 2016 (SAICA 2014). - Increased focus on pervasive qualities and skills (Fouché 2013:147, Keevy 2013:6; Steenkamp 2012:481). - The objective is to develop students who are able to think like business people (SAICA 2010b:8). - Complies with International Education Standards (IESs) through its membership with IFAC (IFAC 2015).
CIMA	<ul style="list-style-type: none"> - Introduced a new syllabus effective from January 2015 (CIMA 2014a). - Increased emphasis is placed on pervasive skills such as business acumen, people skills and leadership skills (CIMA 2014a) and less on accounting and finance skills. - The objective is to bridge the skills gap of newly qualified finance professionals and to make its students more

	<p>employable (CIMA 2014a).</p> <ul style="list-style-type: none"> - Complies with IESs through membership with IFAC (CIMA 2015).
AICPA	<ul style="list-style-type: none"> - AICPA Core Competency Framework (CCF) includes personal core competencies relating to the attitude and behaviour of aspiring professional accountants (AICPA 2014). - Pervasive skills needed by CPAs include, inter alia, personal and strong communication skills, including the ability to be a good listener and to have a broad business perspective (AICPA 2014) which are the typical skills employers seek. - Complies with IESs through its membership with IFAC (AICPA 2015).
ACCA	<ul style="list-style-type: none"> - Created a range of professional skills modules. - Helps to develop the softer skills needed to deliver effectively in the workplace, for example, communications, team work and relationship building (ACCA 2014b). - Includes behavioural competencies such as acting ethically and legally; being a communicator; credibility; influence/challenge; being proactive; sceptical; commercially aware; continuously improving; exercising professional judgement; organised/aware; problem solving; and supporting others (ACCA 2014a). - Complies with IESs through membership with IFAC (IFAC 2015).
NZICA and ICAA	<ul style="list-style-type: none"> - Amalgamated in 2014 to become Chartered Accountants Australia and New Zealand (CA ANZ 2016). - Jointly created the Chartered Accountants Programme. - The programme includes a “capstone module” (NZICA 2014) which develops a series of pervasive skills relevant to the workplace (NZICA 2014). - Complies with IESs through membership with IFAC (IFAC 2015).

CICA and CMA	<ul style="list-style-type: none"> - Joined together on 1 January 2013 to create CPA Canada (CPA Canada 2014b:ii). - Aspiring CPA Canada candidates have to write the Uniform Evaluation (UFE) and thereby demonstrate competence by responding to business cases representative of challenges that entry-level CAs face. - The UFE Candidates' Competency Map (CPA Canada 2014b:21) acknowledges that it is pervasive qualities and skills that empower CPAs to function as competent and capable professionals in a progressively demanding and multifaceted business atmosphere. - The UFE Candidates' Competency Map of 2013 emphasises that professional growth and a solid foundation for lifelong learning are ignited by the acquisition of pervasive skills (CPA Canada 2014b:21). - Identifies pervasive qualities and skills in three categories, namely ethical behaviour and professionalism; personal attributes and professional skills (CPA Canada 2014b:21-30) - Complies with IESs through membership with IFAC (IFAC 2015).
International Accounting Education Standards Board (IAESB)	<ul style="list-style-type: none"> - IFAC members must comply with IESs that are set by the IAESB. - Developed and approved IES 3 - Initial professional development - professional skills (revised) - Developed and approved IES 4 - Initial professional development - professional values, ethics and attitudes (revised). - IES 3 categorises professional skills into four competence areas, namely intellectual skills, interpersonal and communication skills, personal skills and organisational skills (IFAC 2014b). - IES 4 categorises professional values, ethics and attitudes into three competence areas, namely professional

	<p>scepticism and professional judgement, ethical principles and commitment to the public interest (IFAC 2014b).</p> <ul style="list-style-type: none"> - Both IES 3 (revised) and IES 4 (revised) became effective from 1 July 2015.
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Source: Adapted from ACCA 2014a; ACCA 2014b; AICPA 2014; CA ANZ 2016; CIMA 2014a; CPA Canada 2014b; IFAC 2014b; NZICA 2014; SAICA 2010b

Table 2.1 above indicates that all the mentioned professional accounting bodies are members of IFAC. As previously mentioned in section 2.3, IFAC is the global organisation for the accountancy profession that is dedicated to serve the public interest (IFAC 2016:1). Many professional accounting organisations are members of IFAC. It has over 175 members in 130 countries and represents 2.8 million accountants (IFAC 2016:1). IESs demonstrate the standards that IFAC member bodies are expected to meet in the training of professional accountants (IAESB 2016:1). All of the mentioned professional accounting bodies in table 2.1 therefore have to comply with IES 3 and IES 4, which were developed by the IAESB (formerly the IFAC Education Committee) to address pervasive qualities and skills requirements.

SAICA (2014) identifies pervasive qualities and skills in the same three main categories as CPA Canada (see table 2.2). There are many similarities between the framework as set out by the UFE Candidates' Competency Map which CPA Canada uses and the competency framework used by SAICA (see table 2.2).

Table 2.2: Comparison of the pervasive skills included in the SAICA Competency Framework and the UFE Candidates' Competency Map

SAICA Competency Framework	UFE Candidates' Competency Map
Ethical behaviour and professionalism:	Ethical behaviour and professionalism:
Uses an ethical reasoning process	
Protects the public interest	Protects the public interest
Acts competently with honesty and integrity	Acts competently with honesty and integrity
Performs work competently and with due care	Carries out work with due care
Maintains objectivity and independence	Maintains objectivity and independence
Avoids conflict of interest	Avoids conflict of interest
Protects the confidentiality of information	Protects the confidentiality of information
Maintains and enhances the profession's reputation	Maintains and enhances the profession's reputation
Adheres to laws, professional standards and policies and the rules of professional conduct when exercising professional judgement	Adheres to the rules of professional conduct
Personal attributes:	Personal attributes:
Self-manages	Self-manages
Demonstrates responsible leadership	Demonstrates responsible leadership
Maintains and demonstrates competence and recognises limits	Maintains and demonstrates competence and recognises limits
Strives to add value in an innovative manner	Strives to add value in an innovative manner
Manages change	Manages change
Treats others in a professional manner	Treats others in a professional manner
Is a life-long learner	
Plans and effectively manages teams and projects	
Works effectively as a team member	
Manages time effectively	
Demonstrates good corporate citizenship attributes	
Professional Skills:	Professional Skills:
Obtains information	Obtains information
Examines and interprets information and ideas critically (critical thinking)	Examines and interprets information and ideas critically
Solves problems and makes decisions	Resolves problems and makes decisions
Communicates effectively and efficiently	Communicates effectively and efficiently
Manages and supervises	Manages and supervises
Understands how IT impacts a CA's daily functions and routines	Understands how IT impacts a CA's daily functions and routines
Considers and applies legal concepts	Considers basic legal concepts
Understands how the national and international environment impacts a CA's role	

Source: Adapted from CPA Canada 2014b; SAICA 2014

A comparison is also made between the framework of SAICA and the framework of some of the other professional accounting bodies across the globe in order to highlight similarities (see table 2.3). The SAICA competency framework is chosen as a base as it is the most comprehensive framework evident from the comparison between the different professional accounting bodies' frameworks (see table 2.2 and table 2.3). The SAICA competency framework is set out below and will be used as a base from which to further explore the literature, whereafter table 2.3 will depict the different pervasive skills categories of some of the professional accounting bodies in different areas of the world.

2.6.1 Ethical behaviour and professionalism

Professional accounting bodies around the world expect their members to behave ethically and professionally. The highest level of ethical behaviour and professionalism is demanded by the time accounting graduates enter the profession (SAICA 2010b:11-12). The new SAICA training programme places increased emphasis on pervasive skills, which include personal and professional skills such as ethics (Steenkamp 2012:481). Steenkamp (2012:491) conducted a study among Certificate of Theory in Accounting (CTA) students at a residential university in South African to determine their perceptions of the new programme. Although most students perceived the increased focus on ethical behaviour and ethics as positive, three of the 112 respondents in Steenkamp's study mentioned that ethics cannot really be taught, and the teaching of ethics is challenging because it is an internal value.

South African universities often integrate the key elements of this skills set, as set out in the SAICA professional code of conduct, its disciplinary rules, South African legislation and regulations, and IAS, in their auditing modules (Barac & Du Plessis 2014:65). Among other suggested approaches, IFAC (2006:103) suggests that professional values, ethics and attitudes can be enhanced by multidimensional case studies. Although case studies have been found to be useful in enhancing the ethics of accountants (Lampton 2011:67), an exploratory study assessing the effectiveness of a 12-week professional responsibility capstone course for accounting seniors with case studies was not found to be adequate to increase their ethical awareness (Shawver 2006:49).

Employers also expect accountants to behave professionally and ethically. In a survey conducted by Kavanagh and Drennan (2008:279), practitioners across a number of organisations and industries who employ accounting graduates were of the opinion that there is a demand for ethical awareness/professional skills among accounting graduates. According to Amernic and Craig (2004:347), the principles of ethical and moral behaviour can be taught to students, but accounting educators should not be held responsible for the actual ethical and moral behaviour of students after graduation. In New Zealand, Carr, Chua and Perera (2006:365, 372) surveyed accounting alumni from Massey University to determine their perception of the skills needed for success in the accounting profession. Professionalism was one of the identified skills and personal attributes regarded as vitally important to stand out in the profession. Professional accounting education must instil ethical standards and the commitment of a professional accountant (Carr et al 2006:362).

In response to the requirements of professional accounting bodies, accounting educators' goal should be to teach a maximum level of ethical values and sensitivity in order to enhance the ethical orientation of accounting students (Esmond-Kiger 2004:42). In a study by Houck and Laditka (2006:158-160, 164, 165), students developed their own case studies relating to their personal ethical conflicts experienced. After the development of these student case studies, information was shared in class with educators and fellow students.

The subsections of the pervasive skills, ethical behaviour and professionalism, will now be briefly discussed:

2.6.1.1 Uses an ethical reasoning process

Mohamed and Lashine (2003:7) posit that analytical or critical thinking skills have become more important as a result of the increasing publicised corporate misfortunes. Ethics are important to CIMA (CIMA 2014d), and their members have to abide by a code of ethics. CIMA (2014b) also developed a students' ethics support tool which provides students with an overview of the CIMA Code of Ethics, the importance of workplace ethics and suggestions on how ethical considerations can

be assessed in their examinations. In CIMA's previous syllabus, ethics contributed 10% of the marks of the T4 (otherwise known as TOPCIMA) final case study-based examination (CIMA 2012). The 2015 CIMA Professional Qualification Syllabus (CIMA 2016) notes that ethical issues will be included in the P3 Risk Management Examination as part of the "Responses to strategic risk" category which contributes 20% of the examination. The P3 Risk Management Examination forms part of the strategic level examinations of CIMA as explained in chapter 1. It thus appears that some of the ethical competencies demanded of accounting graduates can be successfully incorporated into case studies.

2.6.1.2 Protects the public interest

SAICA (2010b:21) requires CAs to be able to identify ethical dilemmas in any given situation and to protect the public interest. Maintaining the public's trust is necessary to ensure the survival of the accounting profession (Carnegie & Napier 2010:360). In light of the recent increase in publicised corporate failures, Mohamed and Lashine (2003:7) noted that accounting education should place an increased emphasis on problem-solving skills, analytic reasoning and forensic accounting procedures to protect the public interest.

2.6.1.3 Acts competently with honesty and integrity

It is becoming increasingly important to include ethics in the accounting curriculum because it potentially implies a decrease in the occurrence of corporate scandals (Clikeman 2003:80). SAICA (2010b:20) defines integrity as "... acting ethically and honestly, carrying out all work with an objective frame of mind and maintaining independence, both in fact and in appearance, when involved in independent services". Brewster (2003:62) states that the accounting profession's vision is to find and tell the truth. He goes on to comment that accountants should cling to the truth and always strive for its accomplishment. Peter Wilson, former president of the American Accounting Association (AAA), suggests that educators need to focus on two values that uphold the accountant's reputation: integrity and professional scepticism (Esmond-Kiger 2004:42-43). According to IFAC (2006:75), corporate cases and hypothetical case studies are regarded as the most effective method to instil ethics. Fortin and Legault (2010:102-103) also found that the principles of ethical conduct can be instilled through case study-based teaching.

2.6.1.4 Performs work competently and with due care

Accountants should be diligent and dedicated when they perform their duties (Shuttleworth 2012:251). According to Mohamed and Lashine (2003:14), accounting education should provide accounting graduates with the “wisdom, critical ability and ethics needed for them to make the right decision at the right time”.

2.6.1.5 Maintains objectivity and independence

Compliance with the fundamental ethical principle of objectivity is one of the minimum education programme requirements by IFAC for professional values, ethics and attitudes (IFAC 2014b). IFAC member bodies and educators are encouraged to use case studies to enhance the development of professional values, ethics and attitude (IFAC 2014b). The ability to work independently is regarded as an important element of self-management, which is desirable from the perspective of employers for accounting graduates to possess in the 21st century (Tempone, Kavanagh, Segal, Hancock, Howieson & Kent 2012). Case studies can be used as a method of acquisition or development of this element of the ethical behaviour and professionalism skills set (Beard et al 2008:233; Houck & Laditka 2006:159, 164-165).

2.6.1.6 Avoids conflict of interest

Accountants should ensure that they are familiar with the guidelines and laws that prevent the occurrence of conflict of interest. No party should be favoured above another (SAICA 2010b:22). The findings of a recent study by Barac and Du Plessis (2014:71) suggest that the CODs of undergraduate accounting programmes in South Africa perceive the workplace as having a greater responsibility than universities to teach accountants to avoid conflict of interest. Yet again, case studies can be used as a method of acquisition or development of avoiding conflict of interest (Beard et al 2008:233; Houck & Laditka 2006:159, 164-165).

2.6.1.7 Protects the confidentiality of information

Members need to realise that they should never exploit information that should be treated as confidential, and that information should be protected from accidental distribution (SAICA 2010b:22). Confidentiality is a principle included in both the

SAICA and the CIMA codes of ethics. The principle of confidentiality imposes an obligation on all professional accountants to refrain from disclosing confidential information subject to certain conditions. Case study examinations (CIMA 2010:71) could potentially test whether students are aware of obligations such as confidentiality.

2.6.1.8 Maintains and enhances the profession's reputation

International accounting scandals such as Enron, WorldCom, Parmalat and Tyco have led to public and regulatory inspection of both the accounting profession and accounting education (Carr et al 2006:359). It is suggested that new regulations and auditing standards may restore public trust in the accounting profession (Palmer et al 2004:889). The accounting profession needs to portray an image of confidence and respect, offering challenges and benefits in order to attract and retain talented members (Carnegie & Napier 2010:260). The CA(SA) designation is one of the most sought-after business designations in South Africa as a result of the quality inherent in the education and training of CAs(SA) (SAICA 2009b). SAICA moved towards case study-based examinations in order “to ensure that the CA(SA) qualification remains relevant, is abreast of international trends and meets evolving business needs” (SAICA 2013b), eventually resulting in maintaining its excellent reputation. In the frequently asked questions document on the APC, SAICA (2013a:1) states that “the SAICA Brand is directly linked to the quality of the qualification process”. It is further stated in this document that “in keeping abreast with other highly rated international professional accountancy bodies, SAICA has specifically revisited the Part II exam”.

2.6.1.9 Adheres to laws, professional standards and policies and the rules of professional conduct when exercising professional judgement

As explained in the Detailed Guidance for Academic Programmes document of SAICA (SAICA 2010b), adherence to the rules of professional conduct includes adherence to SAICA's Code of Professional Conduct, and if applicable, the Independent Regulatory Board for Auditors (IRBA) and the code of ethics implemented by an employer. The SAICA by-laws explain improper conduct as well as punishable offences (SAICA 2009a), such as breach of professional

confidentiality, unethical conduct, excessive charging and unauthorised advertising, to name but a few. This document also notes improper conduct by trainee accountants - hence the need for accounting graduates to be familiar with the content of these documents. The IRBA Disciplinary Rules also list improper conduct. Case studies can be used as a method of development and assessment of this key element of the ethical behaviour and professionalism skills set (Beard et al 2008:233; Houck and Laditka 2006:159-160, 164, 165).

2.6.2 Personal attributes

Accountants are required to adopt individual characteristics that are important to fulfil the profession's pledge to be leaders in improving decision making and adding value to organisations (CPA Canada 2014b:24; SAICA 2014:18).

2.6.2.1 Self-manages

According to Tempone et al (2012), self-management comprises components such as "ambition; community engagement and social responsibility; hard work and dedication; a holistic and flexible approach to tasks; the ability to deal with complexity, uncertainty and pressure; intellectual capacity; displaying a well-rounded maturity; ability to work independently; and effective time management". Graduates should be able to maintain a healthy work-life balance and be able to switch readily between different tasks and assignments (Bui & Porter 2010:34; De Villiers 2010:4). One of the partners of a small audit firm interviewed in Bui and Porter's survey (2010:34) explained that his firm's staff members need exceptional organising skills. The partner explained that confusion could easily occur as a result of having many clients simultaneously - hence the importance of being organised and able to switch between different clients. He believes that not everyone has this organising ability and that it takes a certain "CA breed". In the UK, Arquero Montaña et al (2001) surveyed 214 employers of management accountants and determined that accounting graduates were perceived to lack stress management skills (Arquero Montaña et al 2001:311). This study also determined that they were perceived to be deficient in their ability to organise and delegate tasks.

2.6.2.2 Demonstrates responsible leadership

In a survey conducted by Kavanagh and Drennan (2008), students nominated leadership skills as the most important for their prospective career. According to Arquero Montaña et al (2001:305), all accounting graduates should demonstrate leadership potential. SAICA (2010b:4) regards “leadership” as a fundamental attribute of a CA(SA) and advocates that a CA(SA) should have the ability to act as a leader in any environment. SAICA (2010b:4) acknowledges that leadership ability is unlikely to be fully developed from prequalification programmes, and suggests that the foundation should be laid in such a way that when it is complemented by post-qualification development and experience, it should deliver CAs with leadership abilities. Leadership is one of the enabling competencies required from CPAs that allows them to function competently in an increasingly complex environment (CICA 2016; CPA Canada 2016). Effective leadership skills are becoming increasingly essential to be successful in business and CIMA has excellent resources, such as the CIMA competency and learning website for the development of this and other pervasive skills (Griffiths 2015). Wessels and Steenkamp (2009:120) deduced from a list of skills required by professional accounting bodies that accountants need to be able to think and act strategically. This implies that accountants need to be able to demonstrate leadership and initiative. Leadership was also identified as one of the most sought-after skills by employers in the study conducted by Jackling and De Lange (2009:377). In an ODL environment, it might be challenging to enhance students’ leadership skills (Shuttleworth 2012:258). This matter will be further discussed in section 2.9.

2.6.2.3 Maintains and demonstrates competence and recognises limits

Continuous learning is critical for accounting graduates’ future success (Kavanagh & Drennan 2008:282). Most of the professional accounting bodies compel their members to adhere to continuing professional development (CPD) requirements. SAICA (2010b:20) suggests that members regularly assess their personal development needs and that they seek learning opportunities that address those needs. In a survey conducted by Hassall et al (2005:386), Spanish employees rated a commitment to lifelong learning highly, an essential pervasive skill required by

accountants. The ODL way of teaching provides the ideal environment and opportunity for lifelong learning (Letseka & Karel 2015:68).

2.6.2.4 Strives to add value in an innovative manner

As previously discussed in this study, accountants should be able to contribute to the decision-making process and add value to organisations (Albrecht & Sack 2000:2-3; De Lange et al 2006:365; Gammie et al 2002:64; Hassall & Milne 2004:135; Howieson 2003:79-80; Jackling & De Lange 2009:369; Wessels 2008:147). Innovative problem solving is clearly regarded as a crucial component of an accountant's skills set (Barac 2009:35; Howieson 2003:69).

2.6.2.5 Manages change

In a study conducted by Bui and Porter (2010:37), an employer mentioned that change and uncertainty are the characteristics that define the accounting environment. The employer went on to comment that the switch from university to the workplace is an early challenge which provides excellent preparation for the continuous learning and professional development in an ever-changing accounting career.

2.6.2.6 Treats others in a professional manner

It is safe to assume that one would be required to treat others in a professional manner when working in a team. Refer to section 2.6.2.9 for a more detailed discussion.

2.6.2.7 Is a lifelong learner

Accountants are encouraged to develop an array of skills and encouraged to become lifelong learners (Hassall et al 2005:386; Parker 2002:4; SAICA 2010a). In the SAICA Competency Framework document (SAICA 2014), it is stated that: "...CAs work in demanding situations and that intellectual and application ability should be of a level which enables life-long learning to occur in this context".

2.6.2.8 Plans and effectively manages teams and projects

Accountants have to be open-minded to new ideas, new technologies and new

cultures and should be willing to change and adapt (Mohamed & Lashine 2003:6). In their study, Mohamed and Lashine comment that accountants need to be familiar with the psychology of different people learning at different ages and different learning stages.

2.6.2.9 Works effectively as a team member

Entry-level trainee accountants in public practice usually work in teams and training officers perceive the ability of these accountants to work in a team as extremely important (Barac 2009:35). Bui and Porter (2010:34) arrived at a similar conclusion and stated that the ability to work as part of a team is considered to be a vital attribute of prospective accounting employees. Hassall et al (2005:385) and Jackling and De Lange (2009:377) found that employers perceive teamwork as one of the highest valued pervasive skills for accounting graduates. ODL students are not always exposed to the dynamics of group work and are compelled to work independently. It might be difficult for them to adjust to working in teams when entering the workplace (Shuttleworth 2012:258).

2.6.2.10 Manages time effectively

Time management skills are considered by CIMA employers to be one of the top priorities that universities need to develop (Arquero Montaña et al 2001:311; Hassall et al 2005:385). Training officers also regard proper time management skills as critical (Barac 2009:35).

2.6.2.11 Demonstrates good corporate citizenship attributes

Being socially responsible forms part of having the ability to self manage (Tempone et al 2012).

2.6.3 Professional skills

Professional skills include creation, analysis, evaluation, and synthesis of information and ideas; problem-solving and decision-making skills; communication and management skills, and proficiency in technology (CPA Canada 2014b:26).

2.6.3.1 Obtains information

Processing and communicating information through the use of IT has become vital (Mohamed & Lashine 2003:6). Knowledge of accounting packages is no longer regarded as a bonus; it is necessary and should be emphasised at university level (Mohamed & Lashine 2003:6). Accounting graduates should have intellectual skills that include the ability to detect, obtain and organise information (Burnett 2003:132). Entry-level trainee accountants should be able to ask relevant questions to obtain the correct information (Barac 2009:35). At Sonoma State University, an information literacy teaching module was developed for the advanced accounting course students (Cunningham & Anderson 2005:3). This module teaches students how to find the correct authoritative accounting literature through search tools to solve business cases. The accounting students gained experience with business case studies and acquired skills in obtaining information (Cunningham & Anderson 2005:16). CODs at various South African universities involved in undergraduate accounting programmes indicated that case studies are often used for the development of this element of the professional skills set (Barac & Du Plessis 2014:69).

2.6.3.2 Examines and interprets information and ideas critically

Boyce et al (2001:54) promote willingness to deal with complexity and confusion and to analyse conflicting information. Analytical reasoning skills are improved through the application of judgement (Boyce et al 2001:45). An accountant's analytical skills enable him or her to examine, collect and interpret the right information in a logical way (Mohamed & Lashine 2003:6). Critical thinking, problem solving and application of judgement are skills that postgraduate students studying towards becoming CAs at the University of Johannesburg (UJ) felt were improved during the Thuthuka university programme (Streng 2011:59,88). Critical thinking skills were also among the pervasive skills identified by academics at the Southeast Missouri State University that have to be assessed in order to determine whether students are indeed learning what they need to learn (Beard et al 2008:233). Strategic and critical thinking skills can inter alia be acquired or developed by having a simulated investment portfolio in a real company which allows students to make comparisons

with the result of their actions against the stock market (Davis, Dudley & McGrady 2001:127, 130-131).

2.6.3.3 Solves problems and makes decisions

The accounting profession requires problem solvers who are innovative people with the ability to think critically, focusing on problem identification and solving of real-world business problems (Barac 2009:35; Burnett 2003:131, 132; Mohamed & Lashine 2003:6; Wessels & Steenkamp 2009:120). Training officers regard the ability of entry-level trainee accountants to ask the right questions as crucial. They also perceive the ability to analyse business problems, discern the true nature of situations and apply problem-solving methodologies as important (Barac 2009:35). According to Wessels and Steenkamp (2009:120), accountants need to be creative in solving problems and making decisions. Eight out of 12 CODs in the study of Barac and Du Plessis (2014:69) revealed that case studies are used to develop problem-solving skills in their undergraduate accounting programmes.

2.6.3.4 Communicates effectively and efficiently

Barac's study (2009:35) found that training officers regard communication skills in the workplace as absolutely essential. The ability to express one's views orally and in writing, listen attentively and comprehend written material is regarded by training officers as being of the utmost importance for entry-level trainee accountants. These findings concur with the findings of other authors (Carr et al 2006:373; De Lange et al 2006:368; Wessels & Steenkamp 2009:120), who state that effective communication skills are essential for accounting professionals. The oral and written communication skills of accounting graduates should be well developed (Arquero Montaña et al 2001:305; Bui & Porter 2010:34; Burnett 2003:132). Accounting graduates should be able to both present and defend their views, negotiate and listen efficiently and write reports (Arquero Montaña et al 2001:305). A survey conducted by Schmidt, Green and Madison (2009:151) among accounting department chairs in North America revealed that all communication skills are deemed important in the accounting curriculum.

Communication skills are essential for accountancy students to be successful in their studies. For instance, the TOPCIMA examination has 20% of its marks allocated to discussing issues and communicating the evaluation of different courses of action (CIMA 2012:3). Another 20% of the marks are available where students have to communicate their recommendations in the case study-based examination. Zoe Robinson, co-author of “A student’s guide to writing business reports” is of the opinion that students’ ability to score well in these two areas depends mainly on their ability to communicate their thoughts and opinions effectively in a report (CIMA 2012:3). She goes on to comment that students’ marks will mainly depend on their communication skills and not necessarily on the strength of their analysis or the depth of their commercial awareness (CIMA 2012:3). Communication skills are included in the CIMA competency framework, and the CIMA 2015 Professional Qualification Syllabus (CIMA 2016) mentions that the new integrated case studies will also test students’ communication skills.

The ability to communicate effectively in common global languages, negotiation skills and working in a team environment using new communication technologies have become increasingly significant (Mohamed & Lashine 2003:6). It was found that employers of management accountants in Spain and the UK regarded communication skills as one of the highest valued pervasive skills for accounting graduates (Hassall et al 2005:385). In another study, CIMA employers also considered communication and stress management skills as important (Arquero Montaña et al 2001:311). Wide support exists for case studies as a method to enhance accounting students’ written communication skills (Barac & Du Plessis 2014:59). In an ODL environment, the teaching of oral and listening communication skills poses a challenge (Berry et al 2011; Shuttleworth et al 2013:1518). See section 2.9 for an in-depth discussion on the teaching of communication skills in the unique ODL environment.

2.6.3.5 Manages and supervises

According to alumni graduates, leadership and project management should be included in the pervasive skills required by entry-level trainee accountants (Carr et al 2006:360). Burnett (2003:132) asserts that accounting graduates should be able to

work effectively in groups and to provide leadership when required. This implies that accounting graduates should be able to manage and supervise to some extent.

2.6.3.6 Understands how IT impacts on an accountant's daily functions and routines

Owing to the lightning-quick rate of developments in technology, Johnson (2005:1) posits that accountants could turn into “dinosaurs” in no time. He cautions that it is easy to become outdated and out of touch and thus suggests that accountants need to be technologically proactive. Training officers expect entry-level trainee accountants to be skilled in the use of IT applications (Barac 2009:36; Burnett 2003:132). The use of spreadsheet software by South African professional accountants is a critical IT skill (Wessels 2008:147). Knowledge of IT helps accounting graduates to adapt faster in their new working environments (Mohamed & Lashine 2003:6). A study conducted by Wells et al (2009:409) among accounting graduates employed in public practice with three- to five-years of postgraduation professional experience revealed that although IT skills are important, interpersonal skills are even more important. In a study conducted by Shuttleworth et al (2013:1525), third-year management accounting students at an ODL university mentioned that access to computers is a challenge for many distance education students and it is not easy for all ODL students to acquire competence in the use of IT. In a study by Barac and Du Plessis (2014:63), numerous CODs involved in undergraduate accounting programmes in South Africa revealed that IT skills were presented in a dedicated module in their universities' undergraduate programmes.

2.6.3.7 Considers and applies legal concepts

SAICA (2010b) expects CAs to have a general understanding of basic legal concepts when performing work, for example, contract law and tax case law. Corporate governance, seeking greater accountability and transparency increasingly concern regulators, shareholders and other stakeholders (Albrecht & Sack 2000:10; Parker 2002:4). According to Howieson (2003:72), there are expectation changes in the now more informed stakeholders who demand greater accountability, for example, the movement towards “triple bottom line reporting”. In May 2010, Sustainability South Africa formed the Integrated Reporting Committee (IRC) to provide guidance on integrated reporting (Sustainability SA 2014). One of the objectives of the IRC is to

bring together international integrated reporting and to consider the recommendations of the King Code (Sustainability SA 2014). The principles of the King Code of Governance of 2009 (King III) were incorporated into the Johannesburg Stock Exchange's (JSE's) listing requirements in 2010, and listed companies had to apply King III principles or give reasons for not complying with them (Sustainability SA 2014). As previously mentioned in this literature review, South Africa has also seen specific changes in legislation (such as the new South African Companies Act 71 of 2008), and students need to have a basic knowledge of applicable legal concepts (Fouché 2013:137).

2.6.3.8 Understands how the national and international environment impacts a CA's role

Accounting graduates require a knowledge of global issues such as the legal, ethical and standards of information sources (Mohamed & Lashine 2003:7). Because of globalisation, a basic knowledge of local and international financial regulations such as import/export regulations, custom dues and immigration laws is essential (Mohamed & Lashine 2003:7). Many accounting graduates are likely to be involved with multinational companies that use different accounting standards. Carr et al (2006:364-365) surveyed 236 alumni from a university in New Zealand who graduated in accounting between 1995 and 2003, and found that they perceived identifying global and local perspectives as one of the skills needed to excel in the profession. The new global business environment has resulted in the horizon and scope of business no longer being bound by national boundaries, and this has implications for accountants to help drive businesses forward (Jackling & De Lange 2009:369).

It is evident from the above discussion that pervasive skills are important for accountants in order to act professionally. Competence in these skills is critical for success. There is an increased demand for graduates to maintain and retain a broad skills set that includes the pervasive skills mentioned in this section (Barac & Du Plessis 2014:53). Table 2.3 depicts the pervasive skills categories that some professional accounting bodies across the globe require. As mentioned in section 2.6, CPA members of AICPA wishing to enhance their credentials with the CGMA designation have to consider the CGMA Competency Framework (AICPA 2016:1).

Table 2.3: Different pervasive skills categories of professional accounting bodies across the globe

SAICA & CPA Canada	IFAC	AICPA	ACCA	CIMA(CGMA)
Ethical behaviour and professionalism:	Professional values, ethics and attitudes:			Ethics, integrity and professionalism
Uses an ethical reasoning process		High ethical standards	Acting ethically and legally	
Protects the public interest				People skills:
Acts competently with honesty and integrity	Ethical principles	Problem solving	Credible	Influence
Performs work competently and with due care				
Maintains objectivity and independence	Commitment to the public interest	Analytical and research skills	Influence/challenge	Negotiation
Avoids conflict of interest			Proactive	
Protects the confidentiality of information				Decision making
Maintains and enhances the profession's reputation	Professional scepticism and professional judgement	Understanding emerging technologies	Sceptical	Communication
Adheres to laws, professional standards and policies and the rules of professional conduct when exercising professional judgement			Commercially aware	Collaborating and partnering
		Marketing/client focus	Continuous improver	
Personal attributes:				Leadership skills:
Self-manages	Professional skills:			
Demonstrates responsible leadership		Broad business perspective	Problem solver	Team building
Maintains and demonstrates competence and recognises limits	Intellectual skills			
Strives to add value in an innovative manner		Personal skills		Coaching and mentoring
Manages change	Personal skills		Supporting others	
Treats others in a professional manner				Driving performance
Is a lifelong learner			Exercising professional judgement	Motivating and inspiring
Works effectively as a team member	Organisational and business management skills	Project management		
Manages time effectively			Organised/aware	Change management
Demonstrates good corporate citizenship attributes				
Professional skills:				
Obtains information				
Examines and interprets information and ideas critically (critical thinking)	Interpersonal and communication skills		Strong communication skills, including the ability to be a good listener	Communicator
Solves problems and makes decisions				
Communicates effectively and efficiently				
Manages and supervises				
Understands how IT impacts on a CA's daily functions and routines				
Considers and applies legal concepts				
Understands how the national and international environment impacts a CA's role				

Source: Adapted from ACCA (2014b); AICPA (2014); CIMA (2014d); IFAC (2010A); SAICA (2014)

Striking similarities can again be seen in table 2.3 between the expected pervasive skills of the different worldwide professional accounting bodies. If one looks at communication skills, for example, this vital skill is included in all of the professional bodies' pervasive skills frameworks. Similar skills were highlighted with the same colours to emphasise the fact that these pervasive skills are prescribed across the globe.

Skills for accounting graduates can be categorised into the following four categories: basic academic and technical skills; higher-order cognitive skills (critical thinking skills); ethics and professional skills; and personal qualities. Shuttleworth (2012:246) listed the following higher-order cognitive skills in her literature review: learning; reasoning; contextualisation; creative thinking; decision making; and problem solving. Developing students' critical thinking skills is an important challenge facing accounting educators today (Cascini & Rich 2007:17). Critical thinking is more than simply acquiring information or mere memorisation (Scriven & Paul 2005:1). The importance of higher-order skills merits an elaboration thereof in the remaining paragraphs of this section.

Higher-order thinking skills were defined decades ago by King, Goodson and Rohani (1998:1). In their definition, these skills consist of critical, logical, reflective, metacognitive and creative thinking skills. They explained in the definition that these skills are used by individuals when they come across problems, questions and dilemmas that are not known or familiar to them. When these skills are applied, it leads to explanations, decisions and performance that promote growth in the specific individual (King et al 1998:1). Scriven and Paul (2005:1) define critical thinking as a way of considering topics or problems where the "thinker improves the quality of his or her thinking by skilfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them". Problem solving and decision making that occur when students encounter problems they are unfamiliar with or scenarios with uncertainties, result in the promotion and development of higher-order thinking skills (Saul & Wuttke 2011:5). Team work, group work and collaborative learning promote understanding of course content and encourage critical thinking (Dzakiria 2012:1).

The marketplace demands critical thinking skills from accountants and accounting graduates (Thompson & Washington 2015:1-2). In the literature review of Thompson and Washington (2015:3), they point out that students struggle to solve accounting problems that are diverse and unstructured and not similar to those presented in the classroom. They go as far as to say that the quality of future accountants will be shaped by a need for improvement in critical thinking skills. It is imperative that educators address the need for developing and enhancing students' critical thinking or higher-order thinking skills as well as other pervasive skills previously described in this section.

In an article written by Mandi Oliver, Senior Executive Professional Development at SAICA, she mentioned that the introduction of the new APC was worth the effort as candidates who wrote the new assessment would be more competent in displaying their higher-order thinking skills (Oliver 2015:44). The APC requires a "higher level of application of knowledge and advice offered" and decision-making is pitched at a higher level (Oliver 2015:44). In addition, critical thinking skills are deemed important for success in an ODL environment (Geduld 2013:104).

2.7 CRITIQUE AGAINST PROFESSIONAL BODIES' ATTITUDE TOWARDS PERVASIVE QUALITIES AND SKILLS

Professional bodies, however, have not been without their critics. A study conducted in the UK points towards professional bodies starting to concentrate too much on developing business professionals as opposed to accountants (Carnegie & Napier 2010:361). Throughout the world, including Australia, the United States of America (USA) and the UK, professional accounting bodies have been blamed for negatively influencing academics (Venter & De Villiers 2013:1247). SAICA influences South African universities' accounting departments directly and three CODs interviewed by Venter and De Villiers (2013:1247) stated that SAICA is "demanding".

As early as the 1990s, Hassall et al (1998:326) highlighted the fact that professional accounting institutions expect graduates to be advised and instructed on how to develop pervasive skills, while at the same time expanding the technical workload of

their curriculums. Both Rebele (2002:24) and Humphrey (2005:346-349) suggested that pressure is being placed on higher education by the accounting profession to develop generic pervasive skills. Gammie et al (2002:65) concluded that universities should not be considered as substitute training and employment organisations. Universities have to comply with the demands placed on them by professional accounting bodies for accreditation purposes, and they are therefore limited by the set syllabus and assessment methods (Cullen et al 2004:252). The next section debates whether or not the responsibility to develop employable accountants lies with educators.

2.8 HIGHER EDUCATION'S RESPONSIBILITY TO DEVELOP EMPLOYABLE ACCOUNTANTS

Pervasive skills have an increased relevance in the context of the working world (Barrie 2004:262). According to Shuttleworth (2012:245), accounting graduates require a "fit-for-purpose" mix of skills to increase their chances of employment. The employers of accountants want to see prospective employees with well-developed pervasive skills (Beard et al 2008:230; Crawford, Helliard & Monk 2011:123; Gammie et al 2002:64; Hassal et al 2003:81, 82, 86; Hassal et al 2005:385; Jackling & De Lange 2009:376; Kavanagh & Drennan 2008:279; Kranacher 2007:80; Pan & Perera 2012:99; Robles 2012:455). Cognitive and pervasive skills are essential for the employability of accounting graduates (Jackson & Chapman 2012:95). According to Kermis and Kermis (2010:1), "technical skills are necessary, but not sufficient for a successful accounting career that includes the individual's selection, retention and advancement". They cite examples of employability skills that should be included in the curricula of accounting students as part of their tertiary accounting education, namely career skills, emotional intelligence, time management and other pervasive skills such as public speaking and teamwork skills.

Kavanagh and Drennan (2008:282) assert that content knowledge becomes outdated and cannot always be transferred to a different type of career. They go on to comment that critical (pervasive) skills remain relevant and can be transferred to different types of jobs and assignments. Kavanagh and Drennan (2008:279) found

that many essential non-technical (pervasive) skills that employers require are not being addressed properly by universities' accounting curriculums. Gammie et al's (2002:64) literature review suggested that employers demand the following skills from new accounting graduates: communication, problem solving, personal and interpersonal skills, responsibility and organisational ability. Arquero Montañó et al (2001:310, 311) found that CIMA employers in the UK expect universities to develop accounting students' pervasive skills.

Gammie et al (2002:71) proposed a dedicated module introduced at second-year level entitled "Business Enterprise Skills" to ensure that accounting graduates are more prepared for their first work experience. Thirteen skills are addressed in this module: CV writing, interview skills, job search skills, time management, writing in business, practical research skills, presentation skills, team working, using IT in business, career planning, oral communication skills, health and safety and company culture. Gammie et al (2002:73-74) go on to suggest various ways of presenting the syllabus for the "Business Enterprise Skills" module. Some of the modes of delivery listed in their study are as follows: lectures; tutorial letters to put lecture content into practice; reflection and advice on student interview performance; tutorials on networking skills; interactive computer simulation; interactive IT laboratory sessions; guest lectures; presentations by visiting placement employers; and group work. However, they do not refer to the use of case studies in this module.

It is questionable whether higher education is able to develop graduates with the necessary employability skills expected by employers (Cranmer 2006:169, 170; Wilton 2008:143, 144). In a study conducted by Bui and Porter (2010:33), employers indicated that university courses provide students with a conceptual understanding of business, but they also mentioned that "real" business knowledge can only be acquired by on-the-job experience. The studies conducted by Cranmer (2006:169) and Lucas, Cox, Croudace and Milford (2004:66) support this finding as they conclude that it is unrealistic for universities to claim that employability skills can be taught at university. The literature presents a view that the workplace and universities have to work together and complement each other in developing the pervasive skills required of accountants (Ballantine & McCourt Larres 2009:388; Bui

& Porter 2010:33, 37). In light of pervasive skills development, it is not clear at which point universities' responsibilities end and employers' responsibilities start (Barac & Du Plessis 2014:54). CODs involved in the undergraduate accounting programmes of various South African universities perceived employers as being primarily responsible for developing accountants's pervasive skills (Barac & Du Plessis 2014:72). In contrast to these views, the literature reveals that employers expect universities to take responsibility for developing accounting graduates' pervasive skills (Barac & Du Plessis 2014:75). Cranmer (2006:182) suggests that academics' efforts to teach employability skills would be better utilised by increasing employment-based training and work experience for graduates. According to Lucas et al (2004:66), pervasive skills development is a "tacit process" and not developed in standalone modules.

2.9 PERVASIVE SKILLS TRAINING IN AN ODL ENVIRONMENT

Distance education is unique and complicated (Dzakiria 2012:1; Shuttleworth et al 2013:1512) and has expanded exponentially during the past 20 years (Makoe 2015:8). Unisa is Africa's leading and largest distance learning institution (Prinsloo 2009:1; Unisa 2013) offering services to an estimated 400 000 students in South Africa and the rest of Africa (Letseka 2015:3). Unisa's enrolment figures comprise about 40% of South Africa's enrolment figures (Letseka & Karel 2015:66). Distance education is defined in the Unisa ODL policy (Unisa 2008:1) as "a set of methods or processes for teaching a diverse range of students located at different places and physically separated from the learning institution, their tutors/teachers as well as other students". ODL is defined in the same policy (Unisa 2008:2) as consisting of multiple dimensions aiming to overcome any form of distance between students and the institution, educators, study material and fellow-students. ODL "focuses on removing barriers to access learning, flexibility of learning provision, student-centredness, supporting students and constructing learning programmes with the expectation that students can succeed" (Unisa 2008:2).

Distance education is a learning process in which students are distant in time and space from educators and tutors (Kamanja 2007:722). At Unisa, students live in

different geographical areas and “they are mainly scattered in the remote rural areas of the provinces of SA and other developing and underdeveloped countries” (Pitsoe & Baloyi 2015:96). It is possible for Unisa ODL students to study remotely because Unisa subscribes to the open distance learning philosophies of accessibility, student-centeredness and flexibility (Makoe 2015:15, 17). ODL educational delivery has improved tremendously over the past few years with increasing numbers of students enrolling in various ODL programmes (Dzakiria 2012:1). ODL offers flexibility by minimising limitations on study in terms of time, access, place, pace of education and method of study (Dzakiria 2012:1; Vakoufari, Christina & Mavroidis 2014:99). Critical thinking, organisational and emotional skills are prerequisites for success in an ODL environment (Geduld 2013:104).

The failure of accounting education to provide accounting graduates with the necessary pervasive skills required by the profession is often the result of institutional constraints (Bui & Porter 2010:29). At Unisa, student numbers are large when compared to the numbers at residential universities (Ryan 2008:878). Unisa, as an ODL institution, has to cater for a variety of students from different age groups with different levels of experience and different views and goals (Heydenrych & Prinsloo 2010:8). There is limited face-to-face contact with students and group discussion classes usually happen on an ad hoc basis once a semester, with large numbers of students attending these classes. Designing support material for students is therefore crucial in the ODL environment (Pitsoe & Baloyi 2015:96). It is highly unlikely that distance education educators would be able to fit pervasive skills training into the limited face-to-face time available with their students. ODL has a lack of direct interpersonal contact (Martin 2007:474). myUnisa is the learning management system at Unisa (an online tool) that is available to all registered students with internet access (Pitsoe & Baloyi 2015:97). Students identified two key deficiencies that keep educators from developing the desirable pervasive skills in their students (Bui & Porter 2010:45, 46). The first factor identified in Bui and Porter's study, is poor teaching skills by accounting educators; and the second factor is a lack of passion in the subject matter (Bui & Porter 2010:45, 46). The students commented that they found accounting educators boring and demotivated.

ODL academics often feel overwhelmed and confused because they have to operate in a multifaceted environment and have to manage tuition, research, community involvement and academic citizenship tasks (Bezuidenhout 2013:20). In an ODL environment with limited face-to-face contact with students, educators mainly engage with students through written study material. The quality of the study material should be a priority for ODL academics. There is an increase in workload of academics (Bezuidenhout 2013:23) and they experience time and work constraints and find it a burden to continuously update the syllabus.

ODL students often experience challenges such as time management, coping with personal stress, deficient IT skills and proficiency in English as the instructional language (Geduld 2013). Educators need to consider the demographics of the generation of students in their classes (Fouché 2013:138). At an ODL institution such as Unisa, the students come from a variety of different backgrounds and belong to different generations. Students from disadvantaged backgrounds find it challenging to be successful in ODL (Makoe 2012:95). Students from different generations might have different expectations and different skills requirements. On the one hand, many Unisa students study part time and their work experience allows them to develop pervasive skills while studying by giving them exposure to real-world problems and employer expectations; on the other, many students are not exposed to real-world working environments (Shuttleworth et al 2013:1510, 1514). Many of the students who study part time experience a time management problem because of the fact that they are employed on a full-time basis while having to study. Some of these students might even have family responsibilities to cope with.

Unisa's student profile is exceptionally diverse, ranging from high-income earning to poor students who do not even have electricity (Ryan 2008:878). ODL students are diverse in age, ability, disability, maturity, commitment, motivation, educational background, working experience, study mode, class, sex, race, religion, marital status, culture and the like (Davis 2003:245; Dzakiria 2012:1; Letseka & Karel 2015:68; Pitsoe & Baloyi 2015:99). Many students are now "faced with a new learning environment and the expectation that they will have independent learning skills and the capacity to engage in activities that require self-direction and self-

management of learning” (McLoughlin & Marshall 2000:1). Although it is assumed that students operating in the 21st century should already have these attributes, Dzakiria (2012:1) posits that this generalisation is not applicable to all ODL students.

ODL has unique problems and issues such as the lack of learning interaction with peers and tutors, which results in a loss of student motivation and a lack of computer skills (Dzakiria 2012:1). Sustained motivation is required for success in ODL (Geduld 2013:106). It can be deduced from the literature and the previous paragraphs that there are many challenges for ODL to develop students’ pervasive skills. Social presence has been found to improve students’ satisfaction with courses and their performance as it is closely related to the learning process (Vakoufari et al 2014:99). Students often have to clarify their own queries. Some students form study groups and work in teams, but others might be geographically isolated and forced to work independently. ODL students mainly communicate with the educators via e-mail, and not all of the students are able to communicate effectively in a written format. Authenticity of students’ assignment work poses another challenge - students complete their assignments at home and educators are unable to confirm whether it is their own work. This creates an ethical dilemma.

Unfamiliarity with technology has also been identified as a limiting factor for ODL students (Dzakiria 2012:1). Not all of the students have access to computers and the internet. “In the context of South Africa, the majority of students do not have access to the internet and they still rely on the print based materials” (Pitsoe & Baloyi 2015:98). Students are expected to be proficient in using the internet, spreadsheets, accounting and other application programs which create a challenge for many of these ODL students (Kamanja 2007:726). They go on to comment that printed material in addition to online material on myUnisa (the student portal) is needed to support students who do not have internet access. Interaction is a vital instructional element of ODL and it is a difficult component to build into an ODL system because of different needs and requirements of different students (Dzakiria 2012:1). myUnisa affords students the opportunity to participate in discussion forums and share their learning activities (Pitsoe & Baloyi 2015:98).

In a study conducted by Berry et al (2011), attention is drawn to the limited face-to-face contact as well as other limitations experienced by students in an ODL system. Their study was conducted among third-year Unisa management accounting students who gave their views on how ODL could improve their employability (pervasive) skills. The respondents identified the following limitations of the ODL environment: limited face-to-face contact with educators; the lack of employability skills workshops; minimal student interaction; lack of information on management accountants' role and the skills needed in their careers; insufficient guidance on time management; the difficulty level of academic language in study material and the lack of internet, computer and software access.

Although ODL has various challenges, there are also distinct opportunities to develop accounting students' pervasive skills. Some ODL students are exposed to practical real-world experience because of the fact that they study part time. ODL challenges students to work independently. ODL students' writing skills are improved when they attempt their compulsory written assignments, written examinations and also when they e-mail their educators. There is an increased shift towards online learning and this will potentially enhance students' IT skills (Kamanja 2007:721). New innovative methods of delivering study material to students, inter alia, satellite broadcasting, DVDs, e-portfolios and podcasts will help to improve the e-learning skills of students. ODL students are described in a study by Mashhour (2007:149) as inspired, hard-working, self-regulated and committed to their career objectives. Unisa has various satellite offices around South Africa in which registered students can make use of computers, and this could possibly assist in overcoming the connectivity challenge (Kirby-Hirst 2014:85). These offices also afford previously disadvantaged students the opportunity to learn computer skills (Kirby-Hirst 2014:87).

Self-regulated learning helps students develop critical thinking skills that are important in adjusting to the changing circumstances surrounding them in an ODL environment (Zimmerman 2002:64). Good planning, organisation, time management and evaluation in terms of learning requirements are part of these critical thinking skills. Independence and self-sufficiency in learning are inspired by open learning

because of the fact that students are in control and are actively involved in the learning process (De Beer & Bezuidenhout 2006:68).

A survey was conducted among third-year management accounting students at Unisa and indicated that respondents perceived Unisa to meet and exceed their expectations for enhancing pervasive skills that increase the employability of the students (Shuttleworth et al 2013:1508, 1524-1525). Written communication skills are perceived to be properly addressed, but they felt that there is room for improvement in verbal and listening communication skills (Shuttleworth et al 2013:1518). Team work and organising and delegating tasks are understandably rated lower than other skills, owing to the fact that students are often forced to work independently. In the respondents' views, ODL teaching improves their time management skills. Respondents felt that with the exception of acquiring relevant information, IT skills were not properly addressed by ODL teaching. According to the respondents, a lifelong learning culture is successfully created by ODL teaching. The majority of respondents were satisfied that Unisa meets and exceeds their expectations in creating an ethical responsible consciousness.

In the study by Berry et al (2011), respondents were invited to make suggestions to address the perceived barriers of pervasive skills training by ODL institutions. Case studies were not identified as a tool to be used to enhance pervasive skills. Shuttleworth et al (2013:1525) suggested that ODL institutions should increase the level of multidisciplinary integration in teaching and assessing management accounting students. In this empirical study, the researcher considered whether case studies can be used successfully in the teaching and assessment of ODL accounting students. A case study-based module would allow for integration between different subjects, such as Accounting, Tax, Auditing and Management Accounting.

Vakoufari et al (2014:109-110) examined the relationship between self-esteem and loneliness with, inter alia, academic performance, academic dropout and course satisfaction in a blended distance education institution in Greece. A questionnaire was distributed to 80 distance education students at the Hellenic Open University. The results indicated that loneliness does not necessarily play an important role in

affecting academic performance or academic dropout in distance learning courses. A highly significant negative correlation, however, existed between academic performance and self-esteem. Their study suggests that group written assignments should be assigned to distance education students because this might prove helpful in reducing the feeling of loneliness and increase the students' perception of social presence. Angelaki and Mavroidis (2013:78) examined the same university students' perception of social presence with their tutors and peers. They found that the majority of students had a need to be academically and emotionally supported by their peers and their tutors as they experienced negative feelings such as loneliness and isolation. Another ODL study conducted in Malaysia also discovered that a high level of interaction is desirable in distance education institutions (Dzakiria 2012:1). Dzakiria's (2012:1) study suggests that the ODL experience can be enriched by increasing interaction and interactivity.

The studies above indicated that distance education institutions face unique challenges, and it would be informative to evaluate the perception of third-year accounting students from an ODL institution about the possible challenges and benefits of introducing a case study-based module focusing on the enhancement of graduates' pervasive skills.

2.10 CHAPTER CONCLUSION

The literature review conducted in this chapter provided valuable information on the pervasive skills that merit attention in accounting education. It became clear that the role of HEIs to prepare graduates for their demanding careers is constantly under the spotlight. Technical academic subject knowledge per se is no longer sufficient for a graduate in the current challenging and changing business environment - hence graduates' need for non-technical skills that will enhance their employability. Professional accounting bodies and other stakeholders promote the inclusion of pervasive skills in accounting curricula in order to enhance the employability of students studying towards becoming professional accountants.

This chapter also explored the existing body of knowledge on the pervasive skills needed by accounting graduates. The new role of the accountant in the changing business environment was explained. Pervasive skills were briefly defined and then an overview provided of the perceived pervasive skills gap. Once the skills gap had been identified, the role of the educators in addressing this gap was considered.

The focus then shifted to the pervasive qualities and skills required from accountants by professional accounting bodies. Different professional accounting bodies' competency frameworks were considered. Criticism of the professional accounting bodies' attitude towards pervasive skills was also discussed. The responsibility of educators to develop employable accountants was debated. The inherently unique ODL environment poses challenges that are not experienced by residential, face-to-face contact universities.

While this chapter illustrated the need to equip accounting graduates with much-needed pervasive skills, chapter 3 explores whether case studies might serve as a possible tool for enhancing some of these pervasive skills, specifically for ODL students. The chapter offers clear arguments for and against using case studies in accounting education in light of their pervasive skills development needs.

CHAPTER 3

THE USE OF CASE STUDIES IN ACCOUNTING EDUCATION

3.1 INTRODUCTION

The previous chapter provided a literature review to shed some light on the pervasive skills needed by accounting graduates. From the literature it was clear that pervasive skills development is a much-debated topic. Recent changes in the business environment impacting on accountant's pervasive skills requirements were discussed. The pervasive skills gap in accounting was also examined. Some researchers argue that educators are to blame for the current pervasive skills shortage, while others contend that it is not the sole responsibility of educators to develop their accounting students' pervasive skills. Professional accounting bodies' pervasive skill requirements were investigated. Pervasive skills training in an ODL environment was then explored. Chapter 2 provided an in-depth understanding of the pervasive skills required by accounting graduates that will benefit educators, curriculum designers and faculties responsible for reviewing and updating accounting curricula.

Educators have been called upon to use more innovative teaching methods to enhance students' pervasive skills development. In disciplines such as public administration, business and management, psychology, law, veterinary science and medicine, case studies, inter alia, have been identified as an effective teaching tool to develop students' pervasive skills, (Brooke 2006:143; Fan 2011:161, 164; Greenhalgh 2007:182; Marcus, Taylor & Ellis 2004:579; Noe 2013:291; Stevens, Hyde, Knight, Shires & Alexander 2015:9; Tiwari, Lai, So & Yuen 2006:547; Wessels & Binza 2012:477). It would therefore benefit accounting educators and students if the use of case studies in accounting education were to be further explored. Since many accounting students study at ODL institutions while doing their traineeship, this study primarily investigated whether the case study approach could be used in these institutions to teach pervasive skills.

This study investigated whether the introduction of a case study-based module, or simply incorporating more case studies into current accounting modules would be a possible solution to the current pervasive skills development conundrum. Exploring the existing body of knowledge around case studies and the use thereof in distance education environments could provide educators with a possible solution to the pervasive skills gap problem being faced in accounting education.

This chapter first defines case studies. The focus will then shift to exploring the different uses of case studies. This is followed by a discussion of the perceived benefits and challenges of teaching with case studies in accounting. Students' and educators' views on pervasive skills development through case studies are then explored. Thereafter, case study-based teaching and the use of case studies in ODL environments are addressed. Exploring the changes to professional accounting bodies' examinations to assess professional competence via case studies will provide some insight into the current assessment practices used by these institutions. The outcome of this literature review chapter is to determine whether case studies can be used effectively in accounting education for pervasive skills development. This is of vital importance as Montiel (2013:270) mentioned in a recent article that the Harvard Business School already has numerous online courses, which indicates that "an evolution, if not revolution, in case method teaching is already under way".

3.2 DEFINING CASE STUDIES

The Oxford Dictionary (2015a) defines a case study as a "particular instance of something used or analysed in order to illustrate a thesis or principle". Davis and Wilcock (2003:1) refer to case studies as being used by students for the application of theory. Case studies have also been defined as a method to facilitate problem solving and decision making in simulated situations (Ballantine & McCourt Larres 2004:172). A good case study usually represents a real-life situation to which students can relate (Gravett 2005:73).

According to Shugan (2006:109), case studies should be defined by focusing on

their differences from other teaching methods (lectures, class discussions, simulation games, etc). Case studies involve providing students with factual information about business situations that took place in the past with a description of the issues faced by the organisation, background information on circumstances and management opinions (Lundberg, Rainsford, Shay & Young 2001:451). Students then have to discuss the case and exercise their judgement in deciding on actions that have to be taken, based on an analysis of the information presented. In an accounting environment, case studies often require certain conclusions, based on computations from quantitative information and quantitative predictions (Knyviené 2014:160; Shugan 2006:110).

It is important to note that case-based learning is a form of problem-based learning (Barrows 1986:481; Brooke 2006:142; Milne & McConnell 2001:66; Wessels & Binza 2012:477). Problem-based learning presents accounting educators with a tool whereby case studies can be used for the attainment of new understanding by students and to afford them the opportunity to learn by themselves and to develop their own skills (Milne & McConnell 2001:62). According to Milne and McConnell (2001:66, 67), in problem-based learning, the case study is purposely intended to help the student gain new knowledge, while in a case-based approach, students are often allowed to draw from existing knowledge.

Some researchers highlight the benefits of the use of case studies as part of their definition of case studies. Wessels and Binza (2012:477) refer to the case study approach as an effective teaching and learning method used by HEIs throughout the world to enable students to investigate and solve problems that affect humanity. They also refer to it as a “problem-solving-orientated learning and teaching pedagogy” which makes teaching and learning interesting and exciting. Brooke (2006:142) described the use of case studies for teaching as a dynamic learning strategy that engages students, and thereby promotes higher-order thinking skills. When students are actively involved in the learning process, they learn more effectively (Sivan, Wong Lenug, Woon & Kember 2000:381). Chen, Shang and Harris (2006:72) refer to the case method of teaching as “a method of instruction that can improve the cognitive learning process”. From the different definitions of case

studies, it is clear that they allow for active learning. Exploring the different uses of case studies in the next section sets the scene for a better understanding of whether case studies can promote the pervasive skills of accounting graduates.

3.3 DIFFERENT USES OF CASE STUDIES

Case studies are used in various ways. They can be used, for instance, to illustrate theories, practice techniques and concepts, introduce or legitimise theories or as live examples (Cullen et al 2004:254). Parkinson (2008:5) suggests that learning objectives and contextual factors should be considered when making use of case studies. His comprehensive literature review examined different features of case studies and he concluded that there is a place for case studies in accounting education (Parkinson 2008:5) if the different suggested considerations are taken into account. Many researchers agree with Parkinson that the type of case selected should fit the needs of specific groups, the learning context and the levels of students (Boyce et al 2001:48; Cullen et al 2004:254; Hassall & Milne 2004:135; Kopp, Hasenbein & Mandl 2014:355). In the literature review by Cullen et al (2004:254), it is suggested that case studies presented to undergraduates with less experience than postgraduate students, should be more analytical and not too intense. The reason why case studies are used should be communicated to students in order to create a more pleasant learning environment as students often do not understand the rationale behind the use of case studies and perceive them to be unnecessarily time consuming (Pastra 2009:107).

Different types of case studies include short case studies that are highly structured, short case studies with little structure and longer case studies that are unstructured (Davis & Wilcock 2003:1). Two extreme types of case studies identified are the prescriptive, longer case studies (Harvard method) that are exclusively used as a teaching method by some educators and the shorter, condensed case studies that are used in conjunction with other teaching methods. In between these two extremes are approaches requiring students to prepare and discuss possible courses of action to be taken, based on business cases with minimal instructions, focusing on problem solving (Libby 1991:195). In order to allow students to freely self-direct questions as

they perceive fitting, Milne and McConnell (2001:61) suggest that accounting case studies should not be too structured.

Some educators use case studies exclusively as their sole teaching tool (Knyviené 2014:3). The first use of the case study method was in 1870 in the Harvard Business School. The so-called "Harvard" method focuses on the development of pervasive skills including analysis, clear reasoning and judgement skills (Cullen et al 2004:254). The Harvard method has been challenged because some find it too prescriptive and lengthy (Cullen et al 2004:254). Sometimes, lengthy accounting case studies are used to simulate real-world scenarios (Ebrahim, Schultz & Hollister 2010:198; Nouri & Opatosky 2010:210). Short case studies are also sometimes used by accounting educators as part of their formal lectures to illustrate real-world practices (Knyviené 2014:3). Brooke (2006:143) favours shorter, condensed case studies in an online environment. Using case studies in ODL accounting education is further explored in section 3.8.

In a study conducted by Kopp et al (2014:355), a distinction is made between "open cases" and "closed cases". The more structured one of the two is the "closed case", which has detailed instructions and clear questions that enable students with minimal pre-knowledge to solve specific problems in a focused fashion. The "open cases" referred to in their study incorporate flexibility whereby students with a higher level of pre-knowledge solve more open types of questions (Kopp et al 2014:355).

Jonassen and Hernandez-Serrano (2002:65) used case studies in the form of stories as a teaching tool. Stories are by nature a powerful method to describe experiential knowledge. They explain that problems are solved by drawing on past experience described by means of stories, and this knowledge is then applied to new problems (Jonassen & Hernandez-Serrano 2002:65). Hayes and Baker (2004:267) used a case study in the form of a folk story to illustrate to their students the accounting principle of "substance over form". They concluded that although this method has limitations, it could be used in conjunction with other teaching methods to make learning more enjoyable for students.

Lately, education has moved more towards student-centred activities. Teaching and

learning styles are constantly changing, and case studies are becoming more popular, especially because they are used for developing important pervasive skills such as communication, group work and problem-solving skills (Davis & Wilcock 2003:1, 7). Case studies are developed not only to improve the understanding of course content and concepts that are fundamental, but also to enhance the graduateness of students (Wessels & Binza 2012:477) and promote pervasive skills such as critical thinking skills (Brooke 2006:142).

Boyce et al (2001:38) emphasised the fact that the way in which educators present case studies is critical for the development of pervasive skills and deep learning. Surface learning only requires memory recall and not an understanding of the subject matter. Case studies should be developed in order to promote deep learning (Arquero Montaña et al 2004:193; Boyce et al 2001:38). Types and difficulty levels of case studies should also be considered when designing case studies that will be used for pervasive skills development in an ODL environment.

3.4 BENEFITS OF THE USE OF CASE STUDIES IN ACCOUNTING EDUCATION

3.4.1 Background information on the benefits of accounting case studies

As far back as about 30 years ago, the benefits of the use of case studies in accounting education were contemplated. In 1986, the use of case studies in accounting was regarded as one of the best methods for developing pervasive skills (AAA 1986:178, 186). The Bedford Committee argued that accounting scope and content should extend beyond technical skills to include pervasive skills, and in the same report it was suggested that case analysis and discussions should be used by every accounting educator because they stimulate thinking (AAA 1986:178, 179, 186).

As explained in section 2.2, a number of factors have led to the increased importance of developing the pervasive skills of accounting students (Barac 2009:20; Botes 2005:67; Fouché 2013:137; Goretzki et al 2013:41; Järvenpää 2007:100; Kavanagh & Drennan 2008:279; Knyviené 2014:159; Low et al 2013:2; Mohamed & Lashine 2003:7; Shuttleworth 2012:247; Sorensen 2009:1271; Yazdifar & Tsamenyi

2005:181). Many researchers found the case-based approach effective in developing the pervasive skills of accounting graduates (Adler, Milne & Stringer 2000:132; Ahmad 2011:33; Ahmad & Sulaiman 2013:175; Arquero Montaña et al 2004:193; Ballantine, Duff & McCourt Larres 2008:198; Ballantine & McCourt Larres 2004:187; Bamber & Bamber 2006:267-290; Boyce et al 2001:38; Cheng 2007:582; Cullen et al 2004:262; Doran et al 2011:259; Fortin & Legault 2010:95,102,103; Gobeil & Phillips 2001:205; Knyviené 2014:159; Lane & Shellard 2009:34-43; Milne & McConnell 2001:61; Sawyer, Tomlinson & Maples 2000:258; Stainbank 2010:79; Van der Merwe 2013:1142; Weil et al 2001:123; Weil et al 2004:140; Wynn-Williams, Whiting & Adler 2008:113). According to Knyviené (2014:159), the use of accounting case studies is critical to ensure the acquisition of pervasive skills and the advancement of the accounting subject, learning process and the revolution and modernisation of accounting practice.

In an online forum on the Harvard Business School's website (Heskett 2008:1), the effectiveness of the case method as a teaching tool was debated in 2008. Most of the people commenting on the forum were of the opinion that case studies can effectively be used for developing pervasive skills and play a vital role, even in accounting education (Heskett 2008:1). It is suggested on this forum that case analysis in accounting courses provides hands-on experience to simultaneously apply concepts and practices. It offers a dynamic learning experience, based on real-world truths. Case studies are encouraged on account of the fact that needs are forever changing, and students and educators should not conform to a single correct answer. Another benefit of case studies mentioned on the webpage is that they incorporate multidisciplinary considerations (Heskett 2008:1). The experience of multiple case studies produces well-rounded students and this shows in the real world. The concluding comment in the summary of this debate suggested that the case method of instruction is not due for an overhaul, but might rather be gaining increased relevance over time (Heskett 2008:1).

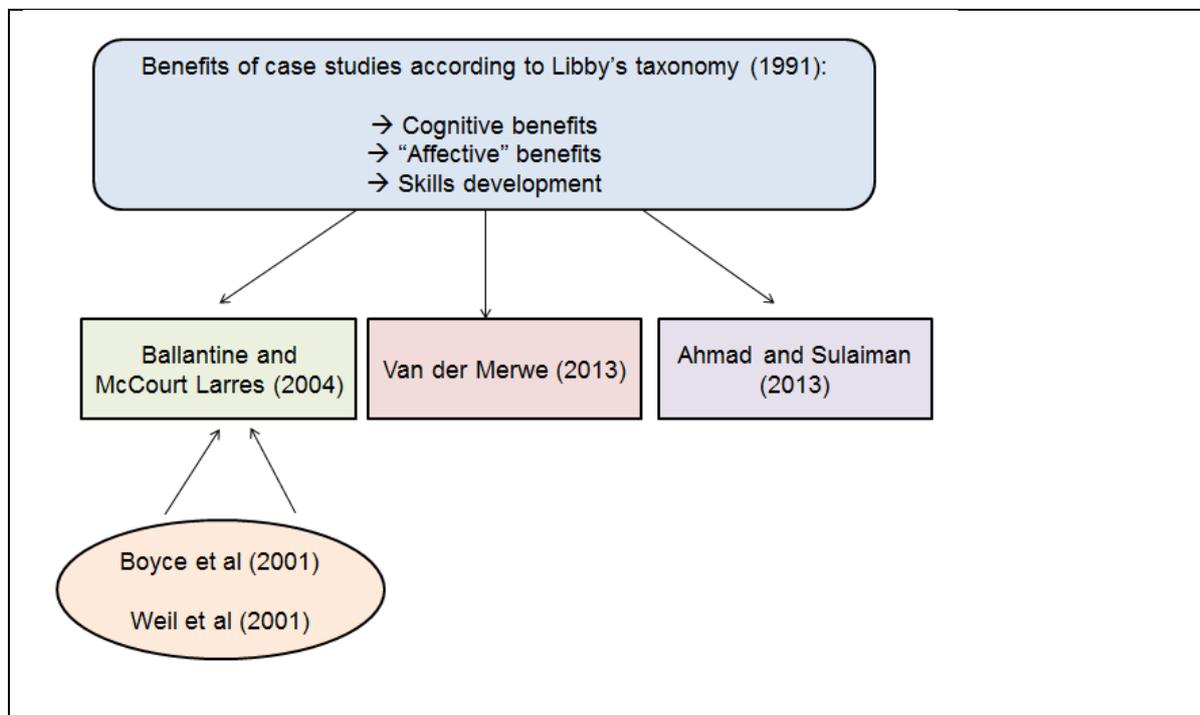
In 2001, Michael J Roberts, the executive director of case development at the Harvard Business School stated that business practitioners operate in the real world with real consequences for decisions. He explained that case studies are a powerful

learning process because students engage intellectually and gain knowledge and skills that will help them to face real-life problems (Ballantine & McCourt Larres 2004:173). Sawyer et al (2000:258) and Fortin and Legault (2010:95) also recognised that case studies in the form of real-world simulations are an effective teaching technique to develop accounting students' pervasive skills.

3.4.2 Benefits of accounting case studies in the literature

In the current study, the literature was explored to determine the benefits of accounting case studies. A taxonomy of the benefits of case studies was developed by Libby (1991:193), as indicated in figure 3.1 below. Libby clearly divided the benefits of case studies in terms of cognitive benefits, "affective" benefits and skills development. "Affective" benefits are positive reactions to case studies and they do not necessarily directly develop students' pervasive skills, but contribute towards a more pleasing case study experience (Libby 1991:195). Three prominent studies stood out in the literature, namely those of Ballantine and McCourt Larres (2004), Van der Merwe (2013) and Ahmad and Sulaiman (2013), and these will be discussed further in this section.

Figure 3.1: Research on the benefits of the use of case studies



Source: Own compilation

Ballantine and McCourt Larres (2004:180) revised and expanded the benefits of case studies identified by Libby by including other researchers' work, such as Boyce et al (2001:38) and Weil et al (2001:151) (see figure 3.1). The studies of Van der Merwe (2013) and Ahmad and Sulaiman (2013) also widely listed the benefits of case studies. The work of these researchers shown in figure 3.1 will be elaborated on in the paragraphs to follow, and table 3.1 will then collate their listed benefits according to Libby's taxonomy.

Although research by Boyce et al (2001:37) indicated that the learning styles of typical accounting students are not appropriate for obtaining pervasive skills, their paper supported the use of case studies as a teaching tool to enhance accounting students' pervasive skills. According to Boyce et al (2001), the most significant benefit of the case study method for teaching in accounting is that theoretical issues are grounded in a practical context. This promotes an active learning approach with a higher level of understanding.

Weil et al (2001:123) explored honours accounting students' perceptions of the usefulness of case studies as a tool to develop certain pervasive skills at the University of Cape Town in South Africa. The study was conducted among 72 students selecting an optional case study-based course. Weil et al (2001:123) classified 31 skills, abilities and knowledge under the following eight headings: visualisation; dealing with uncertainty; problem elaboration; communication skills consolidation and integration; judgement; data exploration; and active participation. The respondents had to indicate the extent to which case studies assisted them in developing and enhancing the respective skills identified. In the opinion of the respondents, the highest ranked benefit of case studies was the way in which students are exposed to real-world complexity in the form of decision making (Weil et al 2001:138). It is clear from their study that most students found case studies in general to be extremely useful in developing different kinds of pervasive skills.

In the UK, Ballantine and McCourt Larres (2004:176, 181, 187) evaluated 84 final-year undergraduate management accounting students' perceptions of the benefits of using case studies. These students were enrolled at the Queen's University in

Belfast for an advanced management accounting module, which included case study teaching. The most significant benefits were found to be the awareness of more than one answer to certain questions and insight into multifaceted real-world business decisions (Ballantine & McCourt Larres 2004:187). This study further evaluated whether the students' opinions of the use of case studies changed if they had relevant work experience. It was found that working students did not perceive case studies as more valuable than students without the work experience. It was thus suggested that educators do not have to modify or change case studies to incorporate students' work experience.

Currently, researchers are still contemplating the benefits of case studies. Van der Merwe conducted a study among 56 third-year South African accounting students at North-West University. He developed a complex, hypothetical, integrated case study and business simulation assignment which he presented to students (Van der Merwe 2013:1142). The purpose of this study was to determine the students' perception of the enhancement of their pervasive skills through participation in the case study-based assignment. He integrated the opportunity for skills development in his case study, for example, by allowing students to work in groups (teamwork skills), write reports (report writing skills) and give presentations (verbal communication skills) (Van der Merwe 2013:1141). Furthermore, his case study assignment was inspired by real-world industry in order for students to gain experience in practical scenarios (Van der Merwe 2013:1141).

A study conducted by Ahmad and Sulaiman (2013:173) explored 231 honours accounting students' perceptions of the usefulness of case studies in Malaysia, a passive learning environment. Malaysia is a developing country and its education system is regarded as a passive learning environment since the delivery methods for teaching focus mostly on lectures. Passive students are said to "quietly take in new information, but they typically don't engage with it. They do not interact, share insight or contribute to it" (Upadhyaya 2013:1). Ahmad and Sulaiman's (2013:180-181) study revealed that students ranked the following cognitive benefits of case studies lower than others: developing their problem-solving skills; developing their conceptual thinking skills; teaching them to distinguish facts from opinions;

developing their skills in evaluating ideals; or their ability to synthesise important components of situations.

Table 3.1 below presents the collated benefits of case studies for accounting students according to the findings of Ballantine and McCourt Larres (2004:180), Van der Merwe (2013:1142) and Ahmad and Sulaiman (2013:175).

Table 3.1: Benefits of case studies: cognitive, “affective” and skills development

Cognitive benefits for students
<ul style="list-style-type: none"> • relate and increase insight into the relationship between theory and practice • integrate major concepts within and between disciplines • enhance understanding of phenomena studied and of real-life practice • provide insight into complexity of "real-world" business situations • improve judgement skills (skills for evaluating ideas) • deal with situations of uncertainty and ambiguity and take decisions with incomplete information • identify relevant data in unstructured problems, distinguish facts from opinions, and develop the ability to synthesise essential elements of a given situation • think conceptually and consider multiple perspectives • develop problem identification, problem synthesis and problem-solving skills • acquire analytical skills • question conventional practice • enhance understanding of the environment within which management problems exist and broaden the view of the role of an accountant • teach that there is seldom only one correct solution to business problems • gain insight into the realities and difficulties of decision making in business and practical business operations • promote effective learning experiences • apply knowledge of and insight into unique or new circumstances • enhance technical competencies

<ul style="list-style-type: none"> • consolidate prior knowledge of the discipline • foster critical thinking ability and encourages conceptual thinking 	
“Affective” benefits for students	Skills development of students
<ul style="list-style-type: none"> • increase motivation to study the course or become a qualified accountant • enhance confidence • encourage involvement in the learning process • encourage students to attend seminars and participate in seminar discussions • encourage lifelong learning • increase interest in subject and chartered accountancy • encourage students to be active participants enjoying the social aspects of the case assignment • encourage students to take responsibility for their own learning 	<ul style="list-style-type: none"> • library skills • interpretation skills • ability to organise and summarise data/information • questioning and logic skills • verbal communication skills • persuasion skills • report-writing skills • teamwork skills • research skills • computer skills • presentation skills • time management skills • language skills • soft skills in general • stress management skills • listening skills

Source: Adapted from Ahmad & Sulaiman (2013:175); Ballantine & McCourt Larres (2004:180); Van der Merwe (2013:1142)

It is evident from table 3.1 above that the use of case studies in accounting education has great potential for pervasive skills development. The perceived benefits of Van der Merwe’s (2013:1142) case study assignment were not listed according to Libby’s taxonomy in his study, but the researcher used her own discretion to also sort and collate the benefits evident in his study in table 3.1, under the headings: cognitive benefits, “affective benefits” and skills development.

Although the three studies explored in this section stood out in the literature as they provided comprehensive lists of benefits, they were not the only studies that

considered the benefits of using accounting case studies. The next section explores students' perceptions of the use of case studies, specifically in light of their pervasive skills development potential.

3.5 STUDENTS' VIEWS ON CASE STUDIES FOR PERVASIVE SKILLS DEVELOPMENT

Research conducted among accounting students in various countries (Adler et al 2000:132; Ahmad & Sulaiman 2013:175; Ballantine & McCourt Larres 2004:187; Bamber & Bamber 2006:267-290; Doran et al 2011:259; Fortin & Legault 2010:95; Gobeil & Phillips 2001:205; Lane & Shellard 2009:34-43; Stainbank 2010:79; Van der Merwe 2013:1142; Weil et al 2001:123, Weil et al 2004:140) identified the use of case studies as one of the techniques recommended to improve and further develop pervasive skills. Several of these studies documented the fact that a wide range of skills can be improved through using case studies, leading to an increase in the use of case studies in accounting education.

3.5.1 Undergraduate students' views on case studies for pervasive skills development

In addition to the studies already discussed, Arquero Montaña et al (2004:193, 194) also conducted a study among 108 final-year students registered for the accounting module, Financial Statement Analysis, at the University of Seville in Spain. The perceptions of these students were that case studies improved their problem-solving, communication and teamwork skills (Arquero Montaña et al 2004:202). The researchers compared the performance of students who were exposed to more complex cases to students who were exposed to more basic cases, and they did not find a significant difference (Arquero Montaña et al 2004:208).

Cullen et al (2004:257) used case studies in the form of problem-based learning for their undergraduate students enrolled for Accounting and Management Control at Sheffield Hallam University. The series of six case studies presented to these students embedded the requirement of skills to be applied that are perceived as important for the workplace. The results of 57 students in Cullen et al's (2004:259,

260) study indicated that many students wanted the inclusion of more case studies in their accounting degree, and they suggested that case studies should be introduced throughout the degree in a progressive fashion. The results of the survey also showed that the students found that the case studies developed their pervasive skills (Cullen et al 2004:260)

The junior-level management accounting students at the University of Georgia in the USA evaluated a series of mini cases from 10-K reports that was developed for accounting educators by Bamber and Bamber (2006:267-290). A 10-K report is an annual report that provides an overview of a company's performance and is required by the US Securities and Exchange Commission (SEC). Bamber and Bamber (2006:267) recommended the use of a company's annual report to create a continuous series of cases from which students could learn important cost and management accounting principles. They also recommend that these mini cases should be used to supplement traditional textbooks. The students agreed that the cases helped them to gain the experience-based knowledge needed by professionals. It is evident from the evaluations that the students regarded their experience with the cases as beneficial and challenging. The students confirmed that the cases assisted them to see the bigger picture and enabled them to integrate different management accounting topics. It also helped them appreciate difficult judgements and decisions that accountants face in real-life complex business scenarios (Bamber & Bamber 2006:267-290).

Lane and Shellard (2009:34-43) constructed a case study for first-year undergraduate management accounting students at the University of Glamorgan that incorporated basic management accounting techniques as well as the use of IT. Students were required to provide feedback on the module at the end of the academic year. The annual module evaluation revealed that students were positive about this teaching approach, which incorporated a case study, and they agreed that their learning experience had been improved by it.

The finding of a study conducted by Bui and Porter (2010:42) among undergraduate accounting students in New Zealand, was that there are not enough case studies in

accounting courses. They felt that case studies and case examples helped them better understand the practical context of accounting topics. This increased understanding elevated their interest in accounting (Bui & Porter 2010:42). Some of the students also noted that students would be more motivated if educators were more excited about teaching with case studies (Bui & Porter 2010:42).

Stainbank (2010:79) conducted a study in South Africa on the usefulness of an accounting project, presented as a case study, to accounting students at a third-year level at the University of KwaZulu-Natal. The case study was developed to encourage the integration of four different modules, namely financial accounting, managerial accounting and finance, auditing and taxation; promote the development of professional skills; promote active participation in learning and group work; and gain accounting knowledge. A questionnaire was developed and distributed to the third-year students to evaluate their perception of the usefulness of the accounting project. The purpose was to determine whether the accounting project had helped develop accounting knowledge and professional skills. Stainbank (2010:80) concluded that in the opinion of the 231 participants, the case study is a valuable tool for developing accounting and professional skills. It also helps students to better relate the theory to practice. In her conclusion, Stainbank (2010:80) advised accounting educators to implement case study projects in their accounting programmes to promote further development of students' accounting and professional skills.

Strategies for case-based teaching were developed and evaluated by Doran et al (2011:259) in large undergraduate management accounting classes at the University College Cork in Ireland. Their aim was to determine whether teaching with case studies would still be beneficial to students if applied in a large class setting. The opinions of both educators and students were obtained. They found that students responded well to the case studies presented and they wanted to participate in the learning opportunities of each case experience. From the students' responses in the large class setting, they discovered that the students felt they had gained exposure to more than one viewpoint and they regarded their experience with case studies as positive. The case studies enabled undergraduate students to gain exposure to real-

life practical scenarios. Doran et al (2011:260) concluded that in the opinion of the students as well as the educators, case studies can be delivered successfully in large class settings.

A case study (Industry Perspective Workshop Programme) was introduced to first-year students enrolled for Acct 102, Accounting and Finance for Business, at Lincoln University in New Zealand. McGuigan et al (2012:177) provided students with a case study to not only develop their technical skills, but also their pervasive skills. Among the benefits listed by the students, were pervasive skills that were enhanced as a result of the case study such as decision making, problem-solving skills, group skills, critical thinking skills, communication and listening skills (McGuigan et al 2012:182). It was also mentioned that the students were positive about the fact that the case simulated real-world business decision-making scenarios (McGuigan et al 2012:183).

3.5.2 Postgraduate students' views on case studies for pervasive skills development

In their study, Weil et al (2004:140) focused on the competency needs of accounting students that can be addressed through the use of case studies. A questionnaire, to determine what they consider to be the most important benefits of the use of case studies, was distributed to 518 students who had just completed the professional examination for accountants throughout New Zealand and Malaysia. These students reported that case studies enabled them to improve their ability to consider more than one solution to a problem. They also explained that they could better evaluate situations from different perspectives (Weil et al 2004:140).

Employed accounting graduates with professional experience suggested in the study conducted by Wells et al (2009:414) that teaching and learning strategies should be improved by shifting the focus of classes towards real scenarios and case studies (Wells et al 2009:414). The benefits of case studies are that “students are encouraged to assimilate and integrate information, consider multiple and conflicting perspectives, and deal with situations of uncertainty within the accounting discipline context” (Wells et al 2009:416).

Ahmad and Sulaiman's (2013) study was also conducted among postgraduate students and was discussed in section 3.4.2 above. It is clear from the literature explored in this section that students perceive case studies to be beneficial towards further developing competencies that exceed the technical skills currently taught at universities. These studies were all conducted at residential institutions. It is therefore also necessary to explore the perceptions of students at an ODL institution on the use of case studies in teaching accounting students. See section 3.8 for a discussion of case-based teaching in an ODL environment. The next section considers the perceptions of educators on the potential of case studies to develop pervasive skills.

3.6 EDUCATORS' VIEWS ON CASE STUDIES FOR PERVASIVE SKILLS DEVELOPMENT

According to Hassall and Milne (2004:135), it is not the material content that determines a case study, but rather "what students do with them and what they do to students' learning and their pre-existing conceptions". They compared different experiences of educators using case studies in both undergraduate and professional programmes. They concluded that there is a strong link to case studies leading to skills development rather than simply satisfying the conditions of a certain set of criteria. Hence it is clear that the type of case study is a key factor to consider in development in order to suit the specific needs of the students. Hassall and Milne (2004:135) posited that teaching with the use of case studies is ineffective if it is dominated by the educator. They recommend following a student-centred approach when teaching with case studies.

Healy and McCutcheon (2010:563) discussed educators' views on the challenges of using case studies. Some educators were not sure how to use case studies in their teaching. The educators also felt that large class sizes made working with case studies unmanageable. One of the educators specifically mentioned that with a class size of 130 students, working with case studies becomes unfeasible. The educators who were interviewed felt that a sound knowledge base was critical before

introducing case studies. Not all of the educators were convinced of the appropriateness of case studies. They identified three categories of accounting educators - controller, facilitator and partner. The controller uses the case study method to help students understand predetermined conclusions. The controller regards case studies' teaching potential as limited. Facilitators tend to focus on module content and not on student engagement. The partner applies the case study method in an effort to develop deeper learning.

Some accounting educators perceive teaching by means of case studies as more challenging than teaching without case studies, which makes them feel less in control of the learning process (Richardson & Cullen 2004:468). They further explained that with a case study approach, the outcomes are less certain than in a normal structured lecture, group dynamics should be considered, discussions should be led, time should be dedicated to group work, points made by different participants should be summarised and instant decisions should be made (Richardson & Cullen 2004:468).

It was evident from the literature reviewed in this and the previous section that the use of case studies in accounting education does not only have benefits, but that challenges are also sometimes experienced by students and educators. The next section explores challenges in the use of case studies in accounting.

3.7 CHALLENGES IN THE USE OF CASE STUDIES IN ACCOUNTING EDUCATION

Criticism that has also been levelled against the use of case studies in accounting education is evident in the literature. Wolcott, Baril, Cunningham, Fordham and St Pierre (2002:85) challenged the findings of some researchers who argued that students' critical thinking skills are enhanced through teaching strategies such as case studies. They posit that there is a lack of empirical evidence by researchers to support their findings (Wolcott et al 2002:86-87) and that the value of further efforts would be questionable without empirical evidence.

Although students were positive about the use of case studies in an undergraduate accounting course in Bui and Porter's study (2010:42), with few exceptions, they were negative about the role the educators play when using case studies as part of their teaching. Students mentioned that the success of using case studies is influenced by the educator's attitude, which some students found to be boring and without passion (Bui & Porter 2010:42).

Van der Merwe's (2013:1137) study, for example, indicated that many students experienced high levels of stress and were upset about not having enough time in which to complete the case study-based assignment that was discussed in section 3.4.2. If students are not active participants in the learning process, the benefits of using case studies may be only marginal (Wynn-Williams et al 2008:116).

Although not directly related to accounting students, case studies used at the Harvard Business School for training law students have raised the following concerns: they are time consuming; they require synthesis of individual decisions to form generalisations; they are an imperfect way of teaching quantitative techniques; and based on the notion that there are no right answers, only some are better than others. In the same online debate, some commentators argued that in a course like accounting, the case method is not suitable (Heskett 2008:1). It is argued that case studies inform students of "real-world" problems effectively, but if a case study is too extensive, the problem area may be missed and if it is too narrow it may limit creative problem solving (Heskett 2008:1).

Case studies might not be suited to everyone. Davis and Wilcock (2003:1) investigated the use of the case-based approach and found that different students learn in different ways. They explain that a balance of learning styles should be maintained as students often complain that case studies in a group work context lead to uneven workload in groups and thus unfairness. Some students prefer formal, time-constrained settings (examination) for case studies rather than group work based on coursework that takes more time (Davis & Wilcock 2003:1). Although these general comments by them related to the engineering education environment, they could also apply to the accounting environment - hence the need for accounting

educators to be aware of these challenges.

In another study, Brennan and Ahmad (2005:23) found teaching with case studies to be less effective than teaching without them. Their study was not conducted in the field of accounting, but in the field of management education, however the challenges mentioned by them could potentially be relevant to the accounting field and should therefore be considered by accounting educators. They found that because of increasing student numbers and weakened educator-student ratios, participation by all students is not really possible, and educators do not necessarily have time to explore all the different interpretations of case studies from all students (Brennan & Ahmad 2005:23). They further commented that because student groups are becoming increasingly diverse and have different educational backgrounds, it is difficult for case studies to be used effectively (Brennan & Ahmad 2005:21). They also found that complex case studies based on real-life business scenarios caused some students to experience anxiety and that older students favoured case studies more than younger students. Yet another concern mentioned by students in Brennan and Ahmad's study (2005:26) was that case studies are not necessarily the best tool for assessment as there is never a clear right or wrong answer. These factors have to be taken into account when educators use case studies as a teaching method. All of these factors can become more challenging in an ODL environment with large student numbers spread over vast geographical areas and limited face-to-face contact with educators. The next section considers case-based teaching in the ODL environment.

3.8 CASE-BASED TEACHING IN AN ODL ENVIRONMENT

3.8.1 Background information on case-based teaching in an ODL environment

ODL education was elaborated on in chapter 2, section 2.9. As mentioned earlier, students are distant in time and space from educators and tutors in a distance learning environment (Kamanja 2007:721). Nowadays, distance education is essential for many institutions and it will continue to be the case because of increased internet accessibility (Shanker & Hu 2008:102). During 2012, the following

profound statement was made by the President of EdX (a joint effort by MIT and Harvard): “We really haven’t applied technology - computing technology, Internet technology - to education ... With online learning we can truly reinvent education” (Hardesty 2012:1). The popularity of case-based learning is increasing in professional training courses, especially in distance learning environments (Reinmann & Mandl 2006). For institutions that make use of case-based teaching, this eruption of online teaching has vital implications (Marcus et al 2004:577).

Web-based learning has become significant in tertiary education and is powerful in both the traditional teaching environment and the online environment (Fan 2011:5). By nature, web-based technology is often used for teaching in ODL environments. ODL institutions mainly cater for mature working students who are not able to attend campus-based, full-time contact institutions (Letseka & Pitsoe 2013:197). Case studies are a useful teaching method in the ODL environment (Wessels & Binza 2012:488). However, in the literature there is a paucity of studies on how case studies develop pervasive skills in the field of accounting in an ODL environment. Apostolou, Hassell, Rebele and Watson (2010:183-187) conducted a literature review of accounting education literature published from 2006 to 2009, and although they found 89 instructional accounting cases, these were not presented in a distance education environment. Five of the studies listed in their literature review were categorised under distance education, but none of them considered case studies.

3.8.2 Factors to consider when using case studies in an ODL environment

It is becoming more important for various business faculties to learn how to teach successfully using case studies in an online environment (Rollag 2010:502). Various factors have to be considered when teaching by means of case studies in an ODL environment. As mentioned in section 3.2, in a traditional teaching environment, the type of case study used should fit the needs of specific groups, the learning context and levels of students. This is also true of the ODL environment. Experience has taught Brooke (2006:142,144) that “beginner” online students and experienced online students should be treated differently when teaching by means of case studies. Therefore in an online environment educators should provide more instructions and direction to novice students. Brooke (2006:142) uses the case

method to teach online psychology classes. She explains that new students still have to become accustomed to the online environment and learn the course content (Brooke 2006:144). These students also need guidance with the tone they use in an online setting because the tone can be set through word choice in a “virtual classroom” and body language cannot be read over a distance. She found in her study that there is usually positive group interaction and a sense of cohesion, but facilitators should address any destructive conflict that may arise. According to Brooke (2006:145), experienced students can be expected to apply course material to more complex cases.

It is vital that there is a “teaching presence” (combination of instructional design and directed facilitation) when cases are presented online as this leads to students reporting a sense of connectedness and elevated levels of learning in a social context (Shea, Swan, Li & Pickett 2005:71). Their study was conducted among 2 036 participants at 32 State University of New York colleges and 581 courses were represented in their sample (Shea et al 2005:62).

Significant learning occurs through the use of case studies in online learning environments as long as they are well designed with proper instructions (Fitzgerald, Hollingsead, Miller, Koury, Mitchem & Tsai 2007:12). The considerations and recommendations presented by Rollag (2010:506) in his study in the field of management education for effective online case teaching could also be applied in the field of accounting. His suggestions for designing online case discussions effectively include that this meets the learning objectives; creates an active case discussion; limits the number of postings to avoid wearying students and educators; permits access flexibility without reducing the quality; and ensures that time requirements for the preparation, facilitation and assessment of online case studies are not significantly more than needed in contact-based classes. In the traditional contact-based learning environment, case discussions usually comprise 60 to 90 minutes of face-to-face conversations. However, in recent years, there has been a shift towards asynchronous electronic discussion boards as a teaching tool in online environments (Rollag 2010:500).

In a study conducted among 252 undergraduate teacher education students, Lin and Overbaugh (2007:404, 410) found that the performance of students in final examinations was similar, whether cases were presented online or in face-to-face facilitated classrooms. The pros and cons of online teaching versus face-to-face teaching are part of an ongoing debate (Montiel 2013:267), particularly for teaching by means of case studies. A blend of classroom and online technologies is often suggested by researchers for teaching by means of case studies (Webb, Gill & Poe 2005:223). Pitsoe and Baloyi (2015:96) contend that students should be self-directed, be able to identify with groups and be in possession of skills that facilitate team goals in order to be successful in an ODL environment. The next two subsections explore the benefits and challenges of case study-based teaching in a distance learning environment.

3.8.3 Benefits of case-based teaching in an ODL environment

Salmons (2003:1) postulates that four goals can be achieved through using case studies as a teaching tool in an online environment: develop online research skills; develop student competencies for working in virtual teams; introduce students to new technologies; and build online learning communities. The pervasive skills mentioned that are enhanced through online case analysis include communication skills, negotiation, problem solving and virtual work skills. Other benefits of case studies mentioned by Salmons (2003:1) include the fact that it allows students to reflect without concern for the impact on real organisations. It also allows for integration of different disciplines and for more than one solution to a problem (Salmons 2003:1).

Perspectives on Accountancy (CAS1501) is a first-year module at Unisa developed for ODL accounting students at a National Qualifications Framework (NQF) level 5. The purpose statement of the module is as follows: “The purpose of this module is to introduce students to the roles of and principles applicable to accountancy professionals and the pervasive qualities and skills associated with such roles and principles; to develop students’ appreciation for the different principles and orientations of ethical behaviour in personal, business and professional accountancy contexts; to expose students to the fundamentals of fraud and corruption, including

their attributes, impacts and motivators in accountancy contexts and to lay the foundation for students to practise accountancy in an ethical and professionally competent manner” (Unisa 2016b). Although students are introduced to pervasive skills, this NQF-level 5 module cannot fully develop pervasive skills at a level ultimately required by the profession.

Case studies are often included in ODL students’ prescribed textbooks, as is the case with the prescribed textbook of the participants of this study. The textbook prescribed for these third-year students is *Management and cost accounting* (9th ed) by Colin Drury. The educators for module MAC3701 refer their students to the case studies in the textbook for enrichment purposes. Although these students are not expected to work through all the case studies in the textbook, over 30 case studies are available. As explained in this textbook, the case studies cover subject content and contains questions that will promote independent thought, critical thinking and analytical skills (Drury 2015:preface XII). These ODL students can then contact their educators telephonically, via e-mail, via online discussion forums or arrange a face-to-face appointment to discuss their questions.

In some instances, online case discussions have been found to be of a higher standard and to be more effective than in a face-to-face setting in a management education course (Rollag 2010:502). A reason for this is because students have sufficient time to properly formulate their thoughts (Rollag 2010:502) and this enables them to work on complex problems (Heimerl & Loisel 2005). The benefits of using case studies to teach online courses have been listed by Brooke (2006:145) as “enhancing intrinsic learning, combatting retroactive inhibition, increasing encoding specificity, and developing more diverse schemes”. As mentioned in section 3.8.2, Brooke’s study was conducted in the field of psychology. She also explains that online case teaching creates an atmosphere in which students accept responsibility for their own learning, and critical thinking and analysis skills are promoted (Brooke 2006:146). There is a balance of power between the teacher and the student and learning is promoted (Brooke 2006:146). A further benefit of online case study teaching is that there is a track record of conversations and debates and it is not lost or poorly documented in class notes (Rollag 2010:503). Although these benefits

were not discovered specifically in the field of accounting, it could possibly be applied to this field.

Friedman, Rushinek and Rushinek (2006:29-30) investigated the relationship between using an online case study and student performance. A comprehensive, managerial accounting case study was assigned to 309 managerial accounting students at the University of Miami. The case study, "Building blocks of accounting: a managerial perspective", is available on the internet at the URL, www.cybertext.com. Through the use of emerging technology, a unique online case study is generated for every student. The students are graded automatically and provided with real-time feedback at any time of the day with unlimited attempts. This enables the grading of students without human intervention, which addresses some of the challenges to be discussed later in section 3.8.4. Although Friedman et al (2006:29-30) did not assess pervasive skills development, they found that the case study had a positive effect on the students' performance in the course.

According to Kopp et al (2014:353), the popularity of case-based learning is increasing in distance learning environments as time and distance challenges are addressed by virtual environments. In an ODL setting, students gain access to learning content at times and places that are convenient to them (Kopp et al 2014:353; Rollag 2010:502). Students often prefer online environments as they are able to plan their learning and teaching around their other life happenings at the location of their choice (Lin & Overbaugh 2007:411; Rollag 2010:502). In this type of environment, the content is usually delivered via a content management system and collaboration takes place through forums (Kopp et al 2014:353). It is further suggested that case-based learning is in use more often as it enables the application of knowledge. The tendency is increasing whereby case studies have to be solved collaboratively in virtual training courses, and according to Hasenbein (2007) and Kopp, Schnurer and Mandl (2009:1), this could lead to the recognition of effective learning with cases.

Various pervasive skills are developed in virtual case-based, distance learning environments. Kopp et al (2014:368) conducted a study among professionals in a

virtual environment whereby the transferral of content was via online forums. Their study indicated that problem-solving activities that take place in face-to-face groups are similar to those found in virtual groups. They also reported that more complex “open” cases led to more problem-solving activities and learning outcomes. Using case studies as a teaching tool in a virtual environment permits distance education students to solve problems in a social context (Kopp et al 2014:368-369). Peer-to-peer learning via case-based teaching may be further developed in online environments through the use of online discussions (Webb et al 2005:247).

Wessels and Binza (2012:482) conducted a three-year longitudinal study for a course on Public Decision-Making I, in which they asked ODL students questions about the teaching of and learning through case studies at an ODL institution, Unisa. Although the study was not conducted in field of accounting, it is fairly relevant as it was conducted at the same distance education institution used in this study. It was clear from the students’ comments that learning with case studies helped them to apply the theory to practice (Wessels & Binza 2012:482). Students learn vast amounts of theory in their Unisa studies, and when placed in a working environment, they are not sure how to apply the theory (Wessels 2011:92). Using case studies in this ODL environment helps bridge the gap between theory and practice (Wessels & Binza 2012:491). The ODL students also experienced other benefits such as gaining meta-skills and developing personal attributes and emotional intelligence (Wessels & Binza 2012:490, 491). From the results of a questionnaire distributed to the Public Decision-Making I students in 2009, it was evident that the majority of them found learning with case studies in an ODL environment fulfilling and they felt that case studies can be used successfully in distance education. It was also their perception that case studies can be used for assessment purposes in ODL education (Wessels & Binza 2012:490, 491). In response to being asked their opinion on using case studies in distance education, one student commented as follows: “It is the best and most effective way of learning in a distance education environment”. Case studies lead to students’ learning experience being linked more closely to what employers expect (Wessels 2011:93; Wessels & Binza 2012:491).

Online discussions that enable the solving of ethical problems are effectively used in

an online ethics accounting course, AC435 Ethics for Accountants at Park University, based in Missouri in the USA (Lampton 2011:67). The course is run online and students responded that they benefited from online case studies (Lampton 2011:70) through developing a sense of connectedness with fellow students with whom they worked. Although students do not meet face-to-face, the online environment enables them to think independently and share ideas (Lampton 2011:70). Teaching the course by means of online case studies provided students with a rich learning experience in which they were taught to think more critically. Another benefit mentioned is that e-learning helps students who do not always feel comfortable interacting and participating in a face-to-face classroom. Anonymity of online learning in a distance learning environment encourages more active participation (Lampton 2011:70; Rollag 2010:502). This benefit, however, poses a challenge for educators as they have to explore ways to limit conversation between some students in order to effectively achieve the learning objectives (Rollag 2010:504). More of the challenges of case-based teaching in a distance learning environment are discussed in the next section.

3.8.4 Challenges of case-based teaching in an ODL environment

Section 3.7 above touched on the challenges of teaching with case studies in accounting in a traditional teaching environment. Teaching by means of case studies, specifically in a distance education environment, also has its challenges, which will be explored in this section.

The most significant challenge of teaching cases online is that it is more time-consuming (Allen & Seaman 2011:1; Rollag 2010:503; Webb et al 2005:247). More specifically, it takes much more time for educators to prepare case studies, facilitate case study discussions (owing to the large quantity of postings made by students) and assess students by means of online case studies (Rollag 2010:503) or to prepare online versions of courses (Allen & Seaman 2011:1). The flexibility of distance education can also lead to an extremely burdensome, overwhelming task for educators if they wish to create a “teaching presence” as it requires constant monitoring and facilitation of online content (Rollag 2010:503). A finding that was identified in the field of online management information systems was that case

studies not only increased the time demands for educators, but also for students (Webb et al 2005:247), which leaves less time for learning subject content.

More coordination is necessary in a distance learning environment than with face-to-face situations owing to a lack of nonverbal signals (Kopp et al 2014:368; Rollag 2010:505). It is harder for educators to have a personal connection and establish a learning relationship with students in a distance education environment (Rollag 2010:505). It is also necessary to consider when structuring the case-solving activities and content that without the proper guidance, the expected learning success will not be achieved (Kirschner, Sweller & Clark, 2006:75; Marcus et al 2004:585). Chen et al (2006:72) found that the learning skills acquired through using case studies in an asynchronous online environment were to be lower than those acquired in face-to-face environments. Cahill, Cook and Jenkins (2003:360-370) conducted research on how useful the World Wide Web discussion boards and e-mails are in presenting a case study course in the medical field. Although they also posited that web-based communication encourages peer learning, their results showed that there is often a lack of participation, described as passive "lurking", owing to a perceived risk of revealing knowledge ignorance (Cahill et al 2003:360). This finding contradicts the findings of Lampton (2011:70) in the accounting field discussed in section 3.8.3.

Communication is vital in the learning environment. Facial expression and body language contribute towards effective communication between educators and students (Rollag 2010:505). Shanker and Hu (2008:105) contend that classroom environments would be better suited to case-based classes that require an increased level of two-way communication than web-based classes. They go on to explain that it would be difficult to implement courses that require continuous exchange of ideas and discussions in a virtual environment. In a web-based environment, the lack of instant feedback, such as an instruction given by an educator in a classroom, necessitates proper planning in advance by educators as it is less dynamic. Shanker and Hu (2008:105) also posit that students who are not comfortable with technology tend to be intimidated by web classes. This also applies to students who are taught by means of case studies in a distance learning environment.

Another challenge of teaching by means of case studies in a distance learning environment is that the pace of real-time discussions depends on the technological platforms being used (Montiel 2013:266). Lost connections or technical support interruptions to announce a drop in bandwidth could potentially cause delays which causes distress (Montiel 2013:266). Unisa also faces the challenge of poor bandwidth (Pitsoe & Baloyi 2015:92). Educators who make use of online case-based teaching may find that students perceive them as less important than in traditional classes (Webb et al 2005:247). Webb et al (2005:247) identified this finding in the field of management information systems.

ODL students are not expected to attend classes and therefore the challenge of evaluating whether students actually interrelate with learning material is more pronounced in a distance learning environment (Letseka & Pitsoe 2013:203). Not only does the use of case studies as a teaching tool in a distance learning environment pose challenges, but the use of case studies as a tool for assessment can also be challenging. Choosing the form of assessment is a vital consideration, as Mampane (2015:40) asserts that the form of assessment in an ODL environment should not affect students negatively. Assessment in ODL institutions often fails to cater for student diversity (Ngara, Ngwarai & Mhute 2012:171). Ngara et al (2012:171) and Letseka and Pitsoe (2013:197, 198) mentioned another challenge in the assessment of ODL students, namely that ODL educators are not always able to authenticate ODL students' written work. Letseka and Pitsoe (2013:197, 198) posed the following question: "How can they tell whether the students' submitted work sufficiently reflects their knowledge and understanding?". They explain that their scepticism originates from practical challenges at Unisa whereby students submit well-written assignments but do not perform well in the examinations. The authorities suspect that the assignments are not always the students' own work (Letseka & Pitsoe 2013:204). Grading students using the case method of teaching in a distance learning environment is more complex and requires more time than in face-to-face environments (Montiel 2013:269; Rollag 2010:503, 504).

3.9 CHANGES TO PROFESSIONAL ACCOUNTING BODIES' EXAMINATIONS TO ASSESS PROFESSIONAL COMPETENCE

One of the challenges with the accounting curriculum in the past was that it encouraged more surface than deep learning (Mohamed & Lashine 2003:14). In Mohamed and Lashine's findings, the assessment approach used in the accounting curriculum seemed to encourage a surface approach and students' perceived material to be learnt as unconnected facts to be memorised. Perhaps the current shift by the examining professional accounting bodies towards deep learning (through the use of case studies) will lead to students' improved understanding of concepts and ideas in an attempt to form a framework for the subject area as opposed to simply memorising information (Mohamed & Lashine 2003:14).

Professional accounting bodies are moving towards more integrated, complex problems that are without structure and cover more than one discipline in order to test application and integration of knowledge (Milne & McConnell 2001:61). In response to calls for change by IFAC and the American Accounting Association (AAA) to move towards making more use of case studies in the learning process of accounting students, case studies are being used more often than in the past. Many professional accounting bodies now make use of case study examinations to assess their prospective members (Knyviené 2014:163).

As mentioned in chapter 1, in 2012, SAICA published its intention to implement a final case study-based examination for trainee accountants eligible to become qualified CAs (SAICA 2013a:1). The APC is the last assessment in the process of becoming a registered CA(SA). The APC examination was introduced to trainee accountants in November 2014 (Oliver 2012). To ensure that the CA(SA) qualification remains relevant and keeps up with evolving business needs and international trends, SAICA changed the examination process to a multidisciplinary real-life imitated case study-based scenario (SAICA 2013a:1). This new format of the examination allows SAICA to increase the assessment of professional and pervasive skills (Oliver 2012). The examination does not only focus on testing the technical aspects of competencies as much greater emphasis will be placed on the

assessment of the pervasive skills, namely ethical behaviour and professionalism, personal attributes and professional skills (SAICA 2013a:2).

Professional competence includes a specific focus on the assessment of strategic and decision-making traits of the far-reaching field of accounting, and it is gained throughout the academic education, professional training programme and practical training (SAICA 2013a:1). In the frequently asked questions about the APC document on SAICA's website (SAICA 2013a:1), it is specifically stated that the "candidate's ability to use knowledge and skills gained in real-life and being able to deal with the changing environment" will be tested in this examination. Candidates can only write the APC after 20 months of practical experience under an approved training contract (SAICA 2013a:6). SAICA's proposed changes to introduce the APC examination were implemented to keep abreast of their international counterparts. The objective of the APC examination is to test candidates' competence as a diverse business professional (UCT Boardcourse 2013:1).

As explained in section 1.1, CIMA introduced a new syllabus that came into effect in January 2015. The purpose of introducing the new syllabus is to bridge the skills gap of newly qualified finance professionals and to make their students more employable (CIMA 2014a). CIMA also introduced new assessment methods which were effective from January 2015. There is a shift in focus towards a pervasive skills such as business acumen, people skills and leadership skills (CIMA 2014a). CIMA now has case studies in all of its subjects in order to incorporate the pervasive skills needed by employable graduates. These integrated case studies combine knowledge and learning at each level of the qualification, resulting in three integrated case studies, one at the operational level, one at the managerial level and one at the strategic level (CIMA 2014c). CIMA regards this new assessment method as being "better" and in line with how technology is currently being used. It also regards its new integrated case study assessments as more practical and robust to provide students with the hands-on skills employers seek.

CIMA is the first global professional accounting body to completely move away from paper-based examinations towards computer-based examinations (CIMA 2014c).

The case study examinations will reflect real-life work situations which enable a wider range of knowledge and skills to be tested, contributing to their wider goal of enhancing “employability”. An interview with Dr Noel Tagoe, CIMA’s executive director of education, revealed that CIMA no longer wishes to deliver qualified accountants who are able to pass examinations, but who are “unable to do things” in the real world. Dr Tagoe suggested that the new syllabus should develop “better thinking and more employable” students. He is also aware of the “Generation Y” needs, and as a result, the examinations will move towards being technology based rather than pen-and-paper based (INSAF Global Business School Blog 2014:1). The new syllabus caters for students to become a flexible “all-round professional”. In 2012, Zoe Robinson, co-author of “A student’s guide to writing business reports”, stated that the demands of CIMA’s case study-style examination enables students to demonstrate how they will perform in their role as newly qualified accountants (CIMA 2012:1). Case study examinations (CIMA 2010:71) could potentially test whether students are aware of obligations such as confidentiality. For example, they could include it in a case study by giving an example of a professional accountant who breached this principle. Students would then be expected to identify non-compliance with the code of ethics and explain why it would not be proper conduct to disclose confidential information.

ACCA (2014b) created a range of professional e-learning skills modules to assist in developing the softer skills needed by modern-day accountants. These skills modules are not compulsory but optional, and have been designed to help students develop the pervasive skills needed in the workplace during the exercise of their practical experience requirements (ACCA Careers 2014). One of the modules, *Communicating Effectively*, claims to enhance written, verbal and virtual communication skills (ACCA 2014b). Another module, *Working Relationships*, describes preferred approaches to interact with people (ACCA 2014b). In an article in *ACCA Careers*, Alan Hatfield, ACCA director of learning, communicated ACCA’s vision with these modules as follows: “We believe the ACCA Qualification prepares students to become complete finance professionals, with the skills required to meet the needs of employers. Through these developments, we continue to strengthen the competencies possessed by our members to meet the constantly changing needs of

business today” (ACCA Careers 2014). Although the skills modules referred to are not case study based, ACCA does make use of case studies based on real-world business scenarios for some of its papers, for example, Governance, Risk and Ethics (Paper P1), which forms part of the Professional Level Essentials examinations (ACCA 2014c).

NZICA and the ICAA, now known as Chartered Accountants Australia and New Zealand, jointly created the Chartered Accountants Programme that has to be completed by aspiring chartered accountants. The programme includes the “capstone module” (NZICA 2014). The capstone module is the final integrated case study-based module in the Chartered Accountants Programme. This module is based on real-world business simulations and strives to develop leadership and other professional skills needed in the workplace. Candidates are assessed both individually and in groups during three one-day workshops, and the module ends with a final examination. The capstone module is assessed through an integrated case study that contributes 60% of module marks and mandatory attendance and completion of assessment tasks during the three workshops contributing 40% of the module marks (ICAA 2014). The module summary on ICAA’s website describes the capstone module as focusing on enhancing professional competence and adding value by integrating technical knowledge with professional (pervasive) skills (ICAA 2014).

As mentioned earlier in Table 2.1, aspiring CPA Canada candidates have to write the UFE and thereby demonstrate competence in pervasive qualities and skills by responding to business cases, representative of challenges that entry-level CAs face (CPA Canada 2014b:21). The UFE consists of three papers written over three days, and all three business simulations require candidates to demonstrate proficiency in pervasive qualities and skills (CPA Canada 2014c).

3.10 CHAPTER CONCLUSION

This chapter explored the use of case studies in accounting education. Different definitions and uses of case studies provided valuable insight. Clear arguments for

and against the use of case studies were discussed in light of their pervasive skills development benefits and challenges. The views of both educators and students were considered. From the different views explored in this literature review chapter, it is evident that case studies have great potential in the accounting education environment for pervasive skills development. It is the perception of educators and students alike that this can be implemented effectively. However, there is room for improvement, and educators should take the various factors, benefits and challenges into account when introducing case studies. The focus of the chapter then shifted towards the ODL environment. It was evident from the literature explored in this chapter that in general, case studies for teaching could be introduced successfully in an ODL environment. However, there is a lack of information on the use of case studies for pervasive skills development in the ODL accounting field. Professional accounting bodies' new assessment methods by means of case studies accentuate the growing importance of case studies.

The next chapter focuses on the research methodology used to conduct an empirical survey and interviews in order to gain more insight into the use of case studies in ODL accounting education with a view to develop pervasive skills.

CHAPTER 4

RESEARCH METHOD

4.1 INTRODUCTION

The literature review in the previous two chapters provided the context for the study by giving an overview of the pervasive skills required by accounting graduates in the 21st century and exploring the use of case studies in ODL accounting education to instil these skills.

The most fundamental characteristic about research is that it is about “discovery” (Ryan, Scapens & Theobald 2002:1). This chapter describes how this research study was conducted. The purpose of this study was to determine whether pervasive skills can be developed through case studies and whether ODL accounting departments should introduce a dedicated case study-based module as part of their curriculum in order to develop or enhance their students’ pervasive skills. In order to find the answer to this question, survey-based research was conducted, by conducting personal interviews and using a questionnaire.

This chapter first explains the research design and research methods used, and this is followed by an explanation of how the empirical research methods were applied. The sample choice and response rate as well as data preparation and statistical presentation of the data are then considered. The limitations of the research are also outlined. The chapter concludes with a discussion of the ethical considerations of the research.

4.2 THE RESEARCH DESIGN

The research design as explained in this section is regarded as the plan of action or blueprint for the study in order to proceed from the research question to a set of conclusions (Babbie 2011:89; Hofstee 2006:113; Wiid & Diggins 2015:42, 62). The techniques that were used in this study, with their strengths and weaknesses as

applied to the research problem, are elucidated in this section.

From the literature reviews conducted mainly in chapters 2 and 3, it seemed appropriate to make use of surveys for this study. Surveys are regarded as a planned and organised technique for collecting information (Bester 2001:1; Wiid & Diggines 2015:72). In survey-based research, information is obtained from individuals who are supposed to represent a larger group (Hofstee 2006:122). Management in CAS, Unisa, represents the ODL academics, and students registered for the MAC3701 module at Unisa represent the ODL students. According to Hofstee (2006:122), surveys can be “an excellent way of finding out people’s opinions, desires and attitudes”. In order to gather ODL academics and ODL students’ views on the subject matter, surveys were thus deemed the most appropriate method to collect information.

Surveys range from qualitative research techniques such as unstructured interviews to quantitative research techniques such as structured questionnaires (Hofstee 2006:122). In a quantitative research design, the design influences the decisions the researcher will make, while in a qualitative research design, the researcher’s decisions will determine the design that he or she will employ (De Vos, Strydom, Fouché & Delpont 2005:269). Before further explaining the research design chosen in this study, the strengths and weaknesses of these two methods, as identified by Johnson and Onwuegbuzie (2004:19, 20), that applied to this study are considered in table 4.1 below.

Table 4.1: Strengths and weaknesses of qualitative and quantitative research methods

Strengths of qualitative research	Weaknesses of qualitative research
<ul style="list-style-type: none"> • Data is based on the participants’ own understanding of matters and provides an explanation of personal experiences of such matters. • Describes matters in much detail as they are situated in local contexts and 	<ul style="list-style-type: none"> • Not as easy to make quantitative predictions and test hypotheses and theories. • Findings or knowledge produced may be unique to relatively few people and may not be generalisable to other

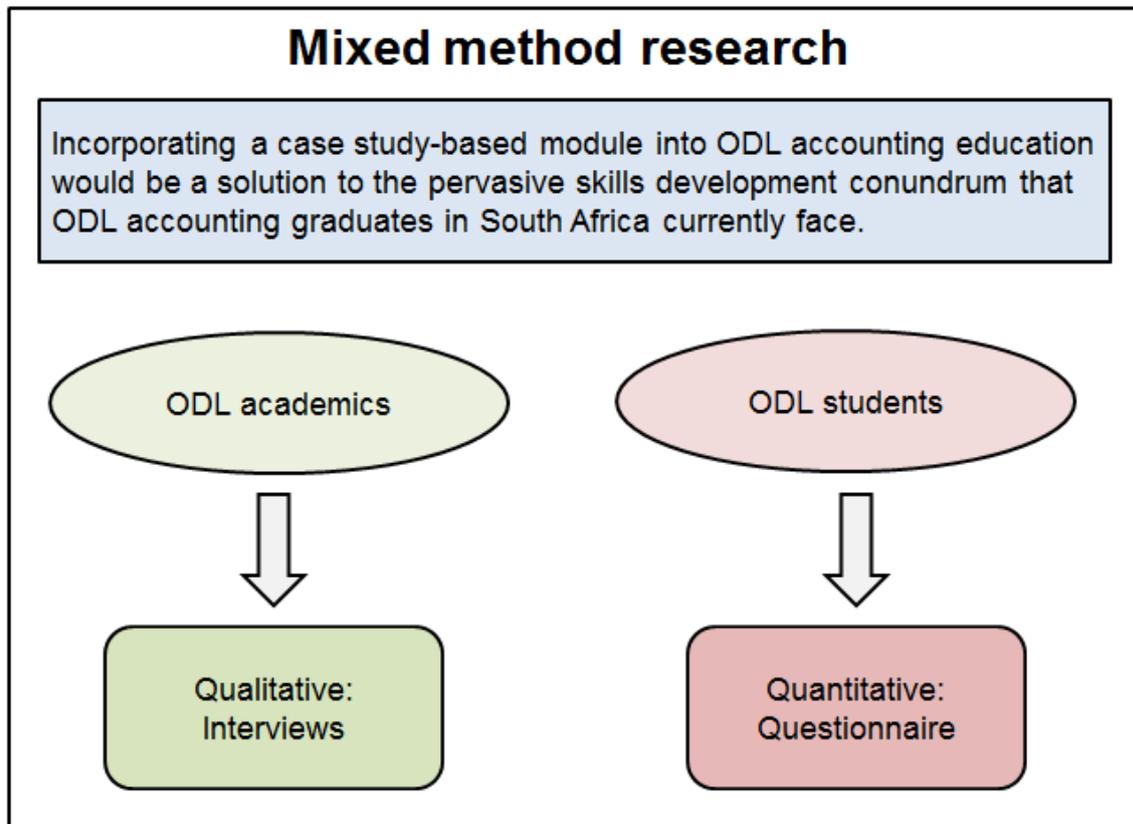
<p>thereby provide “rich” detail.</p> <ul style="list-style-type: none"> • Determines participants’ interpretation of “constructs”. • Natural settings can be used for the collection of data. • This approach takes local situations and conditions into account. 	<p>people or other settings.</p> <ul style="list-style-type: none"> • May have lower credibility with people in power. • More time consuming to collect and analyse the data when compared to quantitative research. • Researcher’s personal bias may more easily impact the results.
<p>Strengths of quantitative research</p>	<p>Weaknesses of quantitative research</p>
<ul style="list-style-type: none"> • Ideal for collecting data that allows for quantitative predictions. • Not time-consuming to collect data with some quantitative techniques. • Generates accurate numerical data. • Not time-consuming to analyse data (using statistical software). • Researcher does not easily influence his or her research results. • May have increased credibility with people in power. • Large numbers of people can be studied. • Enables testing of hypotheses that are constructed before data collection. Can generalise research findings when data are based on random samples with adequate sizes. • Research findings can be generalised when they have been duplicated on different populations. 	<ul style="list-style-type: none"> • The researcher’s categories and theories that are used may not reflect the local population’s understandings. • As theory or hypotheses are tested and not generated, the researcher may miss out on phenomena that are taking place. • Knowledge produced may be too abstract for applying to specific local situations and contexts.

Source: Adapted from Johnson & Onwuegbuzie (2004:19, 20)

In order to test the thesis statement, the views of both ODL accounting academics and ODL accounting students had to be considered which, in light of the strengths and weaknesses of qualitative and quantitative research techniques mentioned in table 4.1 above, posed a challenge. ODL students far outnumber ODL academics and it would be difficult to implement the same research approach for both parties. It would, for example, be difficult to conduct interviews with large numbers of ODL students as they are spread geographically throughout the country, and this would be time consuming and expensive. ODL academics at Unisa, however, are all accessible in the same geographical setting, and “rich” data could thus be collected during interviews because the personal experiences of these academics could be described using interviews without it being too time consuming or costly. The literature consulted provided a solution, namely a mixed method research approach.

In order to test the thesis statement, the study used a mixed method approach. This approach is the class of research in which quantitative and qualitative research techniques are combined or mixed into a single study (Johnson & Onwuegbuzie 2004:17; Wiid & Diggins 2015:65). Some researchers further describe this method as “expansive”, “creative” and “superior to mono-method studies” (Johnson & Onwuegbuzie 2004:17, 18). Mixed model research (where qualitative and quantitative techniques are mixed across stages of the research process) and mixed method (where there is a qualitative phase of research and a quantitative phase in an overall research study) are the two major types of mixed method research (Johnson & Onwuegbuzie 2004:20; Leech & Onwuegbuzie 2009:273). As illustrated in figure 4.1, this study adopted a mixed method approach.

Figure 4.1: Research design



Source: Own compilation

The ODL academics were interviewed (qualitative phase) and the ODL students asked to fill in a questionnaire (quantitative phase) in order to solicit their views on the subject matter. Table 4.2 below lists the main strengths and weaknesses of a mixed method research approach.

Table 4.2: Strengths and weaknesses of a mixed method research approach

Strengths of mixed research
<ul style="list-style-type: none"> • It offers the strengths of both quantitative and qualitative research and the weaknesses of one method can be overcome by the strengths of another method. • Stronger evidence can be provided for conclusions by merging and substantiating findings. • Meaning can be added to numbers by including descriptions, and vice versa. • Insights and understanding that might have been missed when only using

<p>single methods of research can be supplied.</p> <ul style="list-style-type: none"> • Qualitative and quantitative research used simultaneously produce knowledge that is more comprehensive, which can more easily inform theory and practice.
<p>Weaknesses of mixed research</p> <ul style="list-style-type: none"> • The researcher has to learn about multiple methods and approaches and understand how to interrelate them. • Methodological traditionalists argue that work should always be conducted within either a qualitative or a quantitative paradigm. • More costly and takes more time to conduct.

Source: Adapted from Johnson & Onwuegbuzie (2004:21)

As mentioned in table 4.2, one of the strengths of a mixed method research approach is that the weaknesses of one method can be overcome by the strengths of another method. For example, the fact that “rich” data from personal experience will be obtained through conducting interviews, counteracts the weaknesses of the quantitative research methods mentioned above, such as the fact that the knowledge produced may be too abstract for applying to specific local situations and contexts. Although Johnson and Onwuegbuzie (2004:21) identified numerous strengths and weaknesses of a mixed method research approach, their list was adapted to include only those that could be regarded as applicable to this study (see Table 4.2).

Regarding the ODL academics, the qualitative research method was implemented by means of interviews in order to obtain “rich” data based on their personal experience. The ODL academics were all situated in the same geographical setting and it was therefore deemed cost effective and not too time-consuming to collect the data. Zikmund, Babin, Carr and Griffin (2013:150) assert that with qualitative studies, using interviews, the researcher has to analyse various unstructured responses. In the case of this study, large, geographically spread ODL student numbers did not justify the use of interviews. A quantitative research method was therefore followed because of its cost effectiveness. Zikmund et al (2013:186) regard the use of questionnaires as useful because it is “a quick, inexpensive, efficient, and accurate means of assessing information about a population”. The quantitative research

method focuses on numerical results and the data obtained are not influenced by the researcher. It also provides objective, unbiased results and lends itself to statistical manipulation (Hussey & Hussey 1997:12; Madrigal & McClain, 2012). The research approach used in this study was primarily descriptive in nature. Descriptive research, as the name implies, is used to describe attempts to address the questions of who, what, when, where or how much, and typically includes clearly stated hypotheses or investigative questions (Wiid & Diggins 2015:67).

4.3 THE RESEARCH METHODS USED

In the previous section, it was explained that a mixed method research approach was used in this study, combining qualitative and quantitative research techniques. While the research method refers to techniques and procedures used in obtaining data, the research methodology can be regarded as the “design” or approach to the research (Cohen et al 2007:47). For the purposes of this study, methodology referred to “the coherent group of methods that complement one another and that have the ‘goodness of fit’ to deliver data and findings that will reflect the research question and suit the research purpose” (Henning 2004:36). In this study, use was made of a literature review and survey research. For the survey research, both interviews and a questionnaire were used to collect the data.

4.3.1 Literature review

A literature study was conducted to review the available knowledge on the pervasive skills deemed important for accounting graduates (chapter 2) as well as on the use of case studies in accounting education (chapter 3). Mouton (2001:87) explains this as a “scholarship review”, and it has the benefit of saving time by avoiding repetition of previous studies. Mouton (2001:87) also mentions that it “provides clues and suggestions about what paths to follow”. The literature review informed the researcher of past studies conducted on pervasive skills in the accounting field and guided her to further define the study and redirect the research focus towards distance education because this seemed to be a relatively unexplored area.

According to Mouton (2001:87), the literature review indicates accepted empirical

findings in the field of study. An objective analysis of the literature enables the methodology to be linked to the method (Ryan et al 2002:181) and indicates how the researcher's work fits into the existing body of knowledge and how it will lead to new knowledge (Hofstee 2006:91). In this study, a sample of references was taken from relevant books, periodical articles, conference proceedings, theses, dissertations, technical reports and subject ideas. Issues and problems were identified. The literature review therefore helped the researcher to initiate and direct the empirical research.

4.3.2 In-person interviews

The literature review conducted indicated that little has been published on case studies as a tool to develop or enhance ODL accounting graduates' pervasive skills, especially in a South African context. It was decided that the perceptions of ODL academics should be obtained on the matter by conducting interviews. An interview is an organised exchange of words, and Hofstee (2006:122) and Wiid and Diggins (2015:121) regard it as an effective way of finding out what people's opinions are. The use of interviews holds out the prospect of collecting rich data and an opportunity emerges for the use of different methods of data analysis (Newton 2010:2).

The purpose of conducting interviews is to gather reliable information relating to a problem (Hofstee 2006:132). Interviews can be structured, unstructured or semi-structured (Hofstee 2006:132). According to De Vos et al (2005:292, 296), an unstructured interview disregards any of the researcher's previous experience, opinions or information in a particular area, whereas the semi-structured interview focuses on a particular area of interest in order to obtain a detailed picture of a participant's perception of a certain matter. Semi-structured interviews were chosen to collect information from ODL academics because it allowed for different answers from different interviewees to the same questions (Hofstee 2006:132). Another advantage of using semi-structured interviews is that in-depth information can be obtained, and if necessary, interviewers can ask for further explanations to the questions (Terre Blanche & Durrheim 1999:281-282). To gain a better understanding of the use of case studies to develop pervasive skills in ODL accounting education,

semi-structured, one-to-one in person interviews were conducted.

Semi-structured interviews can either be open ended or guided. Open-ended interviews explore new ideas or territory from interviewees, while guided interviews are used for certain topics where the outline of the topic is known and the answer is yet to be determined (De Vos et al 2005:292). The same questions were presented to the different interviewees in order to collect complete and comparable data through the use of a guided interview approach. The questions in the interviews were open ended and interviewees could thereby freely explain their own views on the topic.

4.3.3 Questionnaire

The literature review and interviews informed the development of the questionnaire. A questionnaire can be regarded as “a form of structured interviewing, where all respondents are asked the same questions and are often offered the same options in answering them (yes/no, ranked on a scale, etc.)” (Hofstee 2006:132). The purpose of a questionnaire is “to obtain facts and opinions about a phenomenon from people who are informed on the particular issue” (De Vos et al 2005:166). ODL students’ perceptions on whether case studies could be a useful tool to develop pervasive skills were obtained by using a questionnaire consisting of various statements.

Although questionnaires may include open-ended questions where respondents answer in their own words, this was avoided in the current study. According to Hofstee (2006:132), people differ in their ability and willingness to write answers and responses to open-ended questions and these can be difficult to interpret. ODL students are diverse and could differ in their understanding, ability and willingness to answer open-ended questions. Hence the designed questionnaire for this study included only closed questions.

Questionnaires may be interviewer-administered or self-administered. In light of the fact that ODL students are situated in different places and have access to their e-mails at different times, a self-administered online survey was used to which a link

was sent via e-mail. This enabled the research to be conducted over a wide geographical spread with no distance limitations. According to Neuman (1997:38), use of a self-administered online survey improves anonymity and avoids interviewer bias. The advantages of having a questionnaire sent out via e-mail include, inter alia, a fast response rate and low costs. However, the response rate for online surveys tends to be quite low (Nulty 2008:302).

4.4 IMPLEMENTING THE RESEARCH METHODS

4.4.1 Conducting the interviews

Purposive sampling was used to select the participants. This type of sampling occurs when, according to the researcher's understanding of a certain subject, certain people fit the criteria for "desirable participants" (Henning 2004:71). Interviews were held with members of management of CAS, representing ODL accounting academics at Unisa during February and March 2015.

The selected interviewees (see section 4.5.1) were asked if they would be willing to participate in the interview. After they had consented, an appointment was set up confirming the date, time and venue. A letter handed to the interviewees informed them about the purpose of the study. This letter is included in appendix A. Trust is important and should be maintained throughout the interview through professionalism and respect (Newton 2010:6). Interviewees were asked to sign the permission letter. The anonymity of the participants was guaranteed and they were informed that they could choose to cease to participate at any point during the interview. Participants were informed that they would have access to the results of the study if they so wished. All of the interviews were conducted in English.

Interview questions should be clearly structured (Cohen et al 2007:129). The researcher had a set of predetermined open-ended questions (see appendix B), but was also guided by the interviewees' responses in order to learn more about their role in teaching or enhancing ODL students' pervasive skills. The interviewees were not provided with the questions beforehand. This was done to prevent pre-empted responses. According to Babbie and Mouton (2001:520), social research should not

interrupt people's lives. For this reason the duration of each interview was limited to between 10 and 25 minutes, and they were all conducted at Unisa in the interviewees' offices in order to minimise any inconvenience.

Participants were encouraged to describe in their own words their experiences (if any) of teaching or enhancing pervasive skills in an ODL institution by means of case studies. They shared their personal experience and perceptions of the responsibility to develop pervasive skills, current or proposed practices at Unisa, and the challenges and benefits of incorporating case studies in an ODL environment (see appendix B).

4.4.2 Development of the questionnaire

The self-administered structured web-based questionnaire was designed to assess the perceptions of ODL accounting students on the use of case studies for pervasive skills development in ODL accounting education. A cover letter explaining the purpose of the survey and the confidentiality of the responses, accompanied the questionnaire (see appendix C). A hyperlink to the URL where the questionnaire was hosted was e-mailed to the MAC3701 students. The invitation to participate in the online survey was sent out via SurveyMonkey. The students' e-mail addresses were obtained from the Unisa database with permission from the university (see appendices D and E). The link to the survey was e-mailed to students on 8 May 2015 and followed up by an e-mail message one week before the closing date of the questionnaire, namely 31 May 2015. The participants could complete the questionnaire at a time suitable to them.

The questionnaire (see appendix C) was divided into three main sections. Section A covered the sociodemographic information of the participants. Section B comprised statements and questions relating to the students' perceptions or experience of pervasive skills development. Section C consisted of statements and questions relating to the students' perceptions or experience of case studies during their Unisa studies.

Each participant was required to provide his or her consent after reading the cover

letter to confirm that he or she would be willing to participate in the research and that he or she understood the purpose the study. The cover letter mentioned that the anonymity of the participants was guaranteed and they were informed that they could choose to cease to participate at any point during the completion of the survey. Participants were informed that they would have access to the results of the study if they so wished.

In order to obtain background information (sociodemographic information - section A of the questionnaire), the respondents were asked to indicate their gender, language of learning and age. They were also required to indicate whether they were full-time or part-time students. Their employment status and intended further qualifications with certain professional accounting bodies enabled the researcher to compare different groups of individuals' perceptions when analysing the data.

In sections B and C of the questionnaire, participants were asked to answer a set of questions based on their perception or experience of pervasive skills development and case studies during their Unisa studies. Students were also asked to indicate to what extent they believed certain pervasive skills could be developed or further enhanced by incorporating case studies into ODL accounting education. The statements in section B and C mostly required the students to respond to "yes/no" questions or to rate statements based on a five-point Likert scale: ranging from strongly disagree to strongly agree.

4.4.3 Pretesting

Before the interviews were conducted and the questionnaire was distributed, a pilot study was conducted. Pilot testing is an important step in conducting successful survey-based research (Cohen et al 2007:341; Wiid and Diggins, 2015:174). A pilot test is conducted to determine weaknesses, clarify questions and increase the reliability and validity of the questionnaire (Cohen et al 2007:341). This was accomplished by discussing the interview schedule and the questionnaire with an ODL expert, Professor Paul Prinsloo, at Unisa. His valuable insights, ideas and suggestions were incorporated into this study and informed the final interview schedule. The questionnaire was changed to clear up any misunderstandings after

feedback had been received. Valuable input and suggestions from a qualified statistician were also taken into account.

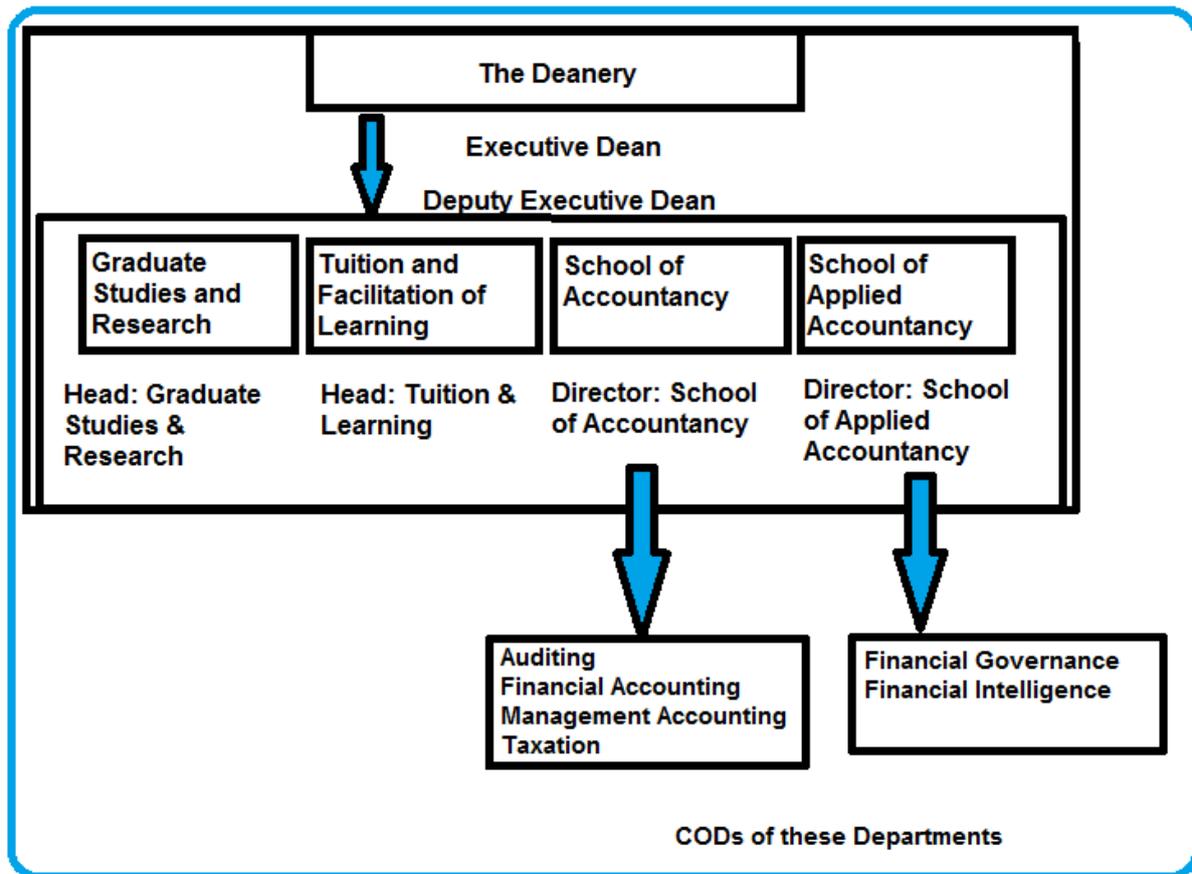
4.5 SAMPLE CHOICE AND RESPONSE RATE

The ODL institution selected for the study was Unisa, since it is Africa's leading and largest distance learning institution (Unisa 2013). Unisa is accredited by SAICA, and from the recently published APC 2014 results document available on SAICA's website, it is evident that Unisa delivers the largest numbers of students who pass SAICA's final test of competence examination (SAICA 2014). Unisa is also accredited by CIMA, the largest management accounting body in the world (Unisa 2015).

4.5.1 Interviews: sample choice and response rate

As mentioned in section 4.4.1, it was decided to conduct interviews with management members of CAS (including CODs) who represent ODL academics. A key advantage of purposive sampling is that it is planned and aimed at an intentional group of people (Tongco 2007:154). Members of management of CAS were chosen as they could be regarded as the "voice of the academics" (Barac & Du Plessis 2014:61) representing the respective departments. Figure 4.2 below provides an overview of the structure of CAS at Unisa. The then Deputy COD of the Department of Management Accounting was also selected to be interviewed because of his knowledge, experience and involvement with the CIMA programme.

Figure 4.2: Structure of CAS, Unisa



Source: Own compilation

Apart from the Executive Dean, only members of management directly involved in the tuition portfolio were interviewed. Eleven interviews were thus conducted.

4.5.2 Questionnaire: sample choice and response rate

The sample chosen for the empirical survey comprised the third-year management accounting students enrolled for the subject MAC3701 at Unisa. According to Shuttleworth et al (2013:1515), it is unrealistic to expect first- or second-year students to realise that they are fully responsible for their skills development - hence the researcher's decision to target third-year students. At a third-year level, students are in a better position to comment on future skills expected of them (Shuttleworth et al 2013:1515). Selecting third-year management accounting students enabled the researcher to take into consideration students who were studying towards becoming CAs registered with SAICA, as well as students studying towards becoming ACMA, CGMAs registered with CIMA because this module is compulsory for both of these

streams of students. Another reason for focusing on a third-year level module was the fact that interdisciplinary integration is a major feature of the APC that prospective CA(SA) students should be exposed to before they qualify (SAICA 2011; Van der Merwe 2013:1138). Furthermore, according to Healy and McCutcheon (2010:563), case studies should be introduced at the right student level, preferably at a more advanced level as it is harder for students who are in their first or second year to apply their knowledge. Nobody in the group was excluded on the basis of race, age or gender. However, only students with MyLife e-mail addresses enrolled for the MAC3701 module were invited to participate in the survey.

Hussey and Hussey (1997:148) and Robson (1993:139) maintain that there is no specific or ideal sample size. According to them, sample size depends on the field in which research is conducted, the confidence level expected in the answers and the response rate anticipated. Although not all students studying at Unisa have access to computers or the internet (Kamanja 2007:726; Prinsloo & Van Rooyen 2007:59), the researcher indiscriminately selected as the target population all third-year management accounting students who had gained admission to write the May/June 2015 examination. In order to gain examination admission, students have to submit at least one assignment during the semester or they must have been granted either a supplementary examination or a special examination during the previous examination period.

E-mails were sent out on 8 May 2015 to 4 406 students' MyLife e-mail addresses. The percentage of students who accessed the survey was 10.1% (444 students). The realised sample consisted of the 363 student who had completed the whole questionnaire and had granted permission for their responses to be used for research purposes. The number of participants in the study was thus reduced to 363, which gave a response rate of 8.3%. The survey was conducted during the students' examination period which could have contributed to a low response rate.

The response rate of online surveys tends to be lower to that of paper-based surveys (Nulty 2008:302), and according to Denscombe (2007:23), there is no specific rule for determining what an adequate response rate should entail. Whether or not a

response rate is sufficient, depends on what the data collected will be used for (Nulty 2008:306). In the case of this study, it was to obtain more information on the perception of ODL students on the usefulness of case studies to enhance pervasive skills. Denscombe (2007:23) suggests that the response rate could be assessed by looking at similar surveys that have been conducted by other researchers. An online survey conducted by Prinsloo and Van Rooyen (2007:54) among second-year ODL accounting students at Unisa, also had a low response rate. The two semesters in which they conducted their study delivered 144 usable responses (less than 7% response rate) and 193 usable responses (less than 10% response rate) respectively. When compared to this online survey, which was also sent out indiscriminately to all students in the target group, the response rate for the current was deemed comparable and acceptable.

The participants comprised 161 males (44%) and 202 females (56%) (see chapter 5, section 5.3.2). This is in line with the profile of the population to whom a questionnaire were sent out as the gender differences for the population requested from the Student System, which is maintained by Computer Services, with the necessary authorisation from the Deputy Registrar at Unisa, also revealed that the female students (59%) outnumbered the male students (41%). In terms of gender, the realised sample could be regarded as being representative of the target population.

4.6 DATA PREPARATION

4.6.1 Interviews: data preparation

The interviews were recorded with a digital voice recorder, transcribed and profiled by the researcher.

4.6.2 Questionnaire: data preparation

Terre Blanche and Durrheim (1999:10,522) suggest that data should be “clean” before preparing any statistical calculations. Data preparation in this study entailed discarding unusable responses where either the whole questionnaire had not been completed, or permission had not been granted.

As mentioned in chapter 1, the raw data was exported from SurveyMonkey for further analysis, into statistical packages, SAS JMP, version 11 as well as SPSS, version 23, and converted into an appropriate format for statistical analysis. The descriptive statistics were calculated for all the variables (questions) in the form of frequency tables and cross-tabulations (see appendix F). The frequency tables also served the purpose of a data quality check in that any improbable value could be identified and corrected.

4.7 STATISTICAL PRESENTATION OF THE DATA

A key point mentioned by Denscombe (2007:254) is that quantitative data can be used meaningfully without necessitating difficult statistical analysis techniques. Denscombe (2007:253) argues that “simple descriptive statistics can offer the project researcher a succinct and precise way of:

- organising the data;
- summarising the findings;
- displaying the evidence;
- describing the profile of findings (how the data are distributed);
- exploring connections between parts of the data (correlations and associations).”

Descriptive and inferential analysis was used in this study. Inferential statistics was used “to make judgments of the probability that an observed difference between groups is dependable or that it might have happened by chance in this study” (Trochim 2006:1).

SAS JMP, version 11 as well as SPSS version 23 were used to conduct the statistical analysis of the data. The main purpose of the questionnaire was to obtain responses to certain questions (descriptive design) and not necessarily to test for constructs. Descriptive statistics comprise frequency tables, which show the percentage of respondents per option chosen per statement.

Exploratory factor analysis (EFA), utilising maximum likelihood estimation as the extraction method and varimax rotation, was used for data reduction on a set of items relating to the means through which pervasive skills were developed by students during their university years. Factor analysis is a statistical technique used to describe the relationship or variability among observed variables in terms of fewer unobserved variables referred to as factors or constructs (Terre Blanche & Durrheim 1999:362; Wiid & Diggines 2015:242). Reliability in quantitative research encompasses the internal consistency of a set of measurements of a measuring instrument. Cronbach's alpha values were used as a measure of the reliability of the construct identified in the questionnaire because these were the most widely used measures (Wiid & Diggines 2015:249). For the factors identified, the analysis of variance (ANOVA) statistical technique was used to infer whether there were real differences between the means of two or more categories of a variable, based on sample data, because with only two groups, the t-test and one-way ANOVA are equivalent and will always give the same p-value. A probability value (p-value) is produced, which indicates statistical significance if the p-value is smaller than 0.05 (Turner 2014:12; Wiid & Diggines 2015:280).

The Pearson chi-square statistical test was used to test for relationships between the responses of different sociodemographic respondent groups. Chi-square statistics is used to test the independence of association between two variables (Denscombe 2007:267; Wiid & Diggines 2015:280).

The results of the statistical analysis of the data obtained in the empirical survey will be discussed in the next chapter.

4.8 LIMITATIONS OF THE RESEARCH

The results obtained from the research methodology used in this study to determine the perception of the usefulness of case studies for pervasive skills development in ODL accounting education were subject to certain limitations.

Firstly, as in the study of Van der Merwe (2013:1144), this study measured the skills

development of students through the perceptions of participants, and it is challenging to accurately measure direct skills improvement. Future research could potentially investigate actual skills improvement experienced by ODL students as a result of case studies.

Secondly, the results in this study were limited to the perceptions of the use of case studies in accounting education in one South African ODL institution, albeit the largest ODL institution in the country. Since information was only collected from management members of CAS at Unisa, it will not be possible to generalise the results to all accounting departments at different education institutions.

Thirdly, in terms of the questionnaire, the results were obtained from third-year ODL management accounting students at Unisa and were thus limited to the perceptions of undergraduate ODL students. The survey was conducted at Unisa, a single university, for a single management accounting course, MAC3701. It will not be possible to generalise the results of this study to the entire target population, but the results of this study should provide insight into a portion (363 students) of the target population. Future research could include larger samples of accounting students in different universities, perhaps at different levels of their studies.

Lastly, this study only focused on the conceptual frameworks of two professional accounting bodies actively involved in South African accounting and management accounting education, namely SAICA and CIMA.

4.9 ETHICAL CONSIDERATIONS IN THE RESEARCH

According to the Belmont report, ethical principles, as summarised by Visagie (2012), were taken into consideration during this study. Prior to commencing the research, ethical clearance was obtained from the Research Ethics Committee (ref no.: 2015_CAS_001) of Unisa's College of Accounting Sciences (see appendix D). Permission was also obtained from the Research Permission Sub-committee of the Senate Research and Innovation Higher Degree Committee (ref no.: 2015_RPSC_008) (see appendix E).

To the best of the researcher's knowledge, all works of others were included with proper acknowledgement in order to avoid plagiarism (De Vos et al 2005).

The researcher had an obligation to respect the rights, needs, values and desires of the ODL academics who were interviewed as well as the ODL students to whom the questionnaire was sent. Data integrity was not compromised because data was only collected from voluntary participants, and they were informed upfront that their data would remain anonymous. Informed consent was obtained from both CAS management as well as the ODL students at Unisa before they commenced answering the questions (appendices A and C). The participants were made aware that they could stop the interview or exit the survey at any time and thereby cease to participate without being adversely affected. They were also informed that their privacy and confidentiality would be guaranteed and that they could withdraw or choose not to participate at any time during the interview or completion of the questionnaire (see appendix B for the interview schedule and appendix C for the questionnaire).

4.9.1 Interviews: ethical considerations

All the audio recordings were transcribed verbatim and all the transcripts were saved on a password-protected computer. The transcription of the data remained strictly confidential. Data was analysed through an inductive thematic analysis method.

Operational measures to ensure trustworthiness included the following:

Credibility

All the interviews were conducted by the primary researcher. The researcher built trust by honouring anonymity, honesty and openness during the interview. The same questions were put to all interviewees and the researcher made use of a reflective journal and field notes.

Transferability

The results were discussed in depth with direct quotations from the interviews. The results were also recontextualised in the literature.

Conformability

This was ensured by the creation of a conformability audit (keeping raw data, condensed notes of data reduction and analysis) in case an auditor would want to verify the trustworthiness of the findings.

Dependability

All aspects of the research were fully described, including the research method, sampling process and data analysis. This process was clearly documented.

Authenticity

Specific groups were not excluded from the project on the basis of race, age, gender or any social or financial criteria.

4.9.2 Questionnaire: ethical considerations

The sampling, data gathering and processing of the relevant data were performed in a manner that was respectful of the rights and integrity of all parties, as stipulated in the Unisa Policy on Research Ethics (2014:4-6).

Demographic information was collected to provide a demographic profile of the participants relevant to the research phenomenon, including age, language of learning and gender. Information on age, language and gender are considered to be sensitive/prejudicial (Protection of Personal Information Bill 2009:1). This information, however, was deemed important by the researcher to create a holistic picture of the phenomenon under investigation. Participants were therefore informed that their identity would remain anonymous. A cover letter to all participants (appendix A) described the purpose and benefits of the study. The researcher will destroy personal information of the participants within five years after completion of the current research in line with the research ethics practices and requirements of the Unisa Policy on Research Ethics (2014:15).

4.10 CHAPTER CONCLUSION

This chapter described the research design and the research method used in this study. A mixed method research approach was followed. This chapter explained how a pilot test was conducted and also elaborated on the approach followed to conduct the interviews and develop the questionnaire. It also explained the sample choice, which was limited to ODL academics and ODL students at Unisa. The response rate was then discussed. No major shortcomings were evident when the data on the questionnaire was prepared for processing. The limitations of the research and ethical matters were also highlighted.

The next chapter focuses on the presentation and analysis of the research findings from the interviews conducted and the questionnaire provided in terms of the methodology explained in this chapter.

CHAPTER 5

PRESENTATION AND ANALYSIS OF THE RESEARCH FINDINGS

5.1 INTRODUCTION

Following the methodology used in this study to determine ODL academics' and ODL students' perceptions of pervasive skills development through the use of case studies, this chapter presents the research findings based on an analysis of the interview and questionnaire results. According to Henning (2004:80), a "process of synthesising" is followed whereby data is interpreted and reduced to a manageable size where the most important findings are reflected upon and further discussed.

The results of the interviews and the questionnaire were analysed and interpreted to draw appropriate conclusions. Hofstee (2006:148) posits that data is useless if it is not analysed. He states that "only when you analyse data, and use that analysis in order to substantiate a point, does it become evidence". According to De Vos et al (2005:333), data analysis arranges and gives direction in an orderly fashion to volumes of data that have merely been collected. They describe it as "a messy, ambiguous, time-consuming, creative and fascinating process" (De Vos et al 2005:333). Ultimately, the aim of analysing and interpreting the data collected for this study was to answer the questions whether case studies can in fact enhance pervasive skills, and whether ODL accounting departments should introduce a dedicated case study-based module as part of their curriculum in an effort to develop or enhance their students' pervasive skills.

Firstly, this chapter will elaborate on the research findings based on the interviews conducted with ODL academics. Secondly, the discussion will focus on the research findings based on the survey conducted with ODL students. Regarding the data obtained from the questionnaire, the research findings relating to the sociodemographic information will be discussed first, followed by an explanation of the descriptive and inferential statistics.

5.2 INTERVIEW RESULTS

The sample choice for the interviews was outlined in section 4.5.1. Eleven of the CAS management members were interviewed, which provided a better understanding of the perceptions of ODL academics. The interviews involved asking management members whether they believed that there is a need for the introduction of a case study-based module in order to deliver better prepared, practice-ready students, by focusing on the enhancement of their pervasive skills. The interviews also determined whether ODL accounting educators in the respective departments had such a module in place and whether they perceived such a module to be beneficial to both students and their future employers.

The interviews were recorded and the transcripts then analysed and interpreted. The following themes emerged during the interviews:

5.2.1 Unisa's responsibility to develop accounting graduates' pervasive skills

In accordance with the literature (Arquero Montaña et al 2001:310; De Lange et al 2006:365-366; Dixon et al 2010; Gammie et al 2002:64; Howieson 2003:79), it was clear from the interviews conducted that the respondents generally agreed that the work environment requires students to develop pervasive skills during their accounting studies. However, one of the interviewees was sceptical and felt that pervasive skills are only actually acquired at the end of the students' practical training period. In a study conducted by Barac and Du Plessis (2014:53), this finding was affirmed as some heads of departments involved in the undergraduate accounting programmes in South Africa indicated that students can better acquire some pervasive skills in the real world through practical work experience than during their university years.

All except one of the interviewees agreed that Unisa has a responsibility to develop accounting graduates' pervasive skills. According to Boyce et al (2001:55), "accounting educators must take direct responsibility for the development and implementation of strategies aimed at improving a range of generic skills in their

students". Three interviewees were of the opinion that it is a crucial responsibility specifically to help students develop the necessary pervasive skills to pass the professional accounting examinations. The training of accounting students is impacted by the fact that both SAICA and CIMA have included final case study-based examinations for their eligible members. It was mentioned and implied by most of the interviewees that, in light of these changes, both the students' syllabus and assessment should be more aligned to that of the professional accounting bodies. As one interviewee aptly put it: "... it is a step in the right direction". Another interviewee explained it as follows: "SAICA and CIMA govern the future of accounting graduates and therefore it is important for us to follow suit." This is in line with the findings of Van der Merwe (2013:1137) and Velayutham (2008:29), who concluded that educational institutions throughout the world have to shift their attention to the enhancement of pervasive skills because of indirect pressure placed on them by the relevant professional accounting bodies. One of the interviewees pointed out that although academics would like to train students to pass professional accounting examinations, it is not their primary purpose, and that the focus should be on helping students to complete their qualifications.

The results show that in line with the findings in the literature (Low et al 2013:4; Shuttleworth 2012:243 259; Zraa et al 2011:3), there is a perceived responsibility by the interviewees to train employable graduates with well-developed pervasive skills. The words used by some of the interviewees to describe these employable graduates were as follows: "competencies to fit into practice", "well-rounded when it comes to pervasive skills", "hands-on accountants" and "fully fledged members of a team".

While one interviewee was sceptical about the ability of an ODL institution to assess pervasive skills, a few of the other interviewees suggested that Unisa should adapt their assessment practices and also include more case studies to assess the students' pervasive skills. Another interviewee specifically mentioned that using case studies would be the best method to develop students' pervasive skills.

One interviewee posited that pervasive skills are not only needed by SAICA, CIMA and other professional bodies, but also by broader society - hence Unisa's responsibility to instil pervasive skills in all graduates, whether or not this is specifically required by professional bodies.

5.2.2 Current practices at Unisa to include case studies in the accounting syllabus

In the opinion of one of the interviewees, the Department of Auditing, inter alia, makes use of integrated case studies at undergraduate level which incorporate pervasive skills. Most of the interviewees, however, commented that case studies at undergraduate level are not really being used as part of the current syllabus. Although some undergraduate modules do include case studies to a certain extent, they are neither comprehensive nor integrated, and there is room for improvement. In the words of one of the interviewees: "I think, although the current practice exists, case studies are not currently utilised to the extent that it should be". Three interviewees argued that the case studies currently in use at undergraduate level are too limited to incorporate pervasive skills training. One interviewee went as far as to say that sometimes it is mere "sugar-coating" of questions and they are not really case studies in the true sense of the word. According to Knyviené (2014:3), accounting educators often use short case studies as part of their lectures to illustrate real-world practices. Based on the participants' responses, it seems as if most of the case studies included at undergraduate level, fell into this category. Brooke (2006:142) states that teaching case studies online is unusual for undergraduate courses, and current practice at Unisa does not seem to be a real exception.

A possible reason for not really using case studies to teach at undergraduate level could be time constraints. Undergraduate modules are presented over a semester, and before the second semester of 2015, undergraduate examinations at Unisa were restricted to two hours, which did not permit additional reading time for engagement with the text of case studies. In the second semester of 2015, the examination time of the financial accounting, taxation, auditing and management accounting third-year modules was extended to three hours. The additional time allowed in the

examination could therefore cater for increased use of case studies for assessment in the future. According to one interviewee, pervasive skills are included in the signature module, CAS1501, for which all first-year students have to enrol.

Case studies are being used at postgraduate level as part of the training of accounting students who wish to become members of SAICA. The interviewees involved in the postgraduate CTA programme, explained that these “case studies” are in the form of “real-life” or “life-like” scenarios and are included in their study material, formative (e.g. assignments) and summative (e.g. examinations) assessment practices. These case studies require the application of certain pervasive skills and the questions required are usually based on the set of information supplied to students. These case studies are therefore longer accounting case studies that are used to simulate real-world scenarios such as those described by Ebrahim et al (2010:198) and Nouri and Opatosky (2010:210). When compared to the case studies being used by the professional accounting bodies, one interviewee explained that the case studies in their postgraduate degree programme are not totally integrated because they only focus on one field.

Botes (2005:153) suggested that HEIs should make use of real-world case studies more often in fields such as management accounting. Unisa seems to follow the advice of Botes as case studies are also being used as part of the postgraduate accounting students’ training for those students intending to become members of CIMA. As explained by the interviewees involved with the CIMA programme, there is a “huge emphasis on case studies” for those students registered for the Postgraduate Diploma in Management Accounting. The current practice at Unisa is to include a comprehensive case study that integrates three of the five CIMA modules’ study material for summative assessment purposes. A new standalone case study-based module is also being developed to replace one of the previous modules that was required for the completion of this degree. Unisa students who obtain the Postgraduate Diploma in Management Accounting are currently exempt from the CIMA Operational and Managerial level examinations, and as part of their training for the strategic level examinations, they are exposed to integrated case studies.

5.2.3 Proposed practice at Unisa to include case studies in the accounting syllabus

From the question on whether case studies should be included in the current accounting syllabus, and if they are, whether they should be integrated into an existing module or rather developed as a separate module, interviewees responded positively about case studies in general. One interviewee commented as follows: “Yes, of course I would like to see more case studies, especially at an undergraduate level”. Some of the interviewees stated that more “basic” case studies should be included at undergraduate level and more “advanced” case studies at postgraduate level. These interviewees’ views are consistent with those of Cullen et al (2004:254), Parkinson (2008:5) and Kopp et al (2014:355), who also suggested that case studies should be tailored for different difficulty levels. Although one of the interviewees felt that there are enough case studies currently at a postgraduate level, he or she also mentioned that “there is always room for more” because “case studies develop a lot of skills”.

Most of the interviewees recommended that case studies aimed at developing or enhancing pervasive skills should be integrated into existing modules, rather than being developed as a separate module. This is consistent with the findings of Arquero Montaño et al (2001:299) and Hassall et al (2003:88) who support this view based on the opinions of CIMA employers as well as students that pervasive skills should be integrated throughout the accounting curriculum currently being taught at universities. One of the interviewees stated: “I think the possibility of a separate module is almost zero.”

One interviewee encouraged the integration of case studies in existing modules in order to “ground the theory in practice”. Davis and Wilcocks (2003:1) and Stainbank (2010:80) also listed the bridging of the theory and practice gap as one of the benefits of using case studies. Another reiterated that students need practical examples in order to better understand some of the topics. A suggestion made by one of the interviewees was that case studies should be put online, on the myUnisa forum for students, together with suggested solutions as a self-assessment type of exercise for enrichment purposes. According to Mampane (2015:40), “self-directed

learning (SDL) is core to the success of any distance student and requires students to acquire self-regulation skills". Yet another interviewee also suggested that case studies should be included in additional assignments for students to enable them to gain increased exposure to case studies and the pervasive skills that these are supposed to develop. Three interviewees mentioned during the interviews that in the field of management accounting specifically, students would benefit greatly from the inclusion of more case studies at undergraduate level because students seem to struggle "more" in this field than in the other accounting-related modules.

One participant strongly felt that while case studies should increasingly be used at undergraduate level and should be integrated into the current modules, there should also be a separate module in the final year of the postgraduate qualification, albeit a module that will integrate the knowledge acquired in all the modules offered at that level. Another interviewee challenged this view and strongly felt that a separate case study-based module would not work because students often do not understand the basics of business and "they must understand the basics of business to cope with a case study module". According to one of the interviewees, a separate, integrated module is currently being considered for third-year accounting students, where three accounting modules could potentially be tested via case studies in a fourth, integrated module. This, however, is to be decided in the future.

The question at which level case studies should be introduced to accounting students allowed for a broad response from interviewees. While some interviewees agreed with Ahmad and Sulaiman (2013:186) that case studies should be introduced from first-year level, others strongly responded that it should only be introduced from third-year level or at the postgraduate level. Many of the interviewees agreed with Healy and McCutcheon (2010:563), who advise that case studies should be introduced preferably at a more advanced level as it is harder for first- or second-year students to apply their knowledge.

However, many interviewees felt that it is too late to only start incorporating case studies at a postgraduate level. Two interviewees suggested that case study-based assignments should replace multiple-choice assignments at first-year level as

students are moving towards professional training. Another interviewee agreed and explained that owing to, for instance, the deterioration of language and writing standards at high school level, case studies should be introduced as early as possible so that students can hone their writing skills. A different stance was taken by three other interviewees, and implied by another, who suggested staggering the incorporation of case studies according to level, whereby shorter, more basic case studies should be introduced at the early levels to be followed by more extensive and advanced case studies at postgraduate level.

According to some interviewees, students should at least be able to integrate knowledge at the third-year level and case studies should therefore be introduced at this level. These interviewees concurred with Van der Merwe (2013:1138) who also mentioned in his study that “CA students - at least at the third-year level of their degrees - should be exposed to inter-disciplinary integration”. One interviewee even stated that, according to Bloom’s taxonomy, integration is expected at a third-year level. From the interviews it was also clear that students at postgraduate level are expected to “think outside the box” and to be able to give advice based on the information supplied in case study scenarios. A few interviewees therefore suggested the inclusion of case studies at this level for the first time.

One of the interviewees went on to explain that case studies could be used as pedagogy, as assessment, as a tool for learning and as a tool to determine whether learning has taken place. It was suggested that there should be a link between case studies as pedagogy and assessment because students cannot be expected to be tested by means of case studies for the first time in the examinations. They should have been exposed to case studies earlier in their study material as well.

One interviewee mentioned that case studies would also be included in the professional master’s degree, which would in future be introduced at National Qualifications Framework (NQF) level 9.

5.2.4 Challenges relating to teaching accounting case studies in ODL institutions

The question relating to challenges with teaching accounting case studies in ODL institutions also elicited mixed responses. While some interviewees were of the opinion that an ODL institution does not face specific challenges regarding the inclusion of case studies, others mentioned a number of challenges that are unique to the distance education environment. The comment was made that because of the way that the study material is currently developed, it really “necessitates a complete overhaul to incorporate case studies in the ODL environment”. Some interviewees also mentioned possible solutions to challenges that were identified.

A few interviewees raised the issue of the preparedness of faculty and the capacity of educators to develop and include more case studies in the “already full” syllabus with a lack of notional hours. To overcome this challenge, it was suggested that other universities’ approval should be obtained to use their case studies where there is a lack of resources and capacity to develop new accounting case studies.

It was also clear from the interviews conducted that the main challenge from an institutional perspective of incorporating case studies into an ODL environment was perceived to be the large student numbers. It is more challenging to assess large numbers of students by means of case studies (especially those with open-ended questions) when limited time is available for grading students. Rollag (2010:503) also found the task of preparing, facilitating and assessing students more challenging via case studies in a distance learning environment because of large numbers of students. Some interviewees mentioned that this challenge could possibly be overcome through the use of technology with less human intervention. One interviewee was strongly opposed to the view that student numbers pose a challenge. Although the current structure of the examinations was perceived by some to be challenging because of the restrictions of assessment methods, it was pointed out that the current assessment system at Unisa is under development to allow for more freedom for alternative assessment in the future.

One interviewee asserted that when case studies are assigned to ODL students in

the form of group assignments, the geographical spread and authenticity of work submitted could potentially be seen as challenging. However, technology could address this challenge and the benefits of such assignments should also be taken into account since “very good synergy can flow out from groups”, and this could lead to pervasive skills development. It was mentioned that the profile, calibre, diverse backgrounds and lack of skills (such as writing skills) of ODL students should also be considered when developing case studies. Some interviewees suggested that ODL students are often isolated and because of the lack of regular contact sessions with educators or fellow students, group case study assignments (with great potential for peer learning) would not be easy. myUnisa as a student support system enables students to participate in discussion forums and helps them to feel less isolated (Pitsoe & Baloyi 2015:98). According to some of the interviewees, in both the formative assessment and other study material, e-learning initiatives (such as podcasts and screencasts) should be used on myUnisa to help facilitate the comprehension of case studies because the same type of interaction found at contact-based universities is not possible in an ODL environment. This would contribute towards creating a “teaching presence” that leads to a sense of connectedness and elevated levels of learning in a social context, as suggested in the literature by Shea et al (2005:71).

Many interviewees mentioned that ODL students, who work on a part-time basis, would be more appreciative of and relate more easily to case studies based on real-life scenarios, thereby demonstrating that they have acquired the pervasive skills required for the work environment. One interviewee suggested that ODL students should be exposed to more integrated case studies throughout the course, forcing the student to work continuously throughout the semester. According to Shanker and Hu (2008:105), students who are not comfortable with technology would be intimidated by web-based classes. Interviewees commented that technology often leads to ODL students experiencing difficulties. Some interviewees, for example, commented on the lack of access to internet facilities to download case studies and upload answers. Kamanja (2007:726) also found internet connectivity and the IT skills of South African ODL students to be a challenge.

5.2.5 Benefits of teaching accounting case studies in ODL institutions

The interviewees were in agreement with many researchers in the literature that the case-based approach is effective to develop accounting students' pervasive skills (see section 3.4), even in an ODL environment. They all concurred that the incorporation of more case studies into the current accounting syllabus would better prepare ODL students for the working environment. In the words of one of the interviewees: "[A] good content appropriate and level appropriate case study ... can be very rich to also teach pervasive skills and communication skills." The interviewees perceived that case studies would go a long way in helping students to hone various skills such as communication, critical thinking, problem solving, decision making and thinking on their feet.

A few interviewees commented on the fact that incorporating more accounting case studies into the current syllabus would improve students' preparation for their future professional examinations. They also asserted that the "graduateness" of students would also be enhanced through developing pervasive skills with case studies. A further perceived benefit that could be experienced when case studies are assigned to ODL students in a group context is peer learning and increased motivation. One interviewee suggested that case studies would stimulate students' interest in a particular subject. Another interviewee explained that case studies would improve students' higher-order thinking or critical thinking skills and teach them to reflect on and integrate information, thus enabling them to make better decisions. ODL students already work independently and, as mentioned by one of the interviewees, working on case studies could strengthen that independence and enhance their problem-solving skills.

5.3 QUESTIONNAIRE RESULTS

5.3.1 Introduction

As outlined in section 4.5.2, there were 363 participants who fully completed and submitted the online questionnaire and gave permission for their responses to be used for research purposes. The number of responses, response rate and rationale for the sample choice were also explained in section 4.5.2 in the preceding chapter.

The sociodemographic information of participating third-year management accounting students will first be discussed, followed by an explanation of interesting findings in the other two sections (B and C) in the questionnaire (see appendix C). Appendix F contains the results of the descriptive statistics, while appendix G contains the results of the inferential statistics.

The statements in sections B and C of the questionnaire (see appendix C) mainly required the students to respond to either “yes/no” questions or to rate statements based on a five-point Likert scale (with anchors 1 = strongly disagree and 5 = strongly agree). Except where indicated otherwise, responses to questions with a five-point Likert scale for “strongly disagree” and “disagree” were incorporated into one category “disagree”, and similarly, responses for “strongly agree” and “agree” were incorporated into one category “agree”.

5.3.2 Descriptive statistics

The sociodemographic information of participating third-year MAC3701 students is summarised in table 5.1 in order to indicate the gender, language of learning, age, full-time/part-time study status, employment status and intended further qualification category in which they were grouped.

Table 5.1: Demographic characteristics of participating third-year management accounting students

Demographic characteristics		Frequency
Gender	Male	44%
	Female	56%
Language of learning		
Language of learning	English	91%
	Afrikaans	7%
	African language	2%
	Other	0%
Age		
Age	Below 25 years	21%

	25 - 35 years	62%
	36 - 45 years	14%
	Older than 45 years	3%
Full-time/part-time student		
	Full-time student	15%
	Part-time student	85%
Employment status		
	Not working	17%
	Self-employed	4%
	Working for accounting firms	8%
	Working for auditing firms	15%
	Working for other	56%
Intended further qualification with professional accounting body		
	Chartered accountant (CA) to register with SAICA	58%
	Associate chartered management accountant (ACMA) and chartered global management accountant (CGMA) to register with CIMA	22%
	No intended further qualification	20%

The participants comprised 161 males and 202 females (see table 5.1). Almost all of the participants (328) indicated that their language of learning was English. In terms of age representation, the majority of participants (223) were aged between 25 and 35 years. The majority of participants (308) were part-time students with only a few being classified as full-time students.

Although the employment status of the participants was mixed, most of them indicated that they intended registering as a professional CA with SAICA. Some indicated their intention of registering as a professional ACMA, CGMA with CIMA, and 20% of the participants revealed that they had no intention of qualifying as a

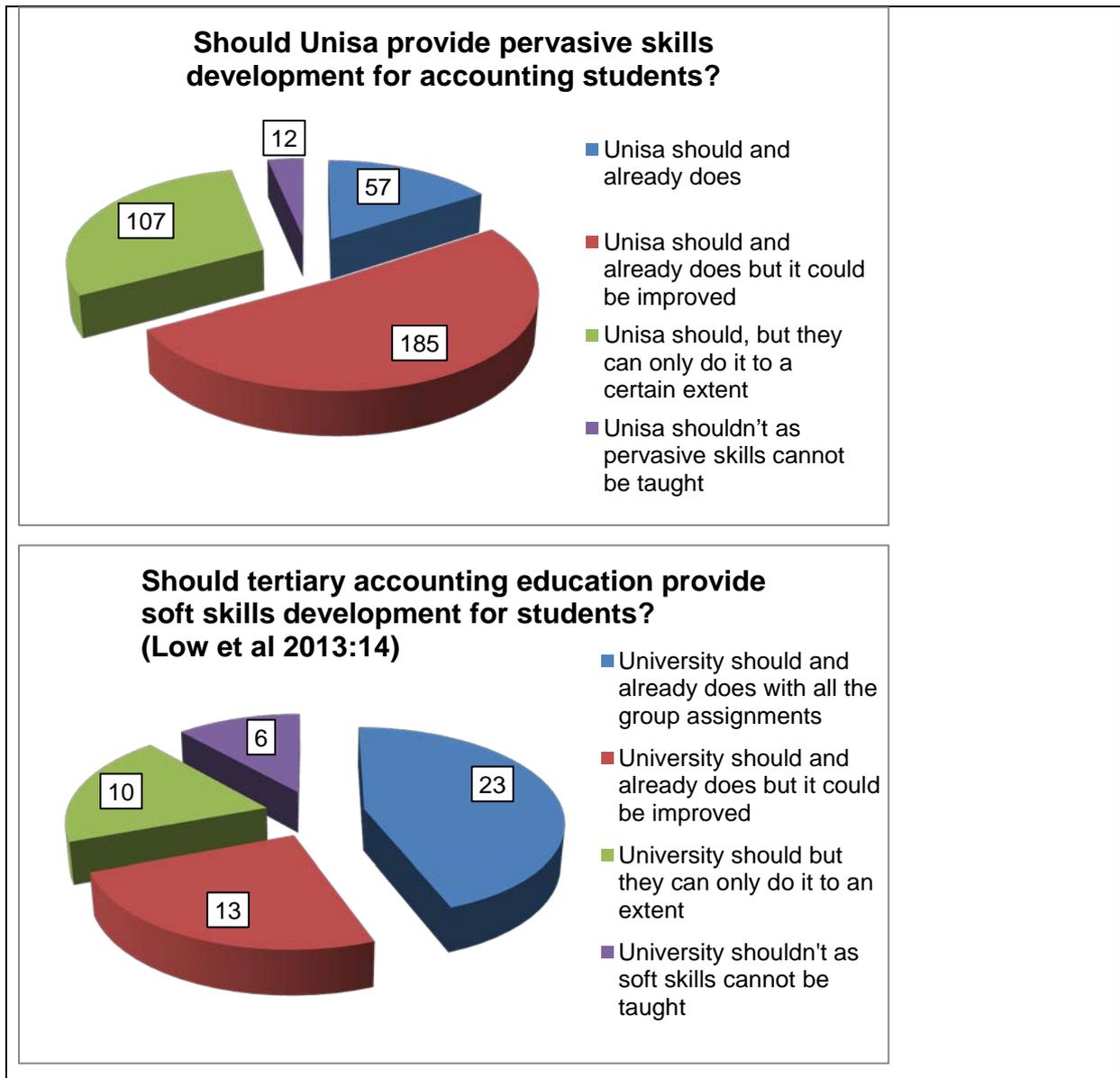
professional accountant. The realised sample therefore comprised mostly older, part-time, employed students, who indicated that their language of learning was English and who intended becoming professional accountants. A few interesting relationships between the respondents' answers and the different sociodemographic groups were identified, which will be discussed in section 5.3.3.

5.3.2.1 Students' perception of and experience with pervasive skills development

According to the Oxford Dictionary (2015b), pervasive skills ("soft skills") are defined as personal attributes that enable someone to interact effectively and harmoniously with other people. In accordance with Low et al's (2013:13) study, participants in the current study were provided with definitions and examples of pervasive skills (see appendix C) to ensure that they were familiar with the meanings of the terms used.

The students were asked whether they felt Unisa should provide pervasive skills development for accounting students. From the frequency tables (see appendix F) and figure 5.1 below, one can infer that a low percentage of students (16%) indicated that Unisa should and already does provide pervasive skills development. Just over half of the participants (51%) perceived that although Unisa already provides pervasive skills development, this could be improved. Of the respondents, 30% agreed that Unisa should provide such development, but that it could only do it to a certain extent, while a very low percentage of students (3%) felt that Unisa should not provide pervasive skills development because it cannot be taught. Figure 5.1 below indicates the results for this question compared with the results of a study conducted by Low et al (2013:14) at contact-based universities (as explored in chapter 2).

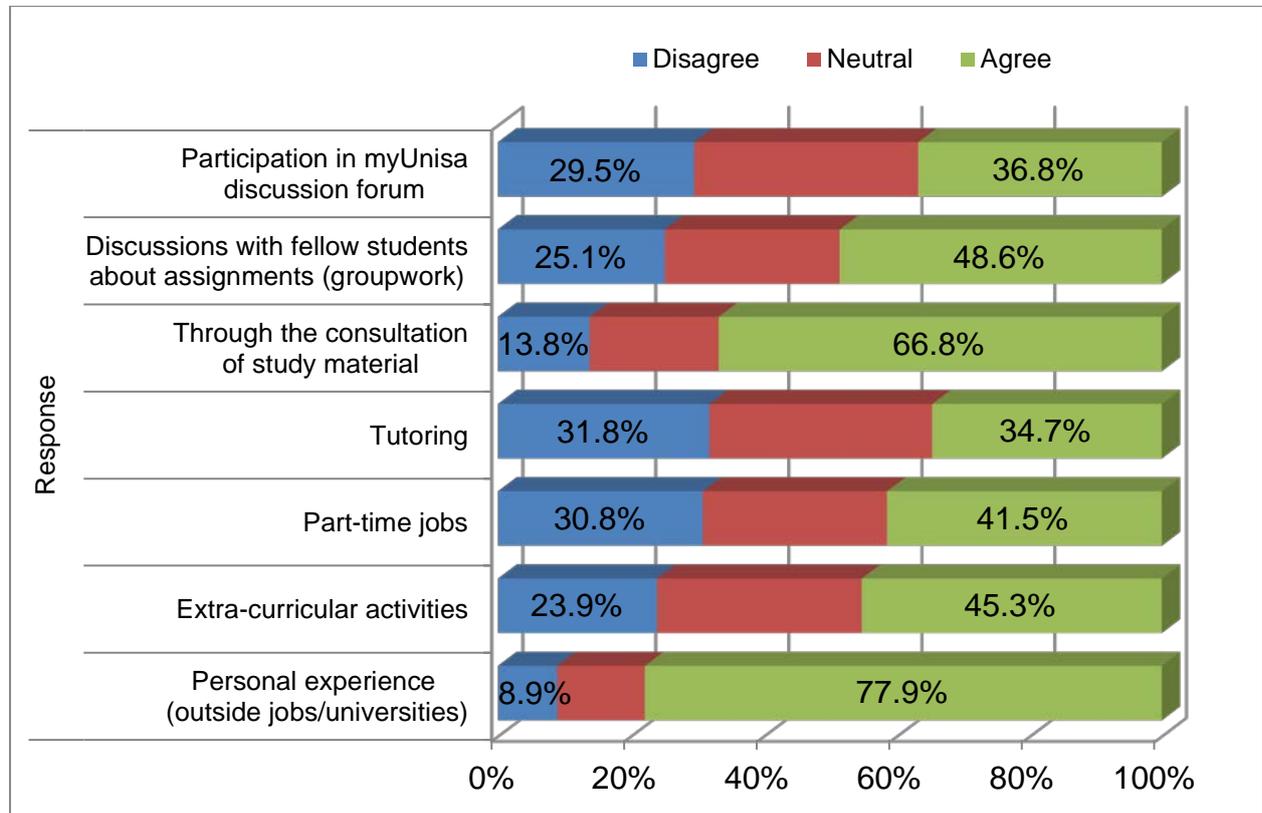
Figure 5.1: Comparison between ODL and contact-based students' perspective of pervasive skills development at their tertiary institutions



In comparison with Low et al's (2013:14) study, from which question 8 was adapted, it would seem that the responses of the Unisa ODL respondents were more inclined towards improvement possibilities in light of pervasive skills development. The difference in percentage comparisons could possibly be attributed to the fact that Unisa is an ODL institution with less face-to-face educator and student interaction, and that the Unisa undergraduate syllabus does not include a research course. One should note, however, that Low et al's (2013:14) study was conducted with a much smaller sample size.

Participants were asked how they had gained their pervasive skills development during their university years at Unisa (see appendix C, question 9). The results of this question are presented in figure 5.2 below.

Figure 5.2: Gaining pervasive skills during university years



It is clear from the statistics presented in figure 5.2 that the participants perceived personal experience as contributing most to their acquisition of pervasive skills during their university years. A high percentage of the respondents (77.9%) felt that they had gained pervasive skills outside the university or in their job through personal experience. In section 5.3.3, the inferential statistics drawn for this question are elaborated upon.

In Low et al's (2013:17) study, graduates were interviewed to enquire about the challenges they faced while conducting their regular work activities. The list of challenges emanating from the interviews was taken and Unisa students were then asked whether they had faced any of these challenges (see appendix C, question 10). The participants' responses are indicated in table 5.2 below.

Table 5.2: Workforce challenges faced by third-year employed accounting students

	Disagree	Neutral	Agree
Meeting deadlines	11%	10%	79%
Dealing with clients	11%	11%	78%
Managing relationships with colleagues and managers	13%	13%	74%
Having to deal with non-textbook situations	9%	12%	79%
Adapting to change	9%	13%	78%
Meeting tight budgets	11%	17%	72%

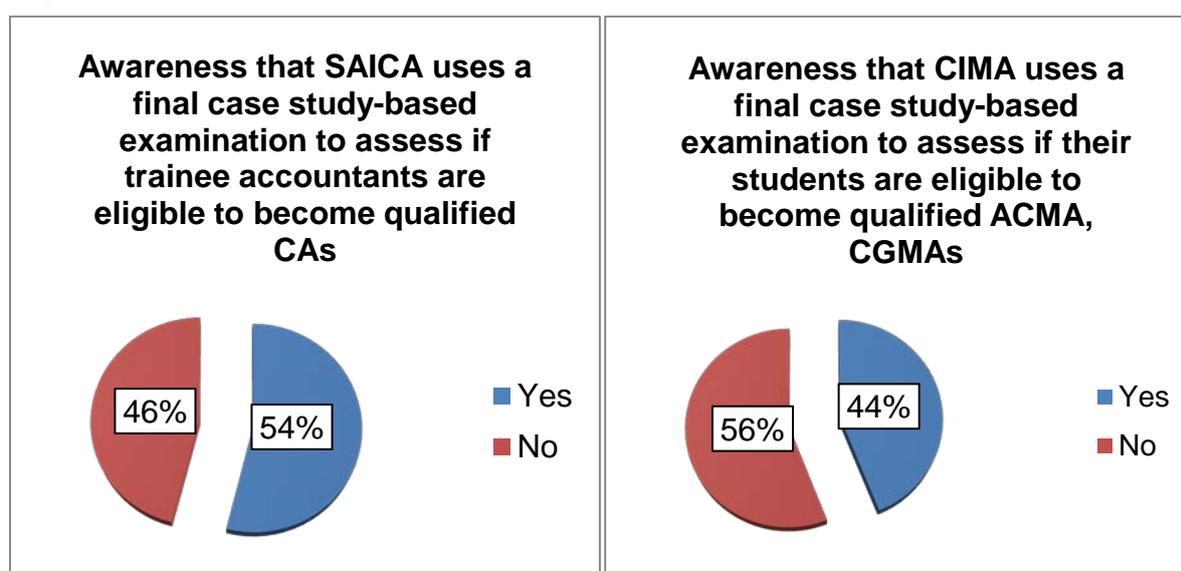
Table 5.2 above, indicates that the majority of employed Unisa accounting students faced all of the listed workforce challenges that were also experienced by the participants in Low et al's (2013:18) study. This indicates the need for ODL students to have pervasive skills that will enable them to cope with the workforce challenges they experience.

Participants were then asked who they believe had a responsibility to develop accounting graduates' pervasive skills (see appendix C, question 11). The categories that had to be considered were as follows: the student him-/herself; educators; training managers and employers. It is comforting to see that almost all of the participants agreed that they themselves had a responsibility, while only four students indicated that the student him-/herself did not have an obligation to develop these skills. Interestingly enough, 79% of the participants felt that training managers had a responsibility towards developing accounting graduates' pervasive skills, while 77% of the participants felt educators had accountability for developing their pervasive skills and 69% indicated that employers are charged with the duty of developing these skills. ODL students and participating educators (see section 5.2.1) were therefore in agreement that Unisa has a responsibility to develop accounting graduates' pervasive skills.

5.3.2.2 Students' perception of and experience with case studies

The questionnaire explored the third-year management accounting students' perception of and experience with case studies during their Unisa studies. Before listing the questions, the students were given the definition and an explanation of a case study to ensure they understood the meaning of the term "case study" in this study (see appendix C). Students were first asked whether they were aware that SAICA uses a final case study-based examination to assess trainee accountants' eligibility to become qualified CAs. They were then asked whether they were aware that CIMA uses a final case study-based examination to assess its students' eligibility to become qualified ACMA, CGMAs (see appendix C, question 12). Figure 5.3 below indicates the participants' responses.

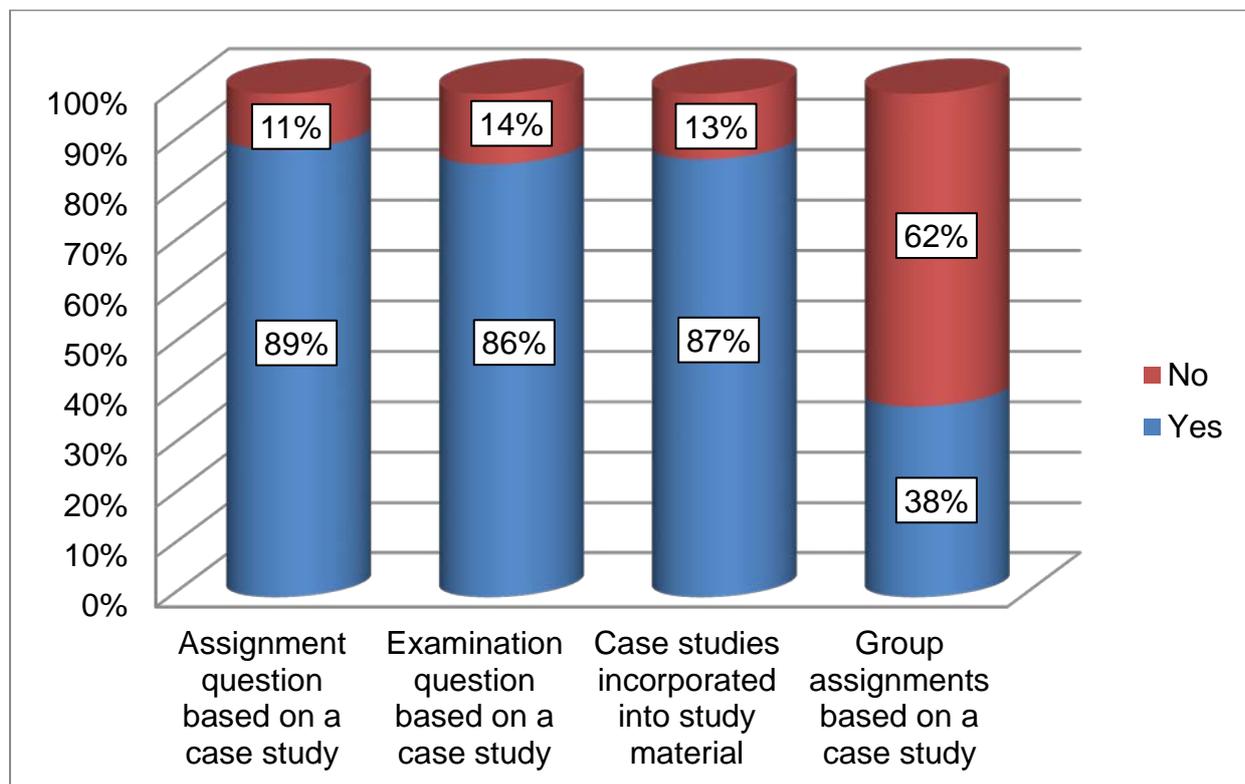
Figure 5.3: Awareness of case study-based examinations



It is interesting that more participants were aware of the use of case study-based examinations by SAICA than CIMA, although SAICA only recently introduced final case study-based examinations, whereas CIMA has been using case study-based examinations for a number of years. This could be ascribed to the fact that 58% of the participants intended studying towards becoming professional CAs registered with SAICA, while only 22% of the participants planned to study towards becoming professional ACMA, CGMAs registered with CIMA. The respective professional accounting bodies should be made aware of these statistics to enable them to create more awareness of the fact that case study-based examinations are used for the final assessment of their candidates.

A further question (see appendix C, question 13) asked students whether they had ever been exposed to case studies through their university studies. They could choose from a predetermined list of sources. The results are provided in figure 5.4 below.

Figure 5.4: Exposure to case studies during university studies

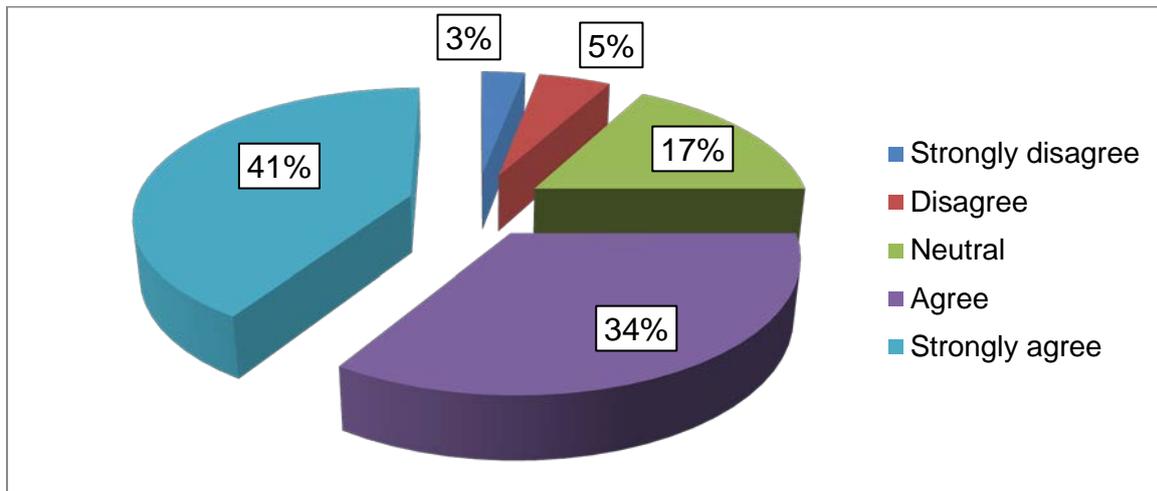


The majority of participants (see figure 5.4) indicated that they had been exposed to case studies through assignment questions based on a case study, examination questions based on a case study and case studies incorporated into existing study material. Only 38% of the participants indicated that they had been exposed to case studies through group assignments. In Low et al's (2013:18) study, 64% of the respondents had felt that university group work contributed towards their pervasive skills development. As mentioned previously, Low et al's (2013) study was conducted at a residential university with a smaller sample size and this fact should be taken into account. According to Shuttleworth (2012:258), it might be challenging for ODL students to work in teams when entering the working environment as they are not often exposed to the dynamics of group work and are forced to work independently time and again. This is an area that could possibly be improved - hence the recommendation that ODL students should be exposed to more case

studies through group assignments because this would reduce the feeling of loneliness and isolation and improve academic performance through peer-to-peer learning (Vakoufari et al 2014:109-110). It was also clear from the interviews conducted with CAS management that case study assignments in groups could add value by enhancing certain pervasive skills of ODL students (see section 5.2.5).

In the questionnaire (see appendix C, question 14), students were presented with a list of general questions about case studies. In response to these questions, 78% of the participants perceived case studies as a valuable tool to develop pervasive skills. It was the perception of students in the study by Bui and Porter (2010:42) that there are not enough case studies at undergraduate level. Most of the participants in the current study (76%) agreed with Bui and Porter's (2010:42) finding as they indicated that there is a need for the use of more case studies integrated into existing modules. During the interviews, CAS management also indicated a preference for the inclusion of more case studies in the existing syllabus as opposed to case studies being developed as a standalone module (see section 5.2.3). Only 54% of the participants agreed that there is a need for the implementation of a dedicated, separate case study-based module in the current accounting syllabus at Unisa. In response to the question whether a case study-based module should be an elective module, if introduced, 49% of the participants agreed. In the next question, it was evident that 39% of the participants agreed that a case study-based module should be compulsory. Students were then asked whether they would enrol for an elective case study-based module if one were offered. While 55% of the participants indicated that they would enrol for the module, 25% of the students remained neutral and the remainder indicated that they would not register if given a choice. The students were asked whether they felt that incorporating case studies into the study material would be more challenging in an ODL environment as opposed to a residential face-to-face university. Figure 5.5 depicts the results for this question.

Figure 5.5: Incorporating case studies into study material would be more challenging in an ODL environment than in a residential face-to-face university



Interestingly enough, 147 of the 356 (41%) participants who answered this question, strongly agreed with this statement (see figure 5.5). From the interviews conducted, CAS management also highlighted a number of unique challenges that would have to be considered in an ODL environment with regard to the introduction of case studies (see section 5.2.4).

One of the questions (see appendix C, question 15) also explored which resources, according to the students' perception, could be used to successfully incorporate case studies into the learning material. An extremely high percentage of students, 94% and 93%, felt that assignments and study material respectively could be used effectively. Many participants (84%) felt that case studies could successfully be included on the myUnisa platform. Although 74% of the respondents indicated that case studies could be successfully incorporated into examinations, this was a much lower percentage than those who felt assignments and study material could be used.

Regarding the question put to students at which level case studies should be introduced in ODL accounting education (see appendix C, Question 16), the findings concurred with those of the interviews conducted with ODL academics (see section 5.2.3) because they also revealed mixed responses. Most of the participants' answers, however, were inclined towards introduction at earlier levels (see figure 5.6).

Figure 5.6: Level at which case studies should be introduced in ODL accounting education

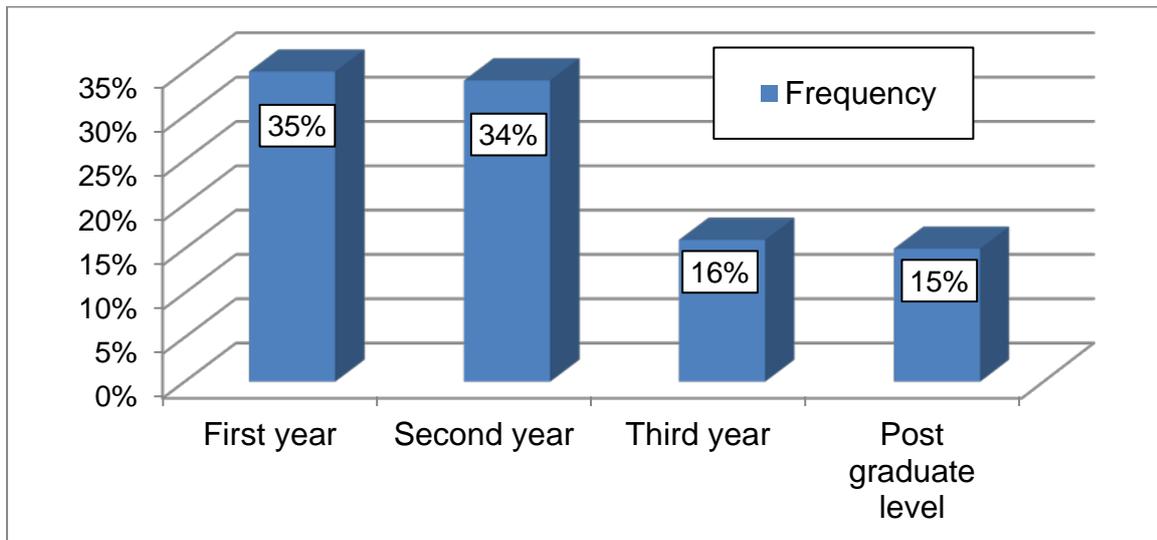


Figure 5.6 clearly shows the participants' preference for introducing case studies at first- and second-year level. As many as 307 of the participants indicated that case studies should be introduced in ODL accounting education at undergraduate level, while only 52 felt that postgraduate level would be more appropriate. Interestingly enough, most of the ODL students felt that case studies should be introduced at a first-year level.

The first question listed under the general questions in question 17 in the questionnaire (see appendix C, question 17) asked students whether they believed case studies could develop or enhance pervasive skills in an ODL environment. Figure 5.7 depicts the results of this question.

Figure 5.7: Potential for case studies to develop or enhance pervasive skills in an ODL environment

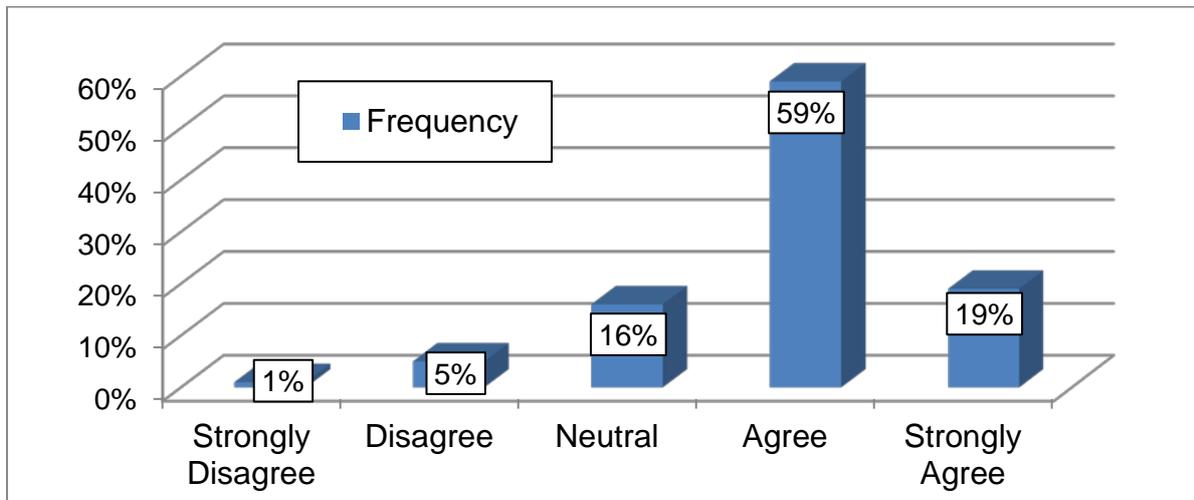
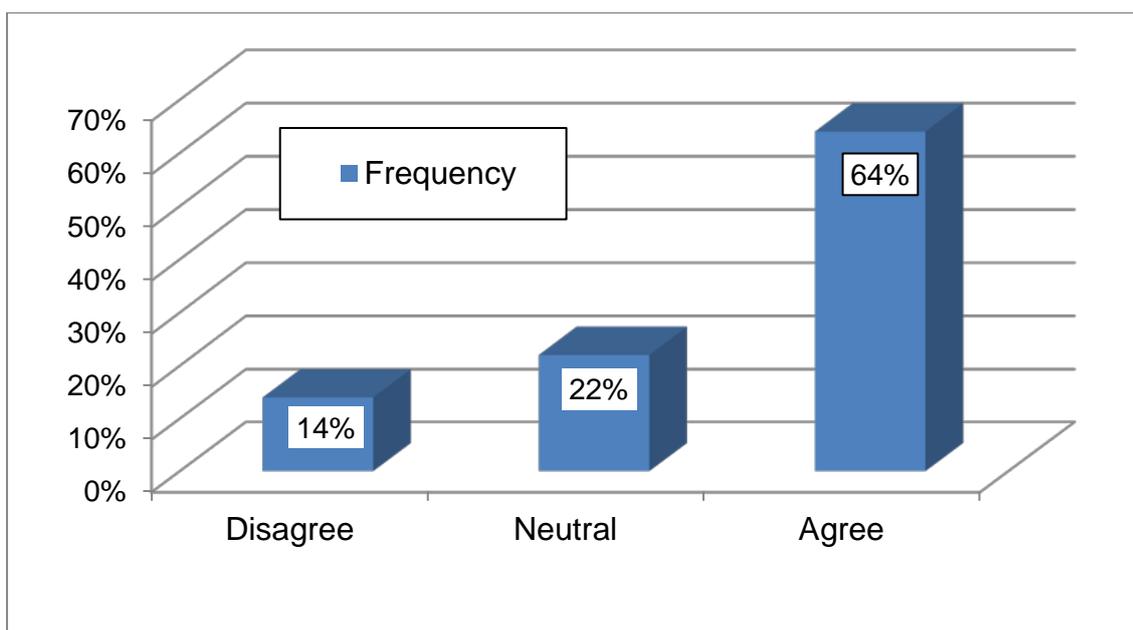


Figure 5.7 indicates that the majority of respondents (284) felt that case studies could develop and enhance pervasive skills in an ODL environment.

The next question (see appendix C, question 17) asked whether there would be any challenges in teaching case study-based modules in an ODL environment (see figure 5.8).

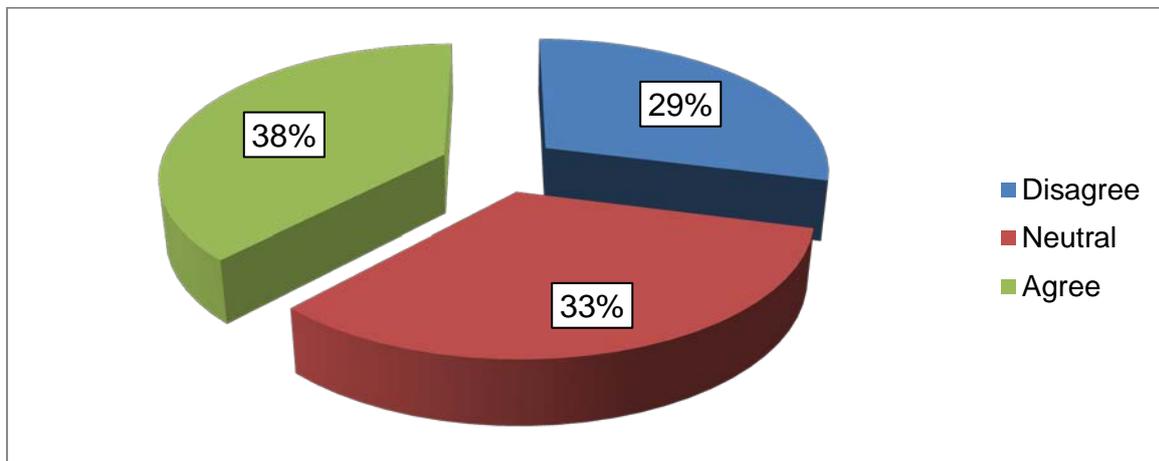
Figure 5.8: Perception of whether there would be challenges in teaching a case study-based module in an ODL environment



In accordance with the perceptions of ODL academics, more than half of the participants (230) felt that there would be challenges in teaching a case study-based module in an ODL environment. Perhaps the finding of Kamanja (2007:726), namely that South African ODL students are not proficient in terms of their use of IT, plays a role. According to Pitsoe and Baloyi (2015:92), Unisa faces the challenge of poor bandwidth which, according to Montiel (2013:266), can cause distress and thereby create a challenge. As stated earlier in chapter 2, unfamiliarity with technology and lack of internet access pose further challenges (Dzakiria 2012:1; Pitsoe & Baloyi 2015:98).

Students were also asked whether they feel Unisa is doing enough to prepare its students for the workplace (see appendix C, question 17). Although most of the participants remained neutral, many indicated that they agreed that Unisa was currently doing enough, while 104 disagreed (see figure 5.9).

Figure 5.9: Students' perception of whether Unisa is doing enough to prepare its students for the workplace



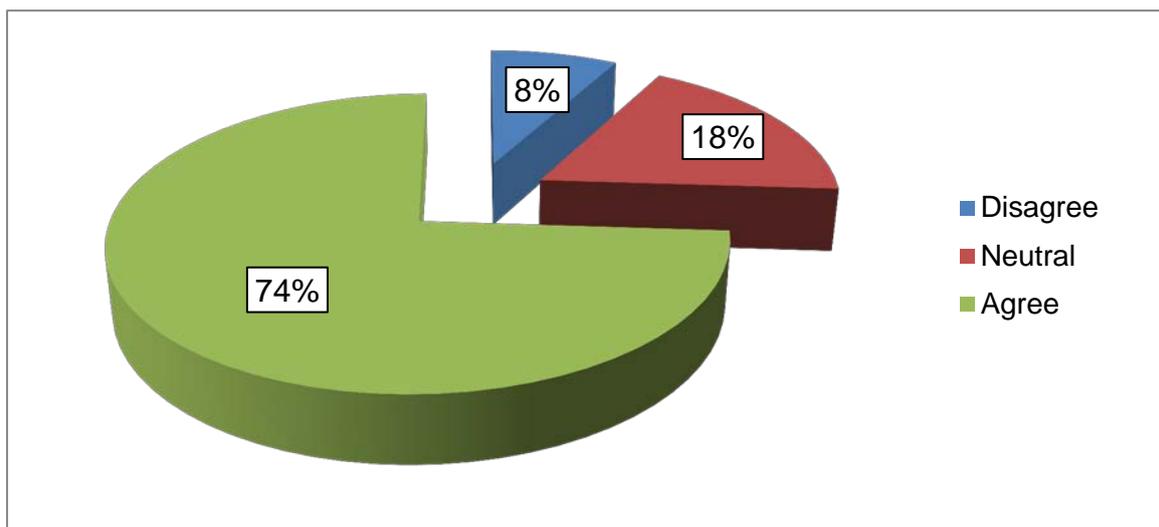
The high neutral percentage indicated in figure 5.9 might reflect that although some participants perceived that Unisa was attempting to prepare its students adequately for the workplace, there is still room for improvement.

myUnisa is a platform where students and educators interact and where students gain access to their learning material online via the internet. Students were asked whether they think the myUnisa platform could be used to facilitate the case study

question discussions (see appendix C, question 17). The majority of the students were positive that this platform is suitable. Of the 359 participants who answered this question, 45 strongly agreed, while 209 agreed that myUnisa is suitable. A few participants (63) remained neutral and the remainder either disagreed or strongly disagreed (42) with this statement.

A high percentage of the students (85%) who answered the questionnaire were studying part time (see table 5.1). The participants were asked whether they felt part-time students who were already in the workplace would perform better in a case study-based module based on practical, real-life scenarios than students who were not working while studying (see figure 5.10).

Figure 5.10: Perceived superior performance of part-time working students in comparison with full-time students in a case study-based module

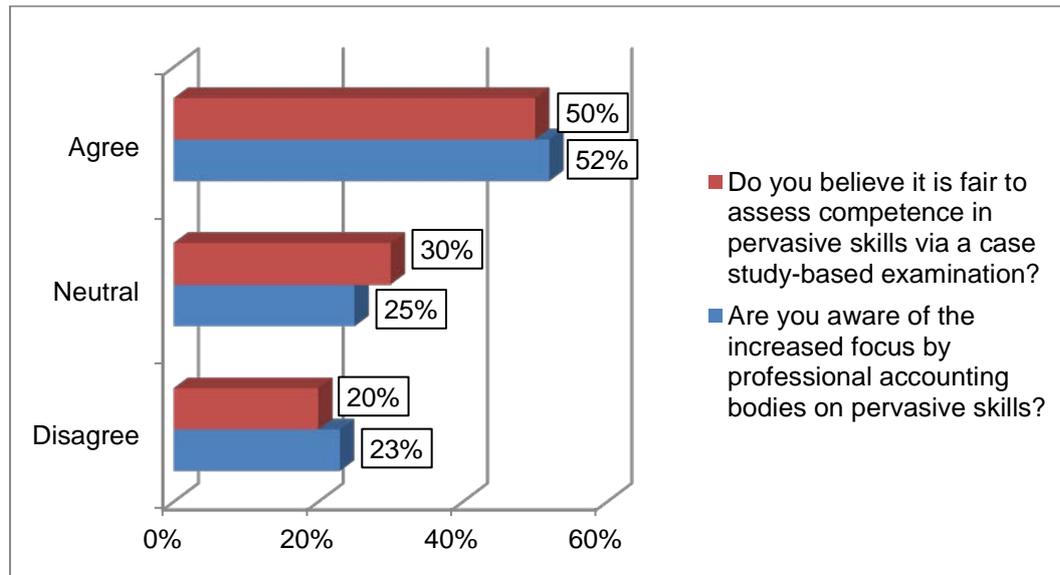


As many as 269 participants agreed that working students would perform better. This finding seems to support the finding of many interviewees who were of the opinion that part-time, working ODL students would be more appreciative of case studies based on real-life scenarios since they could more easily relate to them.

The sixth general question listed under question 17 asked whether the students were aware of the increased focus on pervasive skills by professional accounting bodies, while the last question listed under question 17 asked whether students believed it is

fair to assess competence in pervasive skills via a case study-based examination (see appendix C, question 17). The results of these two questions are depicted in figure 5.11.

Figure 5.11: Awareness of the increased pervasive skills focus by professional accounting bodies and the perceived fairness of assessing pervasive skills competence via a case study-based examination



Most of the participants indicated awareness of the increased focus on pervasive skills by professional accounting bodies. It is reassuring to know that although many participants were not aware of the fact that case studies are being used for final assessment of the students by the professional accounting bodies (see figure 5.3), fewer students (23%) were unaware of the increased focus on pervasive skills. However, this is still a disconcerting figure and professional accounting bodies should heed these statistics and perhaps increase awareness through marketing campaigns conducted at universities. Half of the participants perceived it fair to assess pervasive skill competence via a case study-based examination, while 30% remained neutral, and 20% felt it was unreasonable. These percentages might improve over time, and students will become more aware of the use of case study-based examinations. Increased exposure to case studies might also change their viewpoints as they realise the benefits they will enjoy in making use of case studies for pervasive skills development.

De Villiers (2010) defined the following five main categories of pervasive skill constructs: communication skills; problem-solving and thinking skills; leadership and team work skills; ethical and moral values; and self-management. This list was extended in this study to add critical thinking skills and time management skills (see appendix C). Students were asked which of these pervasive skills they felt could be developed or further enhanced by incorporating case studies into ODL accounting education. The detailed findings are set out in table 5.3 below. The pervasive skills are listed in table 5.3 in descending order, indicating the more highly rated skills first.

Table 5.3: Pervasive skills that could potentially be developed or further enhanced by incorporating case studies into ODL accounting education

	Disagree	Neutral	Agree
Problem-solving skills	1%	5%	94%
Critical thinking skills	2%	5%	93%
Communication skills	1%	7%	92%
Leadership and teamwork skills	2%	9%	89%
Self-management	1%	10%	89%
Time management skills	1%	10%	89%
Integrating different disciplines (accounting, tax, management accounting, audit)	2%	13%	85%
Ethical and moral values	4%	13%	84%

In accordance with the views of the ODL academics interviewed (see section 5.2.5), it was the perception of the majority of participants, as indicated in table 5.3 above, that numerous pervasive skills could be improved by incorporating case studies into ODL accounting education.

5.3.3 Inferential statistics

As explained in the previous chapter, Pearson chi-square and ANOVA statistical techniques were used to test the relationships between the responses of different sociodemographic respondent groups and to infer whether there were real

differences between the means of two or more categories of a variable based on sample data. Exploratory factor analysis, utilising maximum likelihood estimation as the extraction method, and varimax rotation, was used for data reduction on a set of items relating to the means through which students acquire pervasive skills during their university years.

Except where otherwise noted, the following four possible different demographic characteristics were compared in terms of their responses to certain questions:

- (1) gender (male ODL students vs female ODL students)
- (2) age (ODL students aged below 25 years vs ODL students 25 years and older)
- (3) studying status (full-time vs part-time ODL students)
- (4) intended further qualification with professional accounting body (CA[SA] registered with SAICA vs ACMA, CGMA registered with CIMA vs no further intended qualifications)

The results of the inferential statistics are outlined in the subsections below. Only those results where there were statistically significant relationships are indicated.

5.3.3.1 Relationship between the perceived responsibility of Unisa to develop pervasive skills and different sociodemographic student groups

The first question in section B of the questionnaire (see appendix C, question 8) required students to indicate whether Unisa should provide pervasive skills development for accounting students, by choosing from four options. The Pearson chi-square statistical tests revealed no statistically significant relationships between the responses to this question and the four sociodemographic groups considered.

5.3.3.2 Exploratory factor analysis and reliability testing for the means through which pervasive skills have been acquired during university years

The seven items in question 9 (see appendix C) asked students to indicate how they had gained their pervasive skills during their university years. A five-point Likert scale (with anchors 1 = strongly disagree and 5 = strongly agree) was used to determine the extent to which respondents agreed with the given statements. EFA, using maximum likelihood as the extraction method and varimax (orthogonal) rotation, was

conducted to determine the underlying factor structure. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.67, which was above the recommended threshold of 0.50, and Bartlett's test of sphericity was significant ($p < 0.001$) for the seven items dealing with the means of how they had gained their pervasive skills during their university years, therefore indicating that a factor analysis was appropriate. Based on the Kaiser eigenvalue criterion of retaining factors with eigenvalues greater than 1, two factors were identified. The results of the scree plot also suggested that only the first two factors should be retained. The two factors accounted for 58.4% of the total variance (see appendix G, figure G1).

The communality of the seven items and corresponding factor loadings are presented in appendix G, table G1. Communality refers to common variance (the variance that is shared with other items) as opposed to unique variance, which is unique to that item. In interpreting the factor loadings (see table G1), an item was said to load on a given factor if the factor loading was 0.40 or larger. A loading of 0.40 and larger can be deemed meaningful (Wiid & Diggines 2015:243). Using these criteria, four items were found to load on the first factor, which was subsequently labelled "Unisa activities". Three items loaded on the second factor, labelled "Outside Unisa activities". The reliability estimates were computed for these factors, and are reported in appendix G, table G2. Internal consistency (reliability) of responses was assessed by means of Cronbach's alpha. Reliability estimates were 0.694 and 0.727 for responses to "Unisa activities" and "Outside Unisa activities", respectively. This indicated acceptable reliability as the Cronbach alpha values were above 0.60 (Wiid & Diggines 2015:249).

5.3.3.3 Mean scores and standard deviations for the way in which pervasive skills had been acquired during university years

The mean score for the "Unisa activities" was calculated as the simple average of the various responses pertaining to this variable (items 9.1 to 9.4), and the mean score for the "Outside Unisa activities" was calculated as the simple average of the three items pertaining to this variable (items 9.5 to 9.7). In contrast to the results of Low et al's (2013:16) study discussed in chapter 2 (see section 2.5), respondents thus felt that they had gained more pervasive skills during their university years from

activities outside university (mean score of 3.52) than from Unisa activities (mean score of 3.28) (see appendix G, table G3). The standard deviation for the Unisa activities was 0.82 and that for Outside Unisa activities 0.95. The difference between the results for the two studies could possibly be explained by the fact that Unisa is an ODL university and most students study part time, and have already gained pervasive skills through personal experience in activities outside Unisa. Low et al's (2013:16) study was not conducted at ODL institutions.

5.3.3.4 Testing the differences between the sociodemographic characteristics' groups with regard to the means through which pervasive skills were developed

In order to compare the mean values of the two new factors, namely Unisa activities and Outside Unisa activities, between the groups as defined for each sociodemographic characteristic respectively, the analysis of variance (ANOVA) method was applied (Wiid & Diggins 2015:282).

It is worth noting that the assumption of normality was tested and satisfied. The assumption of equal variances was also tested, and where the p-value from Levene's test was smaller than 0.05, indicating unequal variances at a 95% level of confidence, the robust Welch test allowing unequal variances was used (see appendix G, tables G4 and G5).

Age of student

The p-value from Levene's test was smaller than 0.05 ($p = 0.023$), indicating unequal variances at a 95% level of confidence. The results (see appendix G, table G6) revealed statistically significant differences between the two age groups using the robust Welch test ($F(1, 150.21) = 5.231, p = 0.024$) at the 5% level of significance with regard to Unisa activities. Older students (mean of 3.324) showed that they had gained more pervasive skills from Unisa activities than the students younger than 25 (mean of 3.114).

Intended further qualifications with professional accounting bodies

The p-value from Levene's test was greater than 0.05 ($p = 0.228$), indicating equal variances at a 95% level of confidence. The results (see appendix G, table G7) revealed statistically significant differences at the 5% level of significance between the different intentions, ($F(2, 304) = 3.945, p = 0.020$). Students intending to study towards becoming CAs registered with SAICA (mean of 3.350) and students intending to study towards becoming ACMA, CGMAs registered with CIMA (mean of 3.373) showed that they had gained more pervasive skills from Unisa activities than those students who had no intention of furthering their qualifications (mean of 3.029). To assess where specific differences existed (between the various intentions of students towards further qualification), multiple comparison tests were performed, by means of a Tukey-Kramer test. The Tukey letter grouping shows, for each of the intention combinations, whether or not the response variable means are statistically significantly different at the 5% level of significance (Wiid & Diggins 2015:284, 285). The mean scores for gaining pervasive skills through "Unisa activities" of students studying towards becoming members of CIMA and SAICA (both have letter groupings of "A", according to the Connected Letter report contained in table G7, appendix G) were both statistically significantly different from those who did not intend to further their qualifications (letter grouping of "B" according to the Connected Letter report).

5.3.3.5 Relationship between workforce challenges faced and different sociodemographic student groups

Question 10 required employed ODL students' response to whether they had experienced any workforce challenges (see appendix C). Three different demographic characteristics, namely gender, age and intended further qualification, were compared in terms of their responses to question 10. Pearson chi-square statistical tests were performed and revealed no statistically significant relationships between the employed students' responses to this question and the sociodemographic groups considered.

5.3.3.6 Relationship between the responsibility for developing accounting graduates' pervasive skills and different sociodemographic groups

Pearson chi-square statistics were also used for testing the relationships between the responses to question 11 (see appendix C) and various sociodemographic groups. This question required the ODL students to indicate whose responsibility (student him-/herself; educator; training manager; employer) they perceived it to be to develop accounting graduates' pervasive skills.

The results (see appendix G, table G8) revealed that there was a statistically significant relationship at the 5% level of significance between intended further professional qualifications of students and the perception that training managers bore the responsibility for developing accounting graduates' pervasive skills (Pearson chi-square value = 7.409, df = 2, p = 0.025). There was a higher percentage of students studying towards becoming members of CIMA, which indicated that training managers have a responsibility for developing accounting graduates' pervasive skills (85.0% vs 15.0%) than those students who indicated that they were studying towards becoming members of SAICA (79.6% vs 20.4%) or those who indicated that they had no intention of furthering their qualifications (64.8% vs 35.2%).

The results (see appendix G, table G9) revealed that there was a statistically significant relationship at the 5% level of significance between intended further professional qualifications of students and the perception that employers also bore the responsibility of developing accounting graduates' pervasive skills (Pearson chi-square value = 7.507, df = 2, p = 0.023). There was a higher percentage of students studying towards becoming members of SAICA who indicated that employers have a responsibility for developing accounting graduates' pervasive skills (71.1% vs 28.9%) than those students who indicated that they were studying towards becoming members of CIMA (69.5% vs 30.5%) or those who indicated that they had no intention of furthering their qualifications (50.9% vs 49.1%).

5.3.3.7 Relationship between awareness of SAICA and CIMA's use of a final case study-based examination and different sociodemographic groups

The questions listed in question 12 in section C of the questionnaire asked students whether they were aware that SAICA and CIMA, respectively, use a final case study-based examination to assess their eligible members (see appendix C).

The results (see appendix G, table G10) revealed that there was a statistically significant relationship at the 5% level of significance between the intended further professional qualifications of students and their awareness of SAICA's use of final case study-based examinations (Pearson chi-square value = 6.734, df = 2, p = 0.035). Generally, students studying towards becoming members of SAICA were more aware of the use of a final case study-based examination by SAICA (63.9% vs 36.1%) than those students who indicated that they were studying towards becoming members of CIMA (50.8% vs 49.2%) or those who indicated that they had no intention of furthering their qualifications (47.5% vs 52.5%).

The results (see appendix G, table G11) also revealed that there was a statistically significant relationship at the 5% level of significance between intended further professional qualifications of students and their awareness of CIMA's use of final case study-based examinations (Pearson chi-square value = 6.603, df = 2, p = 0.037). As expected, a higher proportion of students studying towards becoming members of CIMA were aware of the use of a final case study-based examination by CIMA (60.3% vs 39.7%) than those students studying towards becoming members of SAICA (42.0% vs 58.0%) or those who indicated that they had no intention of furthering their qualifications (47.5% vs 52.5%).

5.3.3.8 Relationship between responses to case study-related questions and different sociodemographic groups

Various case study-related questions were contained in question 14. Pearson chi-square statistics were used to test the relationships between the responses to question 14 (see appendix C) and various sociodemographic groups.

The third item listed in question 14 asked whether there was a perceived need for

the implementation of a case study based-module in the current accounting syllabus at Unisa. The results (see appendix G, table G12) revealed that there was a statistically significant relationship at the 5% level of significance between students' perceived need for the implementation of a case study based-module in the current accounting syllabus at Unisa and their age (Pearson chi-square value = 20.195, df = 2, $p < 0.0001$). The Pearson chi-square tests that were performed indicated that a higher portion (58.2%) of students aged 25 years and older perceived that there was a need for the implementation of a case study-based module in the current accounting syllabus, than students younger than 25 (37.3%). Only 17.4% of the older students believed that there was no need for the implementation of a case study-based module, while 41.3% of the younger students' answers were inclined towards the same response. Brennan and Ahmad (2005:28) also found in their study conducted in the field of management education that older students tended to be more positively inclined towards the use of case studies.

For the same question, the results (see appendix G, table G13) revealed that there was a statistically significant relationship at the 5% level of significance between students' perceived need for the implementation of a case study based-module in the current accounting syllabus at Unisa and their gender (Pearson chi-square value = 12.414, df = 2, $p = 0.002$). A higher percentage of males indicated that there was a perceived need for the implementation of a case study-based module (64.2% vs 35.8%) than females (45.5% vs 54.5%). The male students seemed to be more inclined to believe there was a need for the implementation of a separate, dedicated, case study-based module than their female counterparts.

The fifth statement in question 14, section C, asked ODL students whether they believed a case study-based module should be compulsory (see appendix C). The results (see appendix G, table G14) revealed that there was a statistically significant relationship at the 5% level of significance between students' perception that a case study-based module should be compulsory and their gender (Pearson chi-square value = 12.355, df = 2, $p = 0.002$). A higher percentage of males (55.0% vs 45.0%) than females (45.0% vs 55.0%) indicated that a case study-based module should be compulsory,

The sixth statement in question 14, section C asked ODL students whether they would enrol for a case study-based module, if it was an elective module (see appendix C). The results (see appendix G, table G15) revealed that there was a statistically significant relationship at the 5% level of significance between students' indicated enrolment for an elective case study-based module and their gender (Pearson chi-square value = 21.323, df = 2, $p < 0.0001$). A higher percentage of males indicated that they would enrol for an elective case study-based module (67.5% vs 32.5%) than females (44.2% vs 55.8%). The male ODL students again seemed to be more positively inclined towards case studies than the females. In contrast to the findings in this study, the study of Brennan and Ahmad (2005:27) found in the field of management education that students' attitudes towards case studies did not vary significantly between men and women.

5.3.3.9 Relationship between the perception of successful incorporation of case studies into learning material on various platforms and different sociodemographic groups

Pearson chi-square statistics were used to test the relationships between the responses to question 15 (see appendix C) and various sociodemographic groups. Question 15 asked the ODL students whether they felt the myUnisa platform, study material, assignments and/or examinations could be used successfully to incorporate case studies into the learning material.

The results (see appendix G, table G16) revealed that there was a statistically significant relationship at the 5% level of significance between the students' perception that the myUnisa platform could be used successfully to incorporate case studies into the learning material and their age (Pearson chi-square value = 8.486, df = 1, $p = 0.004$). There was a higher percentage of older students (aged 25 years and above) who indicated that the myUnisa platform could be used successfully to include case studies (87.4% vs 12.6%) than those younger than 25 (73.7% vs 26.3%).

5.3.3.10 Relationship between the perceived level for the introduction of case studies in ODL accounting education and different sociodemographic groups

Question 16 asked the ODL students at which level case studies should be introduced in accounting education (see appendix C). Four different demographic characteristics were compared in terms of their responses to question 16.

The results (see appendix G, table G17), revealed that there was a statistically significant relationship at the 5% level of significance between the level for the introduction of case studies and the gender of students (Pearson chi-square value = 8.022, df = 3, p = 0.046). In the section dealing with the descriptive statistics (section 5.3.2), it was stated that most of the ODL students' answers to this question were inclined towards earlier (first- and second-year) levels. More females than males (59.8% vs 40.2%) felt that case studies should be introduced at first-year level. More females than males (58.5% vs 41.5%) also believed case studies should be introduced at second-year level. Of the students who indicated that case studies should be introduced from third year onwards, there were fewer females than males (38.6% vs 61.4%). More female students preferred case studies to be implemented at earlier levels than their male counterparts. At postgraduate level, the answers were in line with the percentage of the male respondents (44.4%) and female respondents (55.7%) in the study (see section 5.3.1, table 5.1).

5.3.3.11 Relationship between general questions asked (question 17) and different sociodemographic groups

Four different demographic characteristics were compared in terms of their responses to question 17, which comprised general questions.

The third question listed under question 17, section C (see appendix C), asked ODL students whether they felt Unisa was currently doing enough to prepare its students for the workplace. The results (see appendix G, table G18), revealed that there was a statistically significant relationship at the 5% level of significance between students' perception of whether Unisa adequately prepared its students for the workplace and their gender (Pearson chi-square value = 18.928, df = 2, p < 0.0001). More males than females (58.8% vs 41.2%) indicated that they agreed that Unisa was

adequately preparing them for the workplace. Of those students who indicated that Unisa was not doing enough in terms of workplace preparation, 37.5% were male and 62.5% female.

The fourth general question listed under question 17 (see appendix C) asked ODL students whether they thought the myUnisa platform could be used to facilitate case study question discussions. The results (see appendix G, table G19) revealed that there was a statistically significant relationship at the 5% level of significance between students' perception that myUnisa could be used to facilitate case study discussions and their age (Pearson chi-square value = 6.292, $df = 2$, $p = 0.043$). More of the older students indicated that they felt that the myUnisa platform could be used to facilitate case study question discussions (73.9% vs 26.1%) than students younger than 25 who indicated that they agreed (59.2% vs 40.8%). It can be deduced that the older students seemed to agree more that case study question discussions could be facilitated successfully on the myUnisa platform.

The sixth general question listed under question 17 (see appendix C) asked ODL students whether they were aware of the increased focus by professional accounting bodies on pervasive skills. The results (see appendix G, table G20) revealed that there was a statistically significant relationship at the 5% level of significance between the gender of students and their awareness (Pearson chi-square value = 9.542, $df = 2$, $p = 0.009$). Generally, the male students were more aware of the increased focus by professional accounting bodies on their pervasive skills (60.9% vs 39.1%) than females (45.7% vs 54.3%). The male students seemed to be more informed of the latest movements of professional accounting bodies than the females.

For the same question, the results (see appendix G, table G21) also revealed that there was a statistically significant relationship at the 5% level of significance between intended further professional qualifications of students and their awareness (Pearson chi-square value = 10.485, $df = 4$, $p = 0.033$). Students studying towards becoming members of SAICA were more aware of the increased focus on pervasive skills by professional accounting bodies (59.1% vs 40.8%) than those students who

indicated that they were studying towards becoming members of CIMA (52.9% vs 47.1%) or those who indicated that they had no intention of furthering their qualifications (38.3% vs 61.7%). Students studying towards becoming professional accountants seemed to be more informed about the latest developments of professional accounting bodies than those who did not intend furthering their qualifications.

The seventh general question listed under question 17 (see appendix C) asked ODL students whether they believed it was fair to assess competence in pervasive skills via case study-based examinations. The results (see appendix G, table G22), indicated that there was a statistically significant relationship at the 5% level of significance between the perception of fairness to assess pervasive skills competency via case study-based examinations and students' studying status (Pearson chi-square value = 12.931, df = 2, p = 0.002). Of the students who responded that they agreed that it was fair, 90.4% were part-time students and only 9.6% were full-time students. Of those who disagreed and felt that it is unfair to assess competence in pervasive skills, 72.6% were part-time students, and 27.4% were full time. It is possible that the part-time students' answers were more inclined towards agreeing with the practice of assessment of pervasive skills through case study-based examinations than the full-time students because the latter tend to have more workplace experience.

For the same question (see appendix G, table G23) the results also indicated that there was a statistically significant relationship at the 5% level of significance between the students' perception of fairness in assessing pervasive skills competency via case study-based examinations and their gender (Pearson chi-square value = 14.347, df = 2, p = 0.001). Of the students who responded that they agreed that it was fair to assess competence in pervasive skills by means of a case study-based examination, 54.8% were male students and 45.2% female. Of those that believed that it was not fair to assess competence in pervasive skills by means of a case study-based examination, 37.0% were male and 63.0% female. Male students' answers were again more favourably inclined towards the use of case studies.

5.3.3.12 Relationship between the perception that case studies can develop certain pervasive skills of ODL accounting students and different sociodemographic groups

Question 18 required students to indicate whether they believed certain pervasive skills could be further developed by means of case studies (see appendix C). Four different demographic characteristics were compared in terms of their responses to question 18.

The detailed descriptive findings for question 18 were set out in table 5.3 (see section 5.3.2). It is important to note that between 84% and 94% of the respondents representing various different sociodemographic groups agreed that the various pervasive skills could be developed or further enhanced by means of case studies in ODL accounting education. Two relationships were identified as being significant, namely the relationship between perception that ethical and moral values can be improved and the intended further qualifications of ODL students with professional accounting bodies, as well as the relationship between the perception that time management can be improved and the intended further qualifications of ODL students with professional accounting bodies. The Pearson chi-square tests that were performed, however, raised a warning flag that the relationships were suspect because 20% of the cells in the contingency tables (students who felt these skills could not be further developed) had an expected count of less than 5. In these instances, Cramer's V , a measure of the strength of association, was used to determine statistical significance. The relationship between the perception that ethical and moral values could be improved and the intended further qualifications of ODL students with professional accounting bodies, were found to be statistically significant (Cramer's V value = 0.165, p = 0.029). A higher percentage of the students who intended registering as members of SAICA (60.4% vs 39.6%) perceived that ethical and moral values could be improved compared with those students who intended registering as members of CIMA (22.3% vs 77.7%) and those who had no intention of furthering their qualifications (17.3% vs 82.7%) (see table G24, appendix G). The relationship between the perception that time management could be improved and the intended further qualifications of ODL students with professional accounting bodies was also found to be statistically significant

(Cramer's V value = 0.191, $p = 0.004$). A higher percentage of the students who intended registering as members of SAICA (58.5% vs 41.5%) perceived that time management skills could be improved, compared with those students who intended registering as members of CIMA (22.0% vs 78.0%) and those who had no intention of furthering their qualifications (19.5% vs 80.5%) (see table G25, appendix G).

The Pearson chi-square statistical tests revealed no statistically significant relationships between gender and the students' perception that certain pervasive skills could be further developed by means of case studies. This is in contrast to the findings of Weil et al (2001:134), which indicated significant differences between male and female students' perceptions of certain potential case study benefits.

5.4 CHAPTER CONCLUSION

This chapter dealt with the collation, analysis and presentation of the data. A mixed method empirical research approach was followed whereby interviews were conducted with ODL academics, on the one hand, and a questionnaire completed by ODL students, on the other.

The research findings from the interviews conducted with ODL academics were first discussed. The ODL academics' perception of Unisa's responsibility for developing accounting graduates' pervasive skills was explored. The current and proposed practices at Unisa to incorporate case studies into the accounting syllabus were then determined. Other themes that emerged from the interviews were the challenges and benefits of teaching accounting case studies in a distance education environment.

The questionnaire completed by the ODL students was divided into three sections. Section A covered the sociodemographic information of the participants. Section B comprised statements and questions relating to the students' perceptions of or experience with pervasive skills development. Section C consisted of statements and questions relating to the students' perceptions of or experience with case studies during their Unisa studies. The descriptive and inferential statistics were then presented by means of tables and graphs.

The main findings of the surveys conducted are summarised in the next chapter, which also deals with the conclusions and recommendations.

CHAPTER 6

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

In the previous chapter, the data analysis based on the feedback from the interviews and the questionnaire and the research findings was discussed. Both descriptive and inferential statistics were used to analyse the data in order to gain an understanding of ODL students' perceptions of pervasive skills and the use of case studies in an ODL environment.

This study investigated the viability of using case studies for pervasive skills development in an ODL accounting environment and also explored the benefits and challenges of using case studies in an ODL environment. The perceived level at which to introduce case studies was also considered.

This chapter commences with an overview of the research study - the literature review, the interviews conducted and the questionnaire completed by the participants. Conclusions will be drawn and recommendations made on the basis of the conclusions. The contributions of the study are then discussed and suggestions made for possible future research.

6.2 OVERVIEW OF THE LITERATURE AND THE SURVEY-BASED RESEARCH

The problem addressed in this study related to the challenge faced by accounting education in an ODL institution to deliver well-rounded accounting graduates for the profession. This research study was conducted to increase the limited information available on the use of case studies for pervasive skills development in ODL accounting education. Two approaches were followed: a literature review and a mixed method research approach. A brief overview of the approaches is provided below.

6.2.1 Literature review

It was clear from the literature review conducted in chapter 2 that pervasive skills merit attention in accounting education. The role of HEIs to prepare fit-for-purpose, employable graduates is continuously questioned. Accounting graduates need pervasive skills in addition to technical subject knowledge in order to cope with the demands faced in the 21st century ever-changing business environment. Various stakeholders, including professional accounting bodies, promote the inclusion of pervasive skills in accounting curricula in order to enhance the employability of accounting graduates.

The literature review in chapter 3 explored the use of case studies in accounting education. Different definitions and uses of case studies were considered. Arguments in favour of and against the use of case studies were discussed in light of their pervasive skills development benefits and challenges. From the different views explored it is evident that case studies are regarded as a valuable tool for pervasive skills development in accounting education. In order for case studies to be implemented effectively, educators need to take various factors, benefits and challenges into consideration. Case studies can be implemented successfully, but the general theoretical literature on this subject, specifically in the South African context, is inconclusive for the ODL environment - hence the decision to conduct this study in an effort to answer these and other vital questions. There seems to be a dearth of information on the use of case studies for pervasive skills development in the ODL accounting field. New assessment methods in use by professional accounting bodies are increasingly focusing on assessing pervasive skills, and HEIs need to follow suit.

6.2.2 Interviews

All except one of the interviewees agreed that Unisa has a responsibility to develop accounting graduates' pervasive skills. In light of the increased focus on pervasive skills and the inclusion of final case study-based examinations of professional accounting bodies, most interviewees indicated that the accounting syllabus should be more aligned to the practice followed by these accounting bodies.

With a few exceptions, most of the interviewees stated that case studies are currently only incorporated into undergraduate modules to a limited extent, while more comprehensive, integrated case studies are in use at a postgraduate level for both the SAICA and CIMA routes.

Most interviewees recommended that case studies aimed at developing or enhancing pervasive skills should be integrated into existing modules rather than having case studies offered as a separate module. A broad response from interviewees was obtained in response to the question at which level case studies should be introduced. Staggering the incorporation of case studies at different levels might be a solution to this conundrum, whereby shorter, more basic case studies would be introduced at the early levels and then a progression towards more integrated, extensive case studies at postgraduate level.

The challenges of incorporating case studies into the ODL environment mentioned by interviewees included the preparedness of faculty and the capacity of educators to develop and include more case studies in the “already full” syllabus; the lack of notional hours; large student numbers; limited time for assessing students; the current examination structure at Unisa; the geographical spread of ODL students for group work; the authenticity of work submitted by students; the profile, calibre, diverse backgrounds of ODL students; students’ lack of skills (especially communication skills); and technology challenges such as the lack of internet access.

The interviewees all concurred that teaching accounting case studies in ODL institutions would benefit students. The following benefits were mentioned: the development and enrichment of various pervasive skills such as communication, critical thinking, problem-solving, decision-making and integration skills; better preparation for the workplace; better preparation for future professional examinations; improving “graduateness”; possible peer learning; and increased motivation through case studies in a group work context, which would strengthen students’ independence.

6.2.3 Questionnaire

In terms of the empirical research conducted with ODL students, the answers in 363 questionnaires were processed. The realised sample comprised mostly older, English, part-time, employed students with the intention of studying towards becoming professional accountants.

The ODL students were mostly in agreement with the ODL academics because they also felt that although Unisa does currently provide pervasive skills development, there is room for improvement. The students indicated that they had acquired most of their pervasive skills through personal and work experience (outside Unisa). The majority of employed Unisa students face workforce challenges that require pervasive skills. An exceptionally high percentage of students agreed that they were responsible for their own pervasive skills development. ODL students and ODL educators were in agreement that Unisa also has a responsibility to develop accounting graduates' pervasive skills.

More awareness should be created of the fact that SAICA and CIMA make use of case study-based examinations for their final assessment of eligible members only about half of the respondents indicated awareness of this fact. While the majority of students indicated that they had been exposed to case studies in assignment questions, examination questions and case studies in their existing study material, a low percentage of the participants indicated exposure to case studies through group assignments. Most students indicated a need for the inclusion of more case studies in existing modules. The ODL students and ODL educators seemed to prefer case studies being incorporated into existing modules rather than being developed as a separate module.

Many students agreed that incorporating case studies into study material would be more challenging in an ODL environment than at a face-to-face university, and the unique challenges would have to be considered. The respondents indicated that case studies could be successfully incorporated into assignments, study material, myUnisa and examinations. In terms of the level at which case studies should be introduced, the students' answers were inclined towards the earlier levels. The

majority of participants felt case studies could develop and enhance pervasive skills in an ODL environment. However, many also indicated that there would be challenges with teaching a case study-based module in an ODL environment. Students seemed indecisive about whether Unisa is doing enough to adequately prepare them for employment. The students felt that the myUnisa platform could be successfully used to facilitate case study question discussions. Part-time, working students were perceived to be more appreciative of case study-based modules than full-time students because of their working experience and the fact that case studies are based on real-life scenarios.

Most participants indicated their awareness of the increased focus on pervasive skills by professional accounting bodies. Only half of the participants perceived it fair to assess pervasive skill competence via a case study-based examination. In accordance with the views of the ODL academic interviewees, the majority of participants felt that all of the pervasive skills listed in the questionnaire could be improved by including case studies in ODL accounting education.

When conducting the inferential statistical tests, interesting relationships were identified between students' responses to certain questions and different sociodemographic groups. The means through which students obtained their pervasive skills during their university years were divided into "Unisa activities" and "Outside Unisa activities". While respondents felt that they had gained more pervasive skills during their university years from activities outside Unisa, than from Unisa activities, a one-way ANOVA revealed that the older students had gained more pervasive skills from Unisa activities than students younger than 25. Students studying towards becoming members of professional accounting bodies had also gained more pervasive skills from Unisa activities compared to those students who had no intention of furthering their qualifications.

Pearson chi-square statistics (or Cramer' V test) revealed statistically significant relationships at the 5% level of significance between the following:

- (1) intended further professional qualifications of students and the perception that training managers have a responsibility to develop accounting graduates' pervasive skills
- (2) intended further professional qualifications of students and the perception that employers have a responsibility to develop accounting graduates' pervasive skills
- (3) the awareness of case study-based examinations of SAICA and intended professional membership of students
- (4) the awareness of case study-based examinations of CIMA and intended professional membership of students
- (5) the perceived need for the implementation of a case study based-module in the current accounting syllabus and the age of students
- (6) the perceived need for the implementation of a case study based-module in the current accounting syllabus and the gender of students
- (7) the perception that a case study-based module should be compulsory and the gender of students
- (8) enrolment for an elective case study-based module and the gender of students
- (9) students' perception that the myUnisa platform could be successfully used to incorporate case studies into the learning material and their age
- (10) the perceived level for the introduction of case studies in ODL accounting education and the gender of students
- (11) the perception of whether Unisa adequately prepares its students for the workplace and the gender of students
- (12) the perception that myUnisa could be used to facilitate case study discussions and the age of students
- (13) the awareness of an increased pervasive skills focus of professional accounting bodies and the gender of students
- (14) the awareness of an increased pervasive skills focus of professional accounting bodies and intended studies towards membership of professional accounting bodies
- (15) the perception of fairness to assess pervasive skills competency via case study-based examinations and being either a full- or part-time student

- (16) the students' perception of fairness in assessing pervasive skills competency via case study-based examinations and their gender
- (17) the perception that ethical and moral values could be improved with case studies and the intended further qualifications of ODL students with professional accounting bodies
- (18) the perception that time management could be improved with case studies and the intended further qualifications of ODL students with professional accounting bodies

6.3 CONCLUSIONS

The **first objective** formulated for this study was to determine whether accounting educators at an ODL institution perceived a need for the introduction of a case study-based module to develop well-prepared accounting graduates for the workplace. ODL accounting educators all felt that more case studies should be included in the existing accounting modules. Most of the ODL educators were of the opinion that it would not be feasible to introduce a dedicated case study-based module for pervasive skills development because the syllabus is already too full and there is a lack of notional hours available (see section 5.2.3). The majority of ODL students were also in favour of increasing the number of case studies in existing modules (see section 5.3.2.2). In light of the notional hour limitation and the full syllabus, it would be to the detriment of ODL students if a standalone, separate, dedicated case study-based module were to be developed that would require a lot of learning time, in addition to the current syllabus requirements. Exposure to case studies, however, is necessary to improve ODL student's pervasive skills and the inclusion of case studies in existing modules would therefore provide a solution.

The **second objective** of the study was to evaluate the perception of ODL accounting educators and students about the challenges and benefits of introducing a case study-based module focusing on developing the pervasive skills required by the workplace in an ODL environment. The challenges and benefits mentioned by interviewees were summarised in section 6.2.2. It is clear from the findings that the benefits far outweigh the challenges of incorporating case studies into an ODL

environment. Educators should heed these challenges and benefits, and develop case studies in order to address and limit the challenges and ensure that students derive optimal benefits from the inclusion of case studies.

Many students agreed that incorporating case studies into study material would be more challenging in an ODL environment than at a face-to-face university. Hence there are unique challenges that need to be considered. Many also indicated that there would be challenges with teaching a case study-based module in an ODL environment. In accordance with the views of ODL academics, the majority of participants felt that all of the pervasive skills listed in the questionnaire could be improved by incorporating case studies into ODL accounting education (see section 5.3.2). Although the general perception was that it would be more difficult to implement case studies in an ODL environment, one should bear in mind that well-developed study material embedded with case studies could potentially reach and positively impact a larger number of students' pervasive skills. The time and energy invested in developing case studies catering for an ODL context could make a difference in ODL students' lives, better equipping them for the workplace. The fact that there are far more part-time, employed students studying at Unisa (compared to contact-based residential institutions) would enable educators to develop case studies with a "working" target audience in mind, who would be able to appreciate case studies based on real-life scenarios more, because of their exposure to working in the real world.

In compliance with the questions posed in the problem statement formulated in chapter 1, the **first question** tried to establish whether ODL accounting departments in South Africa should introduce a dedicated case study-based module as part of their curriculum, or whether cases studies should be included in existing accounting-related modules. From the interviews conducted it was clear that the ODL educators rather preferred the idea of including case studies in existing modules, than being developed as a standalone, dedicated module (see section 5.2.3). From the survey conducted among ODL students, a high percentage of the participants indicated that they perceived case studies to be a valuable tool to develop pervasive skills. Most of the participants indicated that there is a need for more case studies to be integrated

into existing modules. Although many participants stated that there is a need for the introduction of a dedicated, separate case study-based module in the current accounting syllabus at Unisa, a higher percentage of students indicated that they would prefer case studies to be incorporated into existing modules (see section 5.3.2).

The second question in the problem statement enquired whether case studies should be implemented as part of the undergraduate or postgraduate curriculum. A broad response from interviewees was obtained in response to this question. Staggering the inclusion of case studies at different levels might be a solution to this conundrum, whereby shorter, more basic case studies could be introduced during the early levels and then a progression towards more integrated, extensive case studies at postgraduate level (see section 5.2.3). In terms of the level at which case studies should be introduced, the students' responses were more inclined towards earlier levels (see section 5.3.3). Based on the preference indicated by students, case studies should be included as part of the undergraduate curriculum (see section 5.3.2). Although it was indicated that many students ultimately plan to obtain professional accounting qualifications when they initially enrol for an accounting degree, only a limited number of students ultimately enrol for honours degrees and postgraduate diplomas, and then progress to acquiring a professional accounting qualification. In light of this fact, it would be in the interests of the majority of students if case studies were to be increasingly included in the undergraduate syllabus. Employers seek graduates with well-developed pervasive skills, and incorporating case studies that would help students to gain the required pervasive skills would benefit students, employers and the economy.

The purpose of the **third question** in the problem statement was to establish whether the use of case studies in ODL accounting education poses specific challenges, and if students would ultimately benefit from the inclusion of case studies. Interviewees mentioned specific challenges in incorporating more case studies into the ODL accounting syllabus. However, they all concurred that teaching accounting case studies in ODL institutions would benefit students. Various pervasive skills could be developed and enriched via case studies (section 5.2.4).

Many students also indicated that there would be challenges with teaching a case study-based module in an ODL environment (section 5.3.2). In accordance with the views of ODL academics, the majority of participants felt that various pervasive skills could be improved by incorporating case studies into ODL accounting education (section 5.3.2). Case studies provide exposure to real-life scenarios which would otherwise be difficult. Although it might be difficult to develop case studies that suit the background and calibre of all ODL students, the advantages would definitely outweigh the disadvantages, and this could be regarded as an effective tool for honing students' pervasive skills. Accounting topics can be brought to life through case studies in which businesses are presented realistically. Many pervasive skills of ODL students could be improved through the use of case studies, for example, analytical thinking, communication, decision making and problem solving. Increased exposure to case studies could increase ODL students' confidence and employability.

The findings of this study were not limited to answering only the main objectives and questions posed in the problem statement in the first chapter. Additional conclusions drawn from the literature study, the interviews conducted with ODL academics and the questionnaire filled in by ODL students are briefly discussed below.

6.3.1 General

The following general conclusions were drawn with reference to the objectives and problems defined in chapter 1 of this study, and on the basis of the outcomes of the literature review:

- (1) The work environment requires pervasive skills that accounting students should, but do not always have.
- (2) Globally, educational institutions need to shift their attention to the enhancement of pervasive skills because of indirect pressure placed on them by the relevant professional accounting bodies.
- (3) The purpose of providing students with case studies should be explained to them to maximise the benefits they are supposed to enjoy.
- (4) ODL accounting educators are positive about case studies in general.

- (5) The case study-based approach is effective in developing the pervasive skills of ODL accounting graduates.
- (6) ODL students who work part time would be more appreciative of and would more easily relate to case studies based on real-life scenarios and thereby demonstrate that they have acquired the pervasive skills needed in the work environment.

6.3.2 Interviews

Although the findings from the interviews were explained in detail in the previous chapter, the following interesting conclusions were drawn on the basis of the interviews conducted:

- (1) Unisa has a responsibility to develop accounting graduates' pervasive skills.
- (2) The training of accounting students should be adapted to include pervasive skills training through case studies because both SAICA and CIMA have included final case study-based examinations for their eligible members that focus on the assessment of pervasive skills.
- (3) Unisa should produce employable graduates with well-developed pervasive skills.
- (4) Currently, most of the undergraduate level modules in the accounting syllabus at Unisa do not really include case studies.
- (5) The additional time (extended to three hours) allowed in undergraduate accounting modules' examinations at Unisa could in future lead to an increased use of case studies for assessment.
- (6) Case studies in the form of real-life scenarios are currently being used at postgraduate level for students training to become members of SAICA and CIMA. These case studies require the application of pervasive skills.
- (7) Although case studies are already in use at postgraduate level, there is always room for improvement. Case studies should be included increasingly throughout the undergraduate and postgraduate syllabus focusing on honing the pervasive skills required of accounting graduates by professional accounting bodies and employers.

- (8) Case studies assist students to better understand certain topics by putting the theory into practice.
- (9) Students' pervasive skills are further developed by the inclusion of case studies in existing study material and formative and summative assessments.
- (10) Most ODL accounting educators would prefer case studies to be incorporated into existing modules rather than developing a standalone, separate case study-based module.
- (11) Although ODL accounting educators gave mixed responses to the question regarding at which level case studies should be implemented, a staggered implementation approach seems to be a possible solution, whereby case studies should be tailored for different difficulty levels.
- (12) The main challenge from an institutional perspective of including case studies in an ODL environment was perceived to be the large student numbers, because it is difficult to assess students by means of case studies when there is limited time for grading students.
- (13) Other challenges to consider in an ODL environment are as follows: the preparedness of faculty and the capacity of educators to develop more case studies; the "already full" syllabus; the lack of notional hours; the current structure of examinations; the geographical spread of ODL students; the profile, calibre and diverse backgrounds of ODL students; the authenticity of the work ODL students submit; the lack of skills; and limited internet connectivity.
- (14) Case studies were perceived by the interviewees to enrich various skills of ODL students such as communication, critical thinking, problem solving, decision making, and thinking independently and on their feet. However, one interviewee mentioned that students often do not understand the basics of business, and another mentioned that case studies do not always teach integration of different disciplines.
- (15) The inclusion of more case studies in the current accounting syllabus would better prepare ODL students for the professional examinations to be written and for the working environment.

- (16) Group work is more challenging in an ODL environment because of the vast geographical spread of students and the fact that many students have limited internet connectivity. However, if case studies could be assigned to ODL students in a group context, this would facilitate peer learning and increase motivation.

6.3.3 Descriptive statistics

Although the findings from the questionnaire were discussed at length in the previous chapter, the following interesting conclusions were drawn from the survey:

- (1) Many students felt that Unisa is not meeting their expectations in terms of pervasive skills development. Although Unisa does provide pervasive skills development, it is not to the extent expected by students. Unisa should have an increased focus on pervasive skills development in order to meet the expectations of its prime stakeholders, the students and other stakeholders such as professional accounting bodies and employers.
- (2) It is comforting to note that the majority of participants recognised that they also have a responsibility to develop their own pervasive skills and that they did not regard Unisa as being solely responsible for pervasive skills development.
- (3) Many participants (including students studying towards becoming members of SAICA and CIMA) were not aware of the fact that SAICA and CIMA make use of case study-based examinations to assess their eligible members. A lack of awareness of professional accounting bodies' use of case study-based examinations could also indicate a lack of awareness of the importance of case studies.
- (4) It is concerning that only a limited number of participants indicated that they had been exposed to case studies through group assignments. ODL students often miss out on peer-to-peer learning and the richness of teamwork as a result of not being exposed to many group work case study-based assignments.
- (5) Participants showed a preference for the inclusion of more case studies in the existing syllabus as opposed to case studies being developed as a standalone module. This could be a result of resistance to the unfamiliar

and the fact that students tend to try to limit the amount of change they might experience in their studies.

- (6) The perception of participants was that the implementation of case studies in an ODL environment would be more challenging than at residential face-to-face universities. ODL students often feel isolated and their perception is that the “distance” element in distance education makes their educators inaccessible.
- (7) In the opinion of the majority of the participants, the myUnisa platform, study material, assignments and examinations could all successfully be used to include more case studies.
- (8) The majority of participants indicated that case studies should be introduced in ODL accounting education at undergraduate level, while only a few felt that postgraduate level would be more appropriate. In light of the benefits that can be gained from the use of case studies, they should be included as early as possible, even if only to a limited extent.
- (9) Although the majority of participants felt that case studies can successfully develop and enhance pervasive skills in an ODL environment, they perceived that it would be more challenging in an ODL environment as opposed to at a contact-based university.
- (10) According to the respondents, part-time students already in the workplace would perform better with case studies based on practical, real-life scenarios possibly because these students are exposed to real-life scenarios as part of their everyday responsibilities in their working environment.
- (11) Although most of the participants indicated that they were aware of the increased focus on pervasive skills by professional accounting bodies, greater awareness should be fostered.
- (12) The fact that only half of the participants perceived it fair to assess pervasive skills competence via a case study-based examination, shows that there is still a major element of uncertainty.
- (13) The majority of participants recognised the potential of case studies to develop pervasive skills in ODL accounting education.

6.3.4 Inferential statistics

The following interesting conclusions were drawn from the findings of the inferential statistics that were discussed in more detail in chapter 5:

- (1) Respondents felt that they had gained more pervasive skills during their university years from activities outside Unisa as opposed to Unisa activities. This is somewhat disconcerting because it indicates that Unisa should and could be doing more to develop and enhance their students' pervasive skills.
- (2) Older students showed that they had gained more pervasive skills from Unisa activities than those students younger than 25. Often, the older students are the ones who are already working in business and they could be more appreciative of the pervasive skills that have been enriched through different activities during their university studies. A higher percentage of older students, in comparison with those younger than 25, indicated that the myUnisa platform could be successfully used to include case studies in the learning material. More of the older students agreed that case study question discussions could be successfully facilitated on the myUnisa platform. A higher proportion of students aged 25 and older, compared with those younger than 25, perceived the need for the introduction of a case study-based module in the current accounting syllabus. The older students were also more appreciative of the potential benefits embedded in the use of case studies as a teaching tool.
- (3) Students intending to study towards professional membership with SAICA and CIMA, in comparison with those who had no intention of furthering their qualifications, indicated that they had gained more pervasive skills from Unisa activities. It is possible that the students with no intention of furthering their qualifications with professional accounting bodies were not aware of the skills that these bodies expect of accounting graduates.
- (4) There was a higher percentage of students studying towards becoming members of CIMA, compared with those students who had no intention of furthering their qualifications, who recognised the responsibility of training managers to develop accounting graduates' pervasive skills. A higher percentage of students studying towards becoming members of SAICA,

versus those who had no intention of furthering their professional qualifications, recognised the responsibility of employers to develop accounting graduates' pervasive skills. Eligible members of SAICA and CIMA have to gain a certain amount of relevant practical work experience before being accepted as members of these institutions. These students are thus more aware of the responsibility of other stakeholders for their pervasive skills development.

- (5) As expected, there was a higher proportion of prospective SAICA and CIMA members, in comparison with those who indicated that they had no intention of furthering their qualifications, who were aware of the use of a final case study-based examination by SAICA and CIMA. Students with no intention of studying further are often not interested in gaining an understanding of what is expected of members of these institutions. Students studying towards becoming professional accountants were also more informed of the latest developments of professional accounting bodies than those who did not intend furthering their qualifications. A higher percentage of the students who intended registering as members of SAICA felt that ethical and moral values as well as time management skills could be improved through the use of case studies, compared to those students who intended registering as members of CIMA and those who did not intend furthering their qualifications and become professional accountants registered as members of CIMA or SAICA.
- (6) The male ODL students were more appreciative of and more positively inclined towards a case study-based module because a higher percentage of males, as opposed to females, indicated that there is a perceived need for the introduction of a case study-based module. Furthermore, more males than females indicated that a case study-based module should be compulsory. A higher percentage of males indicated that they would enrol for a case study-based module if it was elective; and of the students who responded that they agree that it would be fair to assess competence in pervasive skills with a case study-based examination, a higher percentage were male students. More males than females agreed that Unisa is adequately preparing them for the

workplace. Male students seem to be more informed of the latest movements of professional accounting bodies than females.

- (7) More female than male students indicated that they would prefer case studies to be introduced at earlier levels.
- (8) A higher percentage of part-time students than full-time students agreed that it would be fair to assess competence in pervasive skills via a case study-based examination.

6.4 RECOMMENDATIONS

The recommendations below should contribute to finding solutions to the current pervasive skills conundrum of accounting graduates in an ODL environment:

- (1) ODL institutions' assessment practices for accounting students should be adapted to include more case studies requiring the application of pervasive skills.
- (2) Case studies should incorporate a level of integration across disciplines to promote students' critical thinking skills.
- (3) Case study discussions should afford students an opportunity for self-assessment with a set of possible answers, thus helping them to identify their possible lack of comprehension and to modify their learning strategies. Case studies based on real-life scenarios could potentially increase students' analytical skills, critical thinking and judgement skills.
- (4) Students should not only be given case studies for assignments, but should also be equipped with the tools on how to deal with or approach case studies based on real-life scenarios.
- (5) More case study assignments should be integrated into existing modules of the accounting syllabus rather than being developed as a separate standalone case study-based module.
- (6) A possible solution to the level at which to include case studies would be to include shorter, more basic case studies at first-year level (perhaps by means of scenario testing) and then progress towards postgraduate level by introducing comprehensive, advanced, integrated case studies.

- (7) To address the challenge of large student numbers and limited time for assessment, educators could, for example, develop online case-study assessments with different possible solutions. The students could then be asked which solution they would regard as the best possible solution, and indicate their opinion in a fashion similar to selecting the answers to multiple-choice questions, which are marked by systems at the click of a button. Alternatively, educators could provide students with case study-based self-assessments together with the suggested solutions, whereby students would be exposed to a demonstration of the pervasive skills that are embedded in the assignment without having to submit an assessment for marking. A case study could also be developed with an accompanying set of questions, and students would then be allowed to discuss the case study online on the myUnisa platform before being provided with the suggested solutions.
- (8) The examination structure of ODL institutions should not be too prescriptive because it should allow for assessment in alternative ways such as through case study-based examination papers.
- (9) The profile, calibre and diverse background of ODL students should be taken into account when developing case studies for inclusion in the current syllabus in order for students to relate to case studies more easily.
- (10) There should be flexibility when dealing with ODL students in order to allow part-time working students' access to case studies in time frames and at places convenient to them.
- (11) E-learning initiatives should be introduced to help facilitate the ODL students' comprehension of case studies.
- (12) More case studies should be incorporated into the current accounting syllabus in order to further develop and enrich ODL students' pervasive skills.
- (13) More case studies should be included in the current accounting syllabus because this would lead to better prepared ODL students who are ready for the professional examinations they are required to write and the working environment.

- (14) Case studies assigned to ODL students in a group context could facilitate peer learning and increase student motivation. Peer-to-peer learning would be invaluable in the development of pervasive skills in the categories of professional skills and personal attributes, for example, communication skills, working effectively as a team member, negotiation skills and critical examination of information and ideas and problem-solving skills.
- (15) SAICA and CIMA should create more awareness about the increased focus on pervasive skills and the fact that case study-based examinations are being used for the final assessment of their eligible members.

6.5 CONTRIBUTIONS TO RESEARCH

The contributions of this study are highlighted below.

This study has created a greater awareness of the ability of case studies to develop and enhance pervasive skills in the South African ODL environment, which is regarded as a relatively unexplored area. There is a paucity of literature on this subject in the South African context and of empirical research conducted on the use of case studies in ODL accounting.

As mentioned in chapter 1, it is imperative for economies that accountants are well prepared for the working environment. Studies relating to the recent curriculum changes introduced by both SAICA and CIMA to increase their eligible members' pervasive skills requirements are limited. The contribution of this study to research is relevant because of SAICA's recent introduction of case study-based examinations for their potential members that increasingly assess pervasive skills. CIMA recently also started incorporating more case studies into its syllabus in an effort to make its eligible members more employable. Studies relating to pervasive skills development of the future accountants in the South African economy are therefore critical. The findings of this study provide insight from the perspective of ODL accounting students in a South African context.

A study of the perceptions of ODL accounting educators and students of the unique challenges and benefits of using case studies as a pervasive skills development tool in the ODL environment has contributed new knowledge and should provide ODL accounting educators with much food for thought for the development of case studies for ODL students and enable them to further improve their teaching through the use of case studies.

Professional accounting bodies also benefit from the results of this study as it was evident that a greater awareness of the final case study-based examinations should be created. Embarking on continuous nationwide marketing campaigns and career exhibitions to expand this awareness has the added benefit for professional accounting bodies of attracting new prospective members.

6.6 DIRECTIONS FOR FUTURE RESEARCH

Although the results of this study are encouraging, further research is needed to explore the following areas:

- Other stakeholders, such as employers, SAICA and CIMA could be interviewed to determine their perception of the use of case studies for pervasive skills development in South African ODL accounting education, and also possibly to incorporate their ideas and suggestions into a proposed practices document for ODL institutions.
- An action research or evaluative research approach could be adopted to expose undergraduate ODL accounting students to a comprehensive, integrated case study exercise based on a real-life scenario. The pervasive skills developed as a result of this exposure could then be evaluated.
- Future studies could be conducted to investigate ODL students' experiences with more interpretive approaches, such as interviews and focus groups, because of the inherent limitations of using a questionnaire with fixed responses.

6.7 CHAPTER CONCLUSION

This chapter concluded the study by providing an overview of the entire study, the major findings, conclusions, recommendations and contributions to research in light of the results obtained. Suggestions were also made for possible further research.

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APPENDIX A

LETTER TO INTERVIEWEES

Consent for participation in an academic research interview pertaining to:

THE USE OF CASE STUDIES FOR PERVASIVE SKILLS TRAINING IN ODL ACCOUNTING EDUCATION

Thank you for your willingness to participate in an academic research study conducted by Yolande Reyneke, senior lecturer in the Department of Management Accounting at Unisa. The envisaged output of this study will be an article publishable in an accredited journal as well as the completion of my Master's Degree. Ethical clearance has been obtained from the Research Ethics Committee (ref no.: 2015_CAS_001) of the College of Accounting Sciences, Unisa prior to commencing with this research. Permission has also been obtained from the Research Permission Sub-committee of Senate Research and Innovation Higher Degree Committee (ref no.: 2015_RPSC_008).

The objectives of this study are to:

- determine whether ODL accounting educators perceive a need for the introduction of a case study-based module to develop well-prepared accounting graduates ready for the workplace
- evaluate the perception of ODL accounting students about the challenges and benefits of introducing a case study-based module focusing on developing pervasive skills required for the workplace

A study of ODL accounting students' perception of the challenges and benefits of implementing a case study-based module as part of their training towards becoming a professional accountant will enable ODL accounting educators to further improve their teaching through the use of case studies.

The information from individual interviewees will at all times be treated as

confidential. Your name will not be linked to your individual contributions to this study. This will be done by allocating a respondent number to your responses. The information obtained from the interview will be used for academic research purposes only and the data obtained will be held under lock and key by me as the primary researcher for at least five years whereafter it will be destroyed.

Your participation in this study is very important and would be appreciated. Because of the non-sensitive and non-personal nature of the study, I do not foresee that you will suffer any harm from participating in this study. However, you may choose not to participate and you may also stop participating at any time without any adverse consequences. I kindly request you to please complete the consent form below before participating in the interview.

The interview should take approximately 30 minutes of your time and will be conducted as per our appointment at a time and place of your convenience.

Please keep in mind that you will not receive any financial compensation for participating in this study.

Should you require any further information or feedback on the research results, please do not hesitate to contact Yolande Reyneke at:

Telephone: 0723062003
E-mail: reyney@unisa.ac.za
Postal address: 2 Yen Street
Eldoglen
0157

Thank you in anticipation for your kind cooperation and assistance with this research project.

Yours sincerely
Y Reyneke

LETTER OF CONSENT:

I understand that the information I provide will only be used for the purposes of this research project and that I will remain anonymous. I confirm having participated under informed consent.	Please tick	
	Yes	No
Consent: I give my permission for the use of information I provide to be used for research purposes (which will not in any way be to my disadvantage or detriment)	Yes	No
I confirm that I am aware that I may at any point during the interview cease to participate without being adversely affected.	Yes	No

Signed on (date) at(location)

Dr/Prof/Mr/Me

APPENDIX B

INTERVIEW SCHEDULE

RESPONSIBILITY TO DEVELOP PERVASIVE SKILLS

- A. How do you think the fact that both SAICA and CIMA have incorporated final case study-based examinations for their eligible members changes Unisa's responsibility to develop accounting graduates' pervasive skills?

CURRENT/PROPOSED PRACTICE AT UNISA

- B. What is the current practice here at Unisa in your Department/School/College? How are case studies incorporated into the current accounting syllabus?
- C. Would you like to see the inclusion of more case studies in the current accounting syllabus and if so, should it be integrated into existing modules or rather developed as a dedicated, separate module? Please give a reason for your answer.
- D. At which level do you think that case studies should be introduced to accounting students and why?

CHALLENGES

- E. From an Institutional perspective, what unique practical challenges do you foresee in the ODL environment with the incorporation of case studies into existing study material?
- F. What unique challenges do you think ODL students will face regarding the inclusion of case studies or a case study-based module in the accounting curriculum?

G. What advantages do you think residential universities have over ODL institutions in developing pervasive skills through the use of case studies?

BENEFITS

H. What benefits will ODL students experience if case studies become increasingly incorporated into the existing study material?

APPENDIX C

QUESTIONNAIRE FOR THIRD-YEAR MANAGEMENT ACCOUNTING STUDENTS

Dear Prospective Respondent

You are invited to participate in an academic research study conducted by Yolande Reyneke, a Senior Lecturer in the Department of Management Accounting, University of South Africa. Ethical clearance has been obtained from the Research Ethics Committee (ref no. 2015_CAS_001) of the College of Accounting Sciences, Unisa, prior to commencing with this research. Permission has also been obtained from the Research Permission Sub-committee of Senate Research and Innovation Higher Degree Committee (ref no. 2015_RPSC_008).

The purpose of this study is to investigate third-year management accounting students' perceptions of the need for the inclusions of case studies or perhaps a case study-based module in accounting education with the purpose of enhancing pervasive skills in an open distance learning (ODL) environment. Because of the non-sensitive and non-personal nature of the subject, it is not foreseen that you will suffer any harm.

This study could, inter alia, benefit ODL accounting educators to further improve their teaching through the use of case studies with the purpose of developing/enhancing pervasive skills. Students will ultimately benefit if ODL accounting educators are knowledgeable of the benefits and challenges that case study teaching in an ODL environment might bring about. It can also highlight whether there is a need for accounting educators at universities to better prepare their students for the changing and demanding working environment of professional accountants.

The responses obtained from the individual questionnaires will be analysed and statistically processed into final results. The information from individual respondents will at all times be treated as confidential by allocating a respondent number and their identity will not be made available to any entity or third party. Your name will not be linked to your contributions to this study. The data obtained from the

questionnaire will be used for academic research and publishing purposes only. The data will be kept under lock and key by the primary researcher for at least five years whereafter it will be destroyed by deleting it from the computer where it was held and shredding any hard copies of it.

Your participation in this study is of vital importance and would be appreciated. You may, however, choose not to participate and you may also stop participating at any time without any adverse consequences. We kindly request you to please complete the consent form below before completing the questionnaire.

The envisaged output from this study will be an article to be published in an accredited journal and completion of the researcher's Master's Degree. Please keep in mind that you will not receive any financial compensation for participating in this study.

As soon as the research is completed, an electronic copy of the final research study will be made available to all participants requesting such information. You can send a request to reyney@unisa.ac.za.

Please complete the questionnaire electronically if possible, which should take approximately 15 to 20 minutes, and submit it before 28 February 2015.

Should you require any further information, please do not hesitate to contact Yolande Reyneke at:

Telephone: (012) 429 4046

E-mail: reyney@unisa.ac.za

Your response to the enclosed questionnaire would be greatly appreciated.

Thank you in anticipation for your kind cooperation and assistance with this research project.

Yours sincerely

Y Reyneke

I understand that the information I provide will be used only for the purposes of this research project and that I will remain anonymous. I confirm having participated under informed consent. I give my permission for the use of the information I provide below to be used for research purposes (which will in no way be to my disadvantage or detriment). I confirm that I am aware that I may at any point during the survey cease to participate without being adversely affected.

1. Please confirm that you provide consent for research purposes after reading the text above
Yes
No

A. SOCIODEMOGRAPHIC INFORMATION

2. Gender
Male
Female

3. Language of learning
English
Afrikaans
African language
Other

4. What is your age?
Below 25 years
25 - 35 years
36 - 45 years
Older than 45 years

5. Full-time/part-time student
Full-time student

Part-time student

6. Employment status
Not working
Self-employed
Working for accounting firms
Working for auditing firms
Working for other

Please specify if you have chosen the option working for other above:

7. Intended further qualification with professional accounting body
Chartered accountant (CA) registered with SAICA
Associate chartered management accountant (ACMA) and chartered global management accountant (CGMA) registered with CIMA
Other
No intended further qualification

Please specify if you have chosen the option other above:

B. PERCEPTION/EXPERIENCE ON PERVASIVE SKILLS DEVELOPMENT

Background information:

According to the Oxford Dictionary (2015b), pervasive skills (“soft skills”) are defined as personal attributes that enable someone to interact effectively and harmoniously with other people.

Low, Samkin and Liu (2013) extended a list of pervasive skills cited by Paisey and Paisey (2010) to include other relevant literature. Examples of pervasive skills listed by them are as follows: creative thinking; critical thinking; analytical skills; teamwork; problem solving - logically solving unstructured problems; communication - the ability to communicate both formally and informally, in both spoken and written form; interpersonal - the ability to work with others in groups and the ability to interact with

culturally diverse people; leadership; public speaking; decision making and time management

8. Should Unisa provide pervasive skills development for accounting students?
Unisa should and already does
Unisa should and already does, but it could be improved
Unisa should, but they can only do it to a certain extent
Unisa shouldn't as pervasive skills cannot be taught

(Question adapted from Low et al 2013)

Please use the following scale to rate the statements in the categories below:

S/D = strongly disagree

D = disagree

N = neutral

A = agree

S/A = strongly agree

9. How have you gained your pervasive skills during your university years until now?					
Participation in myUnisa discussion forum	S/D	D	N	A	S/A
Discussions with fellow students about assignments (group work)	S/D	D	N	A	S/A
Through the consultation of study material	S/D	D	N	A	S/A
Tutoring	S/D	D	N	A	S/A
Part-time jobs	S/D	D	N	A	S/A
Extra-curricular activities	S/D	D	N	A	S/A
Personal experience (outside jobs/universities)	S/D	D	N	A	S/A

(Question adapted from Low et al 2013)

10. Have you faced any of the following workplace challenges?					
Not applicable - never employed	S/D	D	N	A	S/A

Meeting deadlines	S/D	D	N	A	S/A
Dealing with clients	S/D	D	N	A	S/A
Managing relationships with colleagues and managers	S/D	D	N	A	S/A
Having to deal with non-textbook situations	S/D	D	N	A	S/A
Adapting to change	S/D	D	N	A	S/A
Meeting tight budgets	S/D	D	N	A	S/A

(Question adapted from Low et al 2013)

11. Whose responsibility is it to develop accounting graduates' pervasive skills?		
Student him-/herself	Yes	No
Educator	Yes	No
Training manager	Yes	No
Employers	Yes	No

C. PERCEPTION/EXPERIENCE WITH CASE STUDIES DURING UNISA STUDIES

Background information:

According to the Oxford Dictionary (2015a), a case study is defined as a particular instance of something used or analysed in order to illustrate a thesis or principle. Examples of a case study could be a scenario with a real-world business decision that a company faces, and questions asked on how to approach the decision on hand (e.g. a make or buy decision).

12. Awareness of case study-based examinations		
Are you aware that SAICA uses a final case study-based examination to assess trainee accountants eligible to become qualified chartered accountants?	Yes	No
Are you aware that CIMA uses a final case study-based examination to assess its students eligible to become qualified chartered management accountants?	Yes	No

13. Have you ever been exposed to case studies during your university studies?		
Assignment question based on a case study	Yes	No
Examination question based on a case study	Yes	No
Case studies incorporated into study material	Yes	No
Group assignment based on a case study	Yes	No

14. Case studies/case study-based module?					
Do you perceive case studies as a valuable teaching tool with the aim of pervasive skills development?	S/D	D	N	A	S/A
Do you think there is a need for the inclusion of more case studies (integrated into existing modules) in the current accounting syllabus at Unisa?	S/D	D	N	A	S/A
Do you think that there is a need for the inclusion of a case study based-module (dedicated, separate module) in the current accounting syllabus at Unisa?	S/D	D	N	A	S/A
A case study-based module should be an elective module	S/D	D	N	A	S/A
A case study-based module should be compulsory	S/D	D	N	A	S/A
If a case study-based module was an elective module, would you enrol for it? (Would you register for an elective case study based module if it was offered?)	S/D	D	N	A	S/A
Do you feel that incorporating case studies into study material is more challenging in an ODL environment than at a residential face-to-face university?	S/D	D	N	A	S/A

15. Do you feel any of the following means could be used successfully to incorporate case studies into the learning material?

myUnisa platform	Yes	No
Study material	Yes	No
Assignments	Yes	No
Exams	Yes	No

16. At which level should case studies be introduced into ODL accounting education?

First year
Second year
Third year
Postgraduate level

17. General questions

Do you think case studies can develop or enhance pervasive skills in an ODL environment?	S/D	D	N	A	S/A
Would there be challenges with teaching a case study-based module in an ODL environment?	S/D	D	N	A	S/A
Do you feel Unisa is currently doing enough in terms of preparation of its students for the workplace?	S/D	D	N	A	S/A
Do you think the myUnisa platform can be used for facilitation of case study question discussions?	S/D	D	N	A	S/A
Do you think part-time students who are already in the workplace would perform better in a case study-based module based on practical, real-life scenarios than students who are not working while studying?	S/D	D	N	A	S/A

Are you aware of the increased focus by professional accounting bodies on pervasive skills?	S/D	D	N	A	S/A
Do you believe it is fair to assess competence in pervasive skills via a case study-based examination?	S/D	D	N	A	S/A

De Villiers (2010) defines five main categories of pervasive skill constructs: communication skills; problem-solving and thinking skills; leadership and teamwork skills; ethical and moral values; and self-management. This list was extended in this study to add critical thinking skills and time management skills

18. The following pervasive skills can be developed or further enhanced by incorporating case studies in ODL accounting education					
Communication skills	S/D	D	N	A	S/A
Problem-solving skills	S/D	D	N	A	S/A
Leadership and teamwork skills	S/D	D	N	A	S/A
Ethical and moral values	S/D	D	N	A	S/A
Self-management	S/D	D	N	A	S/A
Integrating different disciplines (accounting, tax, management accounting, audit)	S/D	D	N	A	S/A
Critical thinking skills	S/D	D	N	A	S/A
Time management skills	S/D	D	N	A	S/A

Thank you.

APPENDIX D

ETHICAL CLEARANCE: CAS



**COLLEGE OF ACCOUNTING SCIENCES
RESEARCH ETHICS REVIEW COMMITTEE**

Date: 28 January 2015

Dear Yolande Reyneke,

Decision: Ethics Approval

Ref: 2015_CAS_001
Name of applicant:
Yolande Reyneke
Student #: 5081-336-6
Staff #: 90056566

Name: Mrs Yolande Reyneke,
AJH van der Walt Building 01-042
reyney@unisa.ac.za
(012) 429 4046

Proposal: The Use of Case Studies for Pervasive Skills Training in Accounting Education

Qualification: Master of Philosophy in Accounting Sciences

Thank you for the application for research ethics clearance by the College of Accounting Sciences Research Ethics Review Committee for the above mentioned research. Final approval is granted for the completion of the research.

For full approval: *The application was reviewed in compliance with the Unisa Policy on Research Ethics by the College of Accounting Sciences Research Ethics Review Committee on 28 January 2015.*

The proposed research may now commence with the proviso that:

- 1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*
- 2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the College of Accounting Sciences Research Ethics Review Committee. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*



Open Rubric

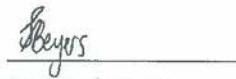
University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 420 2111 Fax: +27 12 420 4150

3) The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.

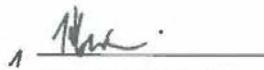
Note:

The reference number [top right corner of this communiqué] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the College of Accounting Sciences RERC.

Kind regards,



Mrs Soné Beyers
(Chairperson of CAS RERC)
beyers@unisa.ac.za
(012) 429 3532



Prof Elmarie Sadler
(Executive Dean of CAS)

APPENDIX E

ETHICAL CLEARANCE: SRIHDC



RESEARCH PERMISSION SUB-COMMITTEE OF SRIHDC

17 February 2015

Ref #: 2015_RPSC_008
Mrs Yolande Reyneke
Student #:
Staff #: 90056566

Dear Mrs Yolande Reyneke,

**Decision: Research Permission
Approval**

Name: Mrs Yolande Reyneke
College of Accounting Sciences
Department of Management Accounting
UNISA
reyney@unisa.ac.za
(012) 429-4046/072 306 2003

Supervisor: Prof C. C. Shuttleworth
shuttcc@unisa.ac.za

**A study titled: "The use of case studies for pervasive skills training in ODL
Accounting education."**

Your application regarding permission to conduct research involving UNISA staff and students in respect of the above study has been received and was considered by the Research Permission Subcommittee of the UNISA Senate Research and Innovation and Higher Degrees Committee (SRIHDC) on 11 February 2015.

It is my pleasure to inform you that permission has been granted for your study, for the period between 16 February 2015 and 31 December 2017 to:

1. Gain access to and use the UNISA CAS management email list for sampling purposes and to conduct interviews with the target audience.
2. Gain access to and use UNISA third year Management Accounting students' mailing list, for students who are enrolled for the module MAC3701, and distribute a web-based survey to them.



University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
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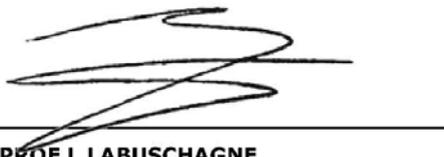
3. Conduct an interview with Prof. Paul Prinsloo.

Note:

The reference number 2015_RPSC_008 should be clearly indicated on all forms of communication with the intended research participants.

We would like to wish you well in your research undertaking.

Kind regards,



PROF L LABUSCHAGNE
EXECUTIVE DIRECTOR: RESEARCH

Tel: +27 12 429 6368 / 2446

Email: labus@unisa.ac.za

APPENDIX F

DESCRIPTIVE STATISTICS

1. Please confirm that you provide consent for research purposes	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	363	100%	363	100.00%
No	Discarded, therefore not applicable			

2. Gender	Frequency	Percent	Cumulative frequency	Cumulative percent
Male	161	44.35%	161	44.35%
Female	202	55.65%	363	100.00%

3. Language of learning	Frequency	Percent	Cumulative frequency	Cumulative percent
English	328	90.86%	328	90.86%
Afrikaans	25	6.93%	353	97.78%
African language	6	1.66%	359	99.45%
Other	2	0.55%	361	100.00%

4. Age	Frequency	Percent	Cumulative frequency	Cumulative percent
Below 25 years	76	20.94%	76	20.94%
25 - 35 years	223	61.43%	299	82.37%
36 - 45 years	52	14.33%	351	96.70%
Older than 45 years	12	3.31%	363	100.00%

5. Full-time/part-time student	Frequency	Percent	Cumulative frequency	Cumulative percent
Full-time student	55	15.19%	55	15.19%
Part-time student	307	84.81%	362	100.00%

6. Employment status	Frequency	Percent	Cumulative frequency	Cumulative percent
Not working	57	16.38%	57	16.38%
Self-employed	15	4.31%	72	20.69%
Working for accounting firms	29	8.33%	101	29.02%
Working for auditing firms	51	14.66%	152	43.68%
Working for other	196	56.32%	348	100.00%

7. Intended further qualification with professional accounting body	Frequency	Percent	Cumulative frequency	Cumulative percent
Chartered accountant (CA) registered with SAICA	181	58.20%	181	58.20%
Associate chartered management accountant (ACMA) and chartered global management accountant (CGMA) registered with CIMA	69	22.19%	250	80.39%
No intended further qualification	61	19.61%	311	100.00%

8. Should Unisa provide pervasive skills development for accounting students?	Frequency	Percent	Cumulative frequency	Cumulative percent
Unisa should and already does	57	15.79%	57	15.79%
Unisa should and already does, but it could be improved	185	51.25%	242	67.04%
Unisa should, but it can only do it to a certain extent	107	29.64%	349	96.68%
Unisa shouldn't as pervasive skills cannot be taught	12	3.32%	361	100.00%

9. How have you gained your pervasive skills during your university years up to now?				
9.1. Participation in myUnisa discussion forum	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	44	12.87%	44	12.87%
Disagree	57	16.67%	101	29.53%
Neutral	115	33.63%	216	63.16%
Agree	104	30.41%	320	93.57%
Strongly agree	22	6.43%	342	100.00%
9.2 Discussions with fellow students about assignments (group work)	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	34	9.83%	34	9.83%
Disagree	53	15.32%	87	25.15%
Neutral	91	26.30%	178	51.45%
Agree	125	36.13%	303	87.57%
Strongly agree	43	12.43%	346	100.00%
9.3. Through the consultation of study material	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	15	4.30%	15	4.30%
Disagree	33	9.46%	48	13.75%
Neutral	68	19.48%	116	33.24%
Agree	165	47.28%	281	80.52%
Strongly agree	68	19.48%	349	100.00%
9.4. Tutoring	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	38	11.28%	38	11.28%
Disagree	69	20.48%	107	31.75%
Neutral	113	33.53%	220	65.28%
Agree	82	24.33%	302	89.61%
Strongly agree	35	10.39%	337	100.00%

9. How have you gained your pervasive skills during your university years until now? (continued)				
9.5. Part-time jobs	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly disagree	44	13.54%	44	13.54%
Disagree	56	17.23%	100	30.77%
Neutral	90	27.69%	190	58.46%
Agree	85	26.15%	275	84.62%
Strongly agree	50	15.39%	325	100.00%
9.6. Extracurricular activities	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	34	10.27%	34	10.27%
Disagree	45	13.60%	79	23.87%
Neutral	102	30.82%	181	54.68%
Agree	101	30.51%	282	85.20%
Strongly agree	49	14.80%	331	100.00%
9.7. Personal experience (outside jobs/universities)	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	11	3.16%	11	3.16%
Disagree	20	5.75%	31	8.91%
Neutral	46	13.22%	77	22.13%
Agree	139	39.94%	216	62.07%
Strongly agree	132	37.93%	348	100.00%

10. Have you faced any of the following workplace challenges?				
10.1 Not applicable - never employed	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	107	42.97%	107	42.97%
Disagree	33	13.25%	140	56.23%
Neutral	46	18.47%	186	74.70%
Agree	29	11.65%	215	86.35%
Strongly agree	34	13.66%	249	100.00%
10.2 Meeting deadlines	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	14	4.22%	14	4.22%
Disagree	23	6.93%	37	11.15%
Neutral	32	9.64%	69	20.78%
Agree	126	37.95%	195	58.74%
Strongly agree	137	41.27%	332	100.00%
10.3 Dealing with clients	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	12	3.63%	12	3.63%
Disagree	24	7.25%	36	10.88%
Neutral	36	10.88%	72	21.75%
Agree	127	38.37%	199	60.12%
Strongly agree	132	39.88%	331	100.00%
10.4 Managing relationships with colleagues and managers	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	11	3.30%	11	3.30%
Disagree	33	9.91%	44	13.21%
Neutral	42	12.61%	86	25.83%
Agree	117	35.14%	203	60.96%
Strongly agree	130	39.04%	333	100.00%

10. Have you faced any of the following workplace challenges? (continued)				
10.5 Having to deal with non-textbook situations	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	6	1.81%	6	1.81%
Disagree	24	7.23%	30	9.04%
Neutral	41	12.35%	71	21.39%
Agree	139	41.87%	210	63.25%
Strongly agree	122	36.75%	332	100.00%
10.6 Adapting to change	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	9	2.69%	9	2.69%
Disagree	21	6.27%	30	8.96%
Neutral	45	13.43%	75	22.39%
Agree	130	38.81%	205	61.20%
Strongly agree	130	38.81%	335	100.00%
10.7 Meeting tight budgets	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly disagree	11	3.32%	11	3.32%
Disagree	25	7.55%	36	10.88%
Neutral	56	16.92%	92	27.79%
Agree	120	36.25%	212	64.05%
Strongly agree	119	35.95%	331	100.00%

11. Whose responsibility is it to develop accounting graduates' pervasive skills?				
11.1 Student him-/herself	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	349	98.87%	349	98.87%
No	4	1.13%	353	100.00%
11.2 Educator	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	249	77.33%	249	77.33%
No	73	22.67%	322	100.00%
11.3 Training manager	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	254	78.88%	254	78.88%
No	68	21.12%	322	100.00%
11.4 Employers	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	220	68.97%	220	68.97%
No	99	31.03%	319	100.00%

12. Awareness of case study-based examinations				
12.1 Are you aware that SAICA uses a final case study-based examination to assess trainee accountants eligible to become qualified chartered accountants?	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	196	54.44%	196	54.44%
No	164	45.56%	360	100.00%
12.2 Are you aware that SAICA uses a final case study-based examination to assess trainee accountants eligible to become qualified chartered accountants?	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	156	43.94%	156	43.94%
No	199	56.06%	355	100.00%

13. Have you ever been exposed to case studies during your university studies?				
13.1 Assignments question based on a case study	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	323	89.23%	323	89.23%
No	39	10.77%	362	100.00%
13.2 Examination question based on a case study	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	310	85.87%	310	85.87%
No	51	14.13%	361	100.00%
13.3 Case studies incorporated into study material	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	313	87.19%	313	87.19%
No	46	12.81%	359	100.00%
13.4 Group assignment based on a case study	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	134	37.64%	134	37.64%
No	222	62.36%	356	100.00%

14.1 Do you perceive case studies as a valuable teaching tool with the aim of pervasive skills development?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	9	2.49%	9	2.49%
Disagree	11	3.05%	20	5.54%
Neutral	58	16.07%	78	21.61%
Agree	181	50.14%	259	71.75%
Strongly agree	102	28.26%	361	100.00%

14.2 Do you think there is a need for the inclusion of more case studies (integrated in existing modules) in the current accounting syllabus at Unisa?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	13	3.64%	13	3.64%
Disagree	27	7.56%	40	11.20%
Neutral	78	21.85%	118	33.05%
Agree	155	43.42%	273	76.47%
Strongly agree	84	23.53%	357	100.00%

14.3 Do you think that there is a need for the introduction of a case study based-module (dedicated, separate module) in the current accounting syllabus at Unisa?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	25	7.00%	25	7.00%
Disagree	55	15.41%	80	22.41%
Neutral	85	23.81%	165	46.22%
Agree	125	35.01%	290	81.23%
Strongly agree	67	18.77%	357	100.00%

14.4 A case study-based module should be an elective module	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	27	7.56%	27	7.56%
Disagree	71	19.89%	98	27.45%
Neutral	85	23.81%	183	51.26%
Agree	132	36.98%	315	88.24%
Strongly agree	42	11.77%	357	100.00%

14.5 A case study-based module should be compulsory	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	41	11.55%	41	11.55%
Disagree	69	19.44%	110	30.99%
Neutral	105	29.58%	215	60.56%
Agree	90	25.35%	305	85.92%
Strongly agree	50	14.09%	355	100.00%

14.6 If a case study-based module was an elective module, would you enrol for it? (Would you register for an elective case study-based module if it was offered?)	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	37	10.45%	37	10.45%
Disagree	37	10.45%	74	20.90%
Neutral	87	24.58%	161	45.48%
Agree	133	37.57%	294	83.05%
Strongly agree	60	16.95%	354	100.00%

14.7 Do you feel that incorporating case studies into study material is more challenging in an ODL environment than at a residential face-to-face university?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	11	3.09%	11	3.09%
Disagree	18	5.06%	29	8.15%
Neutral	60	16.85%	89	25.00%
Agree	120	33.71%	209	58.71%
Strongly agree	147	41.29%	356	100.00%

15. Do you feel any of the following means could be used successfully to incorporate case studies into the learning material?				
15.1 myUnisa platform	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	298	84.42%	298	84.42%
No	55	15.58%	353	100.00%
15.2 Study material	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	334	93.30%	334	93.30%
No	24	6.70%	358	100.00%
15.3 Assignments	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	339	93.65%	339	93.65%
No	23	6.35%	362	100.00%
15.4 Exams	Frequency	Percent	Cumulative frequency	Cumulative percent
Yes	261	73.73%	261	73.73%
No	93	26.27%	354	100.00%

16. At which level should case studies be introduced in ODL accounting education?	Frequency	Percent	Cumulative frequency	Cumulative percent
First year	127	35.38%	127	35.38%
Second year	123	34.26%	250	69.64%
Third year	57	15.88%	307	85.52%
Postgraduate level	52	14.49%	359	100.00%

17.1 Do you think case studies could develop or enhance pervasive skills in an ODL environment?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	4	1.11%	4	1.11%
Disagree	17	4.70%	21	5.80%
Neutral	57	15.75%	78	21.55%
Agree	214	59.12%	292	80.66%
Strongly agree	70	19.34%	362	100.00%

17.2 Would there be any challenges with teaching a case study-based module in an ODL environment?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	8	2.22%	8	2.22%
Disagree	42	11.67%	50	13.89%
Neutral	80	22.22%	130	36.11%
Agree	189	52.50%	319	88.61%
Strongly agree	41	11.39%	360	100.00%

17.3 Do you feel Unisa is doing enough currently in terms of preparation of its students for the workplace?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	25	7.02%	25	7.02%
Disagree	79	22.19%	104	29.21%
Neutral	116	32.58%	220	61.80%
Agree	109	30.62%	329	92.42%
Strongly agree	27	7.58%	356	100.00%

17.4 Do you think the myUnisa platform could be used for facilitation of case study question discussions?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	10	2.79%	10	2.79%
Disagree	32	8.91%	42	11.70%
Neutral	63	17.55%	105	29.25%
Agree	209	58.22%	314	87.47%
Strongly agree	45	12.54%	359	100.00%

17.5 Do you think part-time students who are already in the workplace would perform better in a case study-based module based on practical, real-life scenario's than students who are not working while studying?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	6	1.67%	6	1.67%
Disagree	21	5.85%	27	7.52%
Neutral	63	17.55%	90	25.07%
Agree	156	43.45%	246	68.52%
Strongly agree	113	31.48%	359	100.00%

17.6 Are you aware of the increased focus by professional accounting bodies on pervasive skills?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	16	4.44%	16	4.44%
Disagree	66	18.33%	82	22.78%
Neutral	89	24.72%	171	47.50%
Agree	138	38.33%	309	85.83%
Strongly agree	51	14.17%	360	100.00%

17.7. Do you believe it is fair to assess competence in pervasive skills via a case study-based examination?	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	21	5.85%	21	5.85%
Disagree	52	14.49%	73	20.34%
Neutral	107	29.81%	180	50.14%
Agree	143	39.83%	323	89.97%
Strongly agree	36	10.03%	359	100.00%

18. The following pervasive skills could be developed or further enhanced by incorporating case studies into ODL accounting education				
18.1 Communication skills	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	1	0.28%	1	0.28%
Disagree	4	1.10%	5	1.38%
Neutral	27	7.44%	32	8.82%
Agree	220	60.61%	252	69.42%
Strongly agree	111	30.58%	363	100.00%
18.2 Problem-solving skills	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	1	0.28%	1	0.28%
Disagree	2	0.55%	3	0.83%
Neutral	20	5.53%	23	6.35%
Agree	214	59.12%	237	65.47%
Strongly agree	125	34.53%	362	100.00%
18.3 Leadership and teamwork skills	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	2	0.55%	2	0.55%
Disagree	4	1.11%	6	1.66%
Neutral	33	9.12%	39	10.77%
Agree	204	56.35%	243	67.13%
Strongly agree	119	32.87%	362	100.00%

18. The following pervasive skills could be developed or further enhanced by incorporating case studies into ODL accounting education (continued)				
18.4 Ethical and moral values	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	2	0.55%	2	0.55%
Disagree	11	3.03%	13	3.58%
Neutral	46	12.67%	59	16.25%
Agree	189	52.07%	248	68.32%
Strongly agree	115	31.68%	363	100.00%
18.5 Self-management	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	2	0.55%	2	0.55%
Disagree	4	1.11%	6	1.66%
Neutral	35	9.67%	41	11.33%
Agree	201	55.53%	242	66.85%
Strongly agree	120	33.15%	362	100.00%
18.6 Integrating different disciplines (accounting, tax, management accounting, audit)	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	1	0.28%	1	0.28%
Disagree	6	1.65%	7	1.93%
Neutral	50	13.77%	57	15.70%
Agree	198	54.55%	255	70.25%
Strongly agree	108	29.75%	363	100.00%
18.7 Critical thinking skills	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	2	0.55%	2	0.55%
Disagree	2	0.55%	4	1.10%
Neutral	20	5.53%	24	6.63%
Agree	208	57.46%	232	64.09%
Strongly agree	130	35.91%	362	100.00%

18. The following pervasive skills could be developed or further enhanced by incorporating case studies into ODL accounting education (continued)

18.8 Time management skills	Frequency	Percent	Cumulative frequency	Cumulative percent
Strongly disagree	0	0.00%	0	0.00%
Disagree	4	1.11%	4	1.11%
Neutral	37	10.25%	41	11.36%
Agree	189	52.36%	230	63.71%
Strongly agree	131	36.29%	361	100.00%

APPENDIX G

INFERENCEAL STATISTICS

Figure G1: Output from EFA tests performed

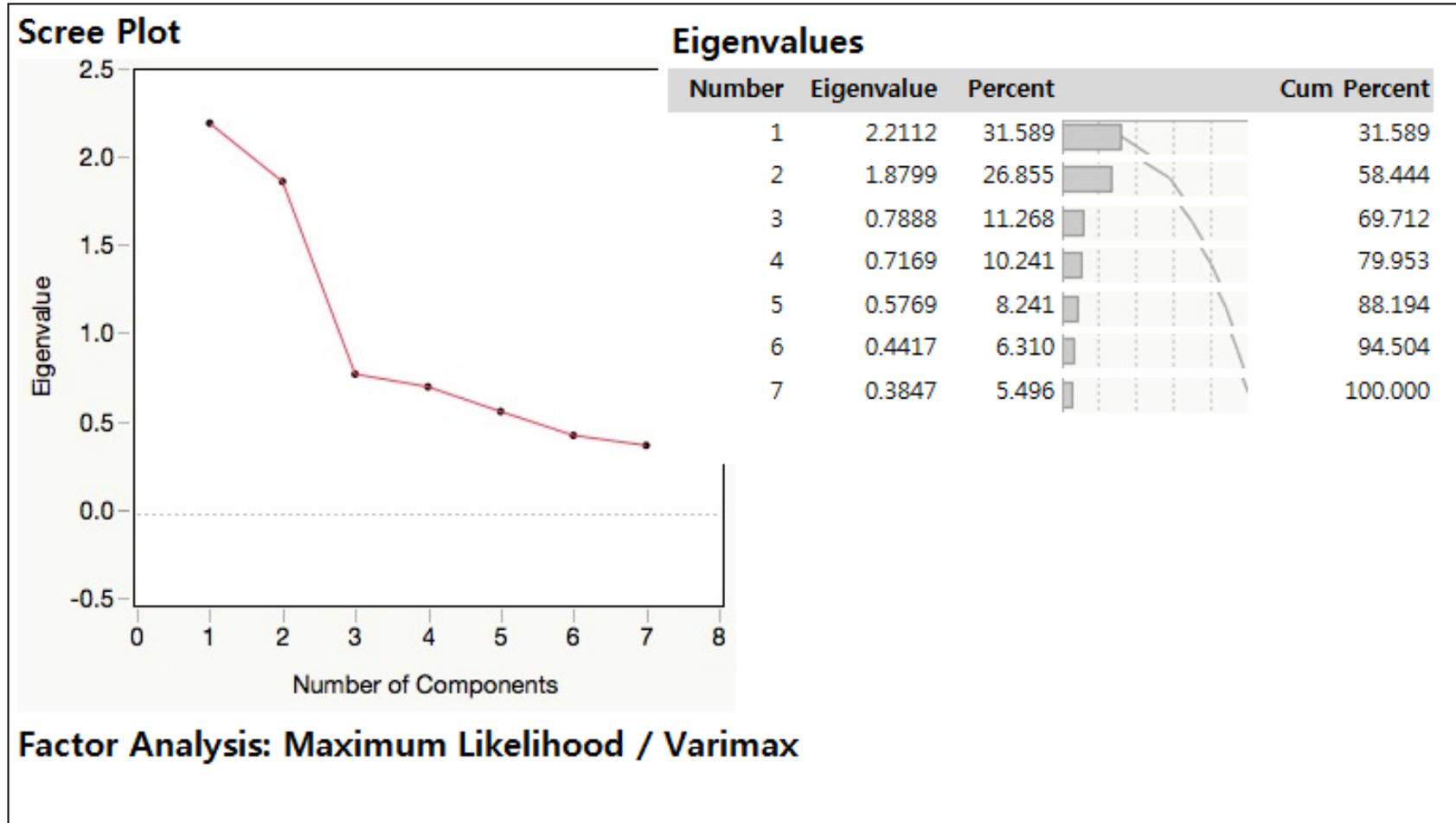


Table G1: Rotated factor loadings and communality estimates (after extraction)

Items	Communalities	Factor 1 loadings	Factor 2 loadings
9.1 Participation in myUnisa discussion forum	0.554	0.744	0.010
9.2 Discussions with fellow students about assignments (group work)	0.569	0.754	-0.020
9.3 Through the consultation of study material	0.205	0.452	-0.022
9.4 Tutoring	0.231	0.461	0.137
9.5 Part-time jobs	0.646	0.140	0.792
9.6 Extra-curricular activities	0.484	0.067	0.698
9.7 Personal experience (outside jobs/universities)	0.356	-0.084	0.590

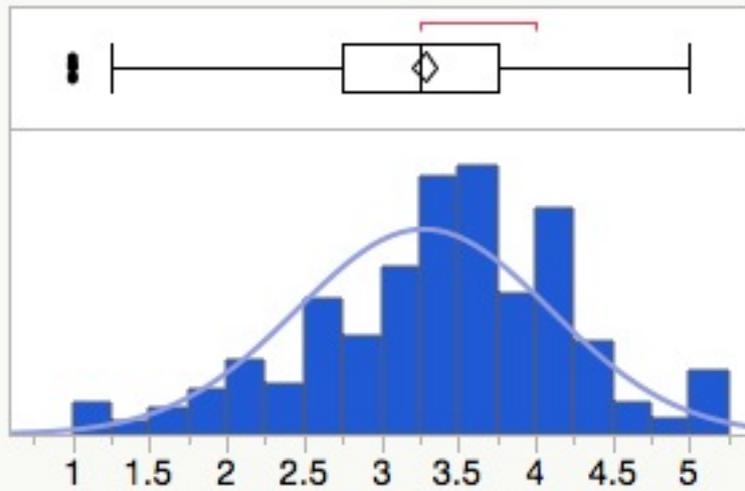
Table G2: Reliability estimates for question 9

Variables	Items	Cronbach α	Reliability
Unisa activities	9.1; 9.2; 9.3; 9.4	0.6942	Acceptable
Outside Unisa activities	9.5; 9.6; 9.7	0.7266	Acceptable

Table G3: Mean and standard deviation for question 9

Variables	Mean	Std dev
Unisa activities	3.28	0.82
Outside Unisa activities	3.52	0.95

Table G4: Distributions: question 9: the means through which pervasive skills have been obtained during university years = Unisa activities



Normal(3.27918,0.82497)

Quantiles

100.0%	maximum	5
99.5%		5
97.5%		5
90.0%		4.25
75.0%	quartile	3.75
50.0%	median	3.25
25.0%	quartile	2.75
10.0%		2
2.5%		1.4875
0.5%		1
0.0%	minimum	1

Summary statistics

Mean	3.2791783
Std dev	0.8249725
Std err mean	0.0436622
Upper 95% mean	3.3650466
Lower 95% mean	3.1933101
N	357
Skewness	-0.408274
Kurtosis	0.2492472

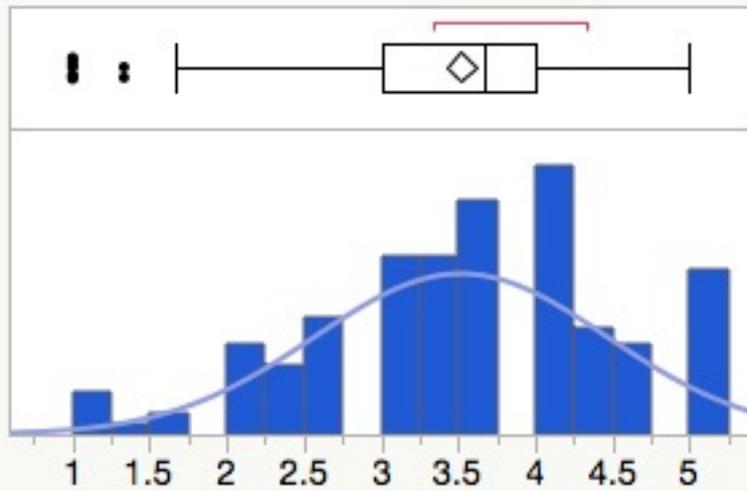
Fitted normal

Parameter estimates

Type	Parameter	Estimate	Lower 95%	Upper 95%
Location	M	3.2791783	3.1933101	3.3650466
Dispersion	Σ	0.8249725	0.768572	0.8903749

-2log(Likelihood) = 874.744766208422

Table G5: Distributions: question 9: the means through which pervasive skills have been obtained during university years = Outside Unisa activities



Normal(3.52089,0.95054)

Quantiles

100.0%	maximum	5
99.5%		5
97.5%		5
90.0%		5
75.0%	quartile	4
50.0%	median	3.6666666667
25.0%	quartile	3
10.0%		2.0666666667
2.5%		1
0.5%		1
0.0%	minimum	1

Summary statistics

Mean	3.5208927
Std dev	0.9505422
Std err mean	0.0507362
Upper 95% mean	3.6206789
Lower 95% mean	3.4211065

N 351
 Skewness -0.469651
 Kurtosis -0.059872

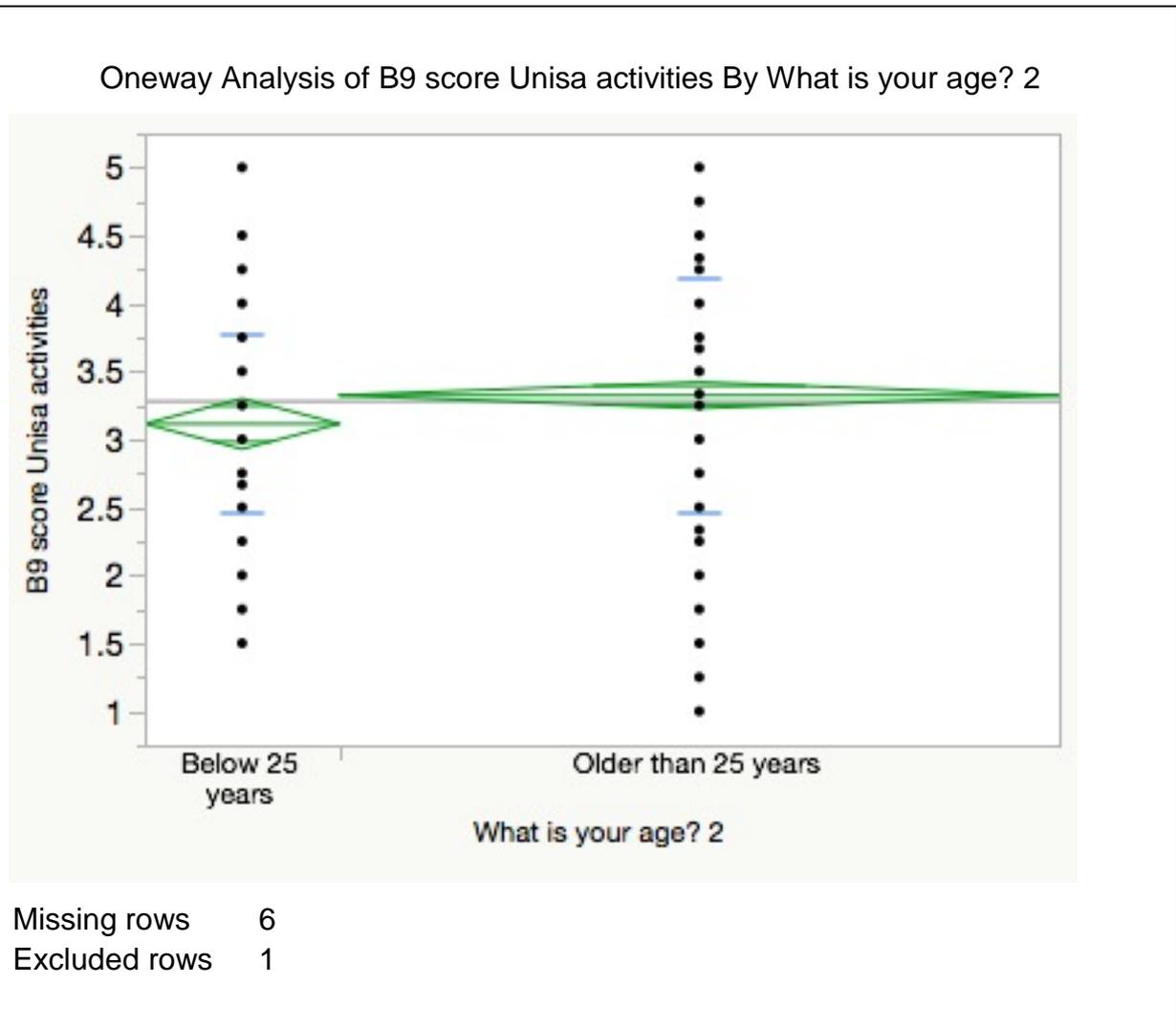
Fitted normal

Parameter estimates

Type	Parameter	Estimate	Lower 95%	Upper 95%
Location	μ	3.5208927	3.4211065	3.6206789
Dispersion	σ	0.9505422	0.8850412	1.0265939

-2log(Likelihood) = 959.48751166903

Table G6: One-way ANOVA to examine whether there is a statistically significant difference between students of different ages in relation to their mean “Unisa activities” scores



One-way Anova

Summary of fit

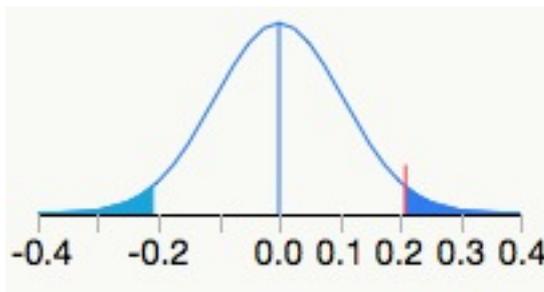
Rsquare	0.010868
Adj Rsquare	0.008082
Root mean square error	0.821632
Mean of Response	3.279178
Observations (or Sum Wgts)	357

t Test

Older than 25 years-Below 25 years

Assuming equal variances

Difference	0.209808	t Ratio	1.975019
Std Err Dif	0.106231	DF	355
Upper CL Dif	0.418730	Prob > t	0.0490*
Lower CL Dif	0.000887	Prob > t	0.0245*
Confidence	0.95	Prob < t	0.9755



Analysis of variance

Anova descriptives

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
What is your age?	1	2.63328	2.63328	3.9007	0.0490*
Error	355	239.65306	0.67508		
C. Total	356	242.28634			

Means for one-way Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Below 25 years	76	3.11404	0.09425	2.9287	3.2994
Older than 25 years	281	3.32384	0.04901	3.2274	3.4202

Std error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis tests (rank sums)

Level	Count	Score sum	Expected Score	Score mean (Mean-Mean0)/Std0	
Below 25 years	76	11443.5	13604.0	150.572	-2.721
Older than 25 years	281	52459.5	50299.0	186.689	2.721

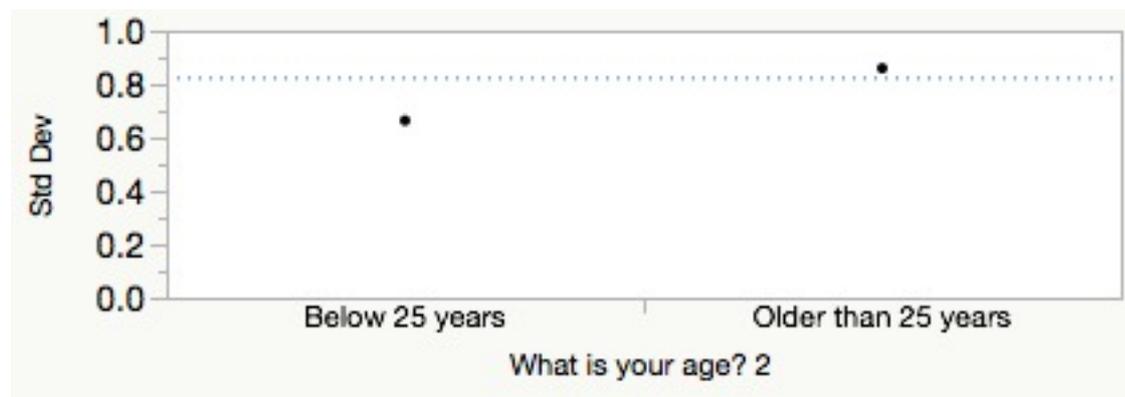
2-sample test, normal approximation

S	Z	Prob> Z
11443.5	-2.72066	0.0065*

1-way test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
7.4054	1	0.0065*

Tests that the variances are equal



Level	Count	Std dev	MeanAbsDif to Mean	MeanAbsDif to Median
Below 25 years	76	0.6633029	0.5121191	0.4978070
Older than 25 years	281	0.8591010	0.6655965	0.6571767

Test	F ratio	DFNum	DFDen	p-Value
O'Brien[.5]	5.0049	1	355	0.0259*
Brown-Forsythe	4.9220	1	355	0.0271*
Levene	5.2527	1	355	0.0225*
Bartlett	7.1032	1	.	0.0077*
F test 2-sided	1.6775	280	75	0.0085*

Welch's test

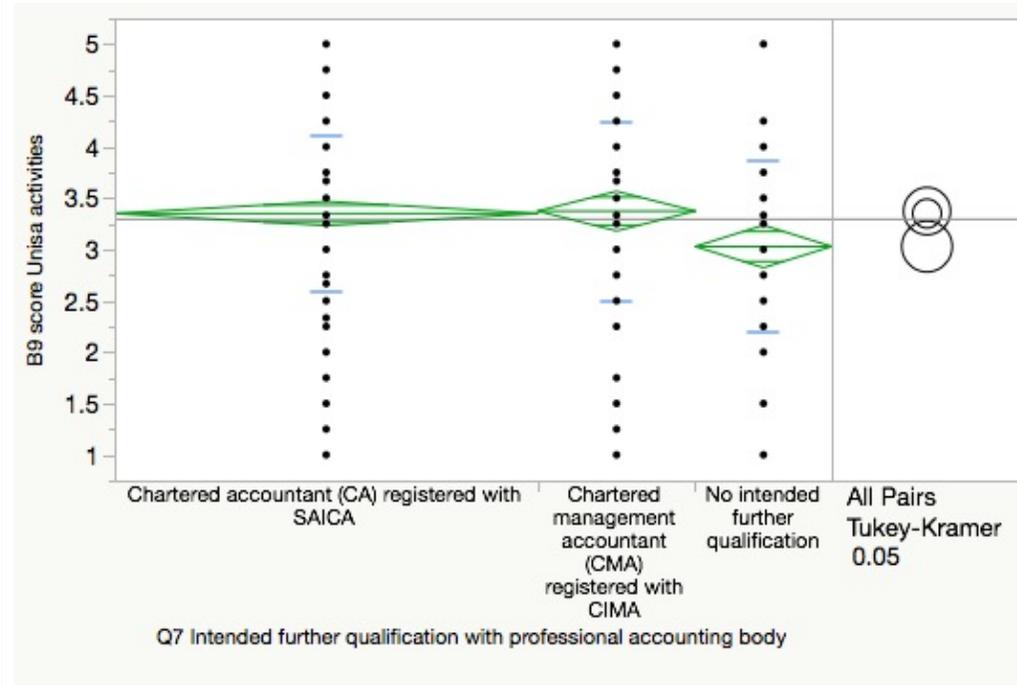
Welch Anova testing means equal, allowing std devs not equal

F Ratio	DFNum	DFDen	Prob > F
5.2307	1	150.21	0.0236*

t Test
2.2871

Table G7: One-way ANOVA to examine whether there is a statistically significant difference between different intended further qualifications with professional accounting bodies in relation to their mean “Unisa activities” scores

One-way analysis of B9 score Unisa activities By Q7 Intended further qualification with professional accounting body



Missing rows 58

Excluded rows 1

One-way Anova

Summary of fit

Rsquare 0.02546

Adj Rsquare	0.019006
Root mean square error	0.800513
Mean of response	3.293716
Observations (or sum wghts)	305

Analysis of variance

Source	DF	Sum of squares	Mean square	F ratio	Prob > F
Q7 Intended further qualification with professional accounting body	2	5.05591	2.52796	3.9449	0.0204*
Error	302	193.52788	0.64082		
C. Total	304	198.58379			

Means for One-way Anova

Level	Number	Mean	Std error	Lower 95%	Upper 95%
CA registered with SAICA	180	3.34954	0.05967	3.2321	3.4670
ACMA, CGMA registered with CIMA	67	3.37313	0.09780	3.1807	3.5656
No intended further qualification	58	3.02874	0.10511	2.8219	3.2356

Std error uses a pooled estimate of error variance

Wilcoxon/Kruskal-Wallis tests (rank sums)

Level	Count	Score sum	Expected score	Score mean	(Mean-Mean0)/Std0
CA registered with SAICA	180	28279.0	27540.0	157.106	0.981
ACMA, CGMA registered with CIMA	67	11036.5	10251.0	164.724	1.238
No intended further qualification	58	7349.50	8874.00	126.716	-2.536

1-way Ttst, ChiSquare Approximation

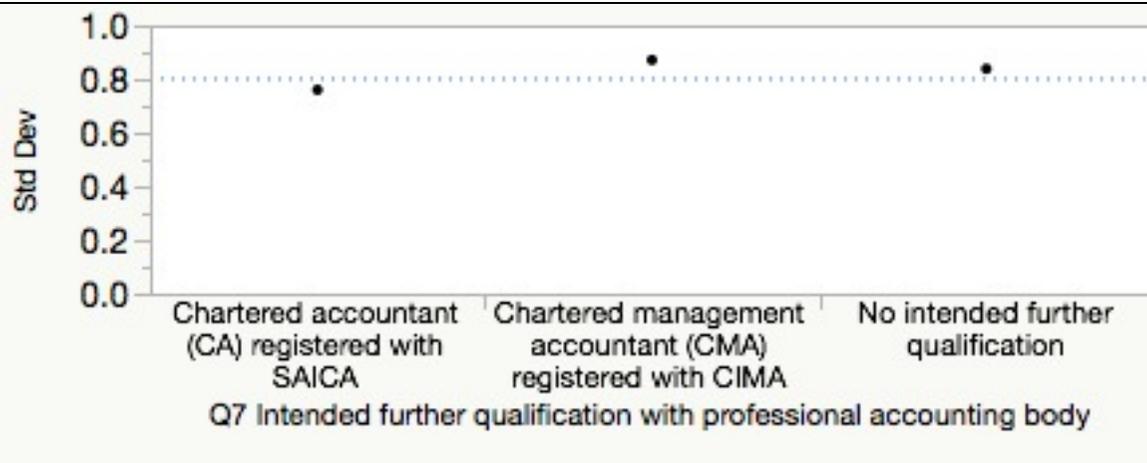
ChiSquare	DF	Prob>ChiSq
6.8032	2	0.0333*

Nonparametric comparisons for all pairs using Steel-Dwass method

q*	Alpha
2.34370	0.05

Level	- Level	Score mean difference	Std err dif	Z	p-value	Hodges-Lehmann	Lower CL	Upper CL
ACMA, CGMA registered with CIMA	CA registered with SAICA	6.5232	10.16387	0.64180	0.7970	0.000000	- 0.250000	0.250000
No intended further qualification	ACMA, CGMA registered with CIMA	-14.9897	6.46414	- 2.31890	0.0532	-0.250000	- 0.750000	0.000000
No intended further qualification	CA registered with SAICA	-24.1078	10.33308	- 2.33307	0.0514	-0.250000	- 0.500000	0.000000

Tests that the variances are equal



Level	Count	Std dev	MeanAbsDif to mean	MeanAbsDif to median
CA registered with SAICA	180	0.7599484	0.5802726	0.5800926
ACMA, CGMA registered with CIMA	67	0.8712773	0.6712705	0.6542289
No intended further qualification	58	0.8382242	0.6895561	0.6666667

Test	F ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.9542	2	302	0.3863
Brown-Forsythe	0.8655	2	302	0.4219
Levene	1.4879	2	302	0.2275
Bartlett	1.0874	2	.	0.3371

Welch's test

Welch Anova testing means equal, allowing std devs not equal

F ratio	DFNum	DFDen	Prob > F
3.6345	2	116.6	0.0294*

Means comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence quantile

q*	Alpha
2.35540	0.05

HSD threshold matrix

Abs(Dif)-HSD

	ACMA, CGMA registered with CIMA	CA registered with SAICA	No intended further qualification
ACMA, CGMA registered with CIMA	-0.32577	-0.24624	0.00623
CA registered with SAICA	-0.24624	-0.19875	0.03611
No intended further qualification	0.00623	0.03611	-0.35013

Positive values show pairs of means that are significantly different.

Connecting letters report

Level		Mean
ACMA, CGMA registered with CIMA	A	3.3731343
CA registered with SAICA	A	3.3495370
No intended further qualification	B	3.0287356

Levels not connected by same letter are significantly different.

Ordered differences report

Level	- Level	Difference	Std err dif	Lower CL	Upper CL	p-value
-------	---------	------------	-------------	----------	----------	---------

ACMA, CGMA registered with CIMA	No intended further qualification	0.3443987	0.1435727	0.006227	0.6825701	0.0448*
CA registered with SAICA	No intended further qualification	0.3208014	0.1208667	0.036112	0.6054909	0.0227*
ACMA, CGMA registered with CIMA	CA registered with SAICA	0.0235973	0.1145627	-0.246244	0.2934384	0.9769

Table G8: Relationship between the perception that training managers have a responsibility towards pervasive skills development of accounting graduates and intended further studies

Q11.3 Count	CA	ACMA,	No intended	Total
Total %	registered	CGMA	further	
Col %	with	registered	qualification	
Row %	SAICA	with CIMA		
Yes	129	51	35	215
	46.74	18.48	12.68	77.90
	79.63	85.00	64.81	
	60.00	23.72	16.28	
No	33	9	19	61
	11.96	3.26	6.88	22.10
	20.37	15.00	35.19	
	54.10	14.75	31.15	
Total	162	60	54	276
	58.70	21.74	19.57	

Tests

N	DF	-LogLike	RSquare (U)
276	2	3.5039395	0.0132

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	7.008	0.0301*
Pearson	7.409	0.0246*

Table G9: Relationship between the perception that employers have a responsibility towards pervasive skills development of accounting graduates and intended further studies

Q11.4 Count	CA	ACMA,	No intended	Total
Total %	registered	CGMA	further	
Col %	with	registered	qualification	
Row %	SAICA	with CIMA		
Yes	113	41	27	181
	41.70	15.13	9.96	66.79
	71.07	69.49	50.94	
	62.43	22.65	14.92	
No	46	18	26	90
	16.97	6.64	9.59	33.21
	28.93	30.51	49.06	
	51.11	20.00	28.89	
Total	159	59	53	271
	58.67	21.77	19.56	

Tests

N	DF	-LogLike	RSquare (U)
271	2	3.6009982	0.0138

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	7.202	0.0273*
Pearson	7.507	0.0234*

Table G10: Relationship between awareness of SAICA’s use of a final case study-based examination and intended further studies

Q12.1 Count	CA	ACMA,	No intended	Total
Total %	registered	CGMA	further	
Col %	with	registered	qualification	
Row %	SAICA	with CIMA		
Yes	115 37.34 63.89 64.61	34 11.04 50.75 19.10	29 9.42 47.54 16.29	178 57.79
No	65 21.10 36.11 50.00	33 10.71 49.25 25.38	32 10.39 52.46 24.62	130 42.21
Total	180 58.44	67 21.75	61 19.81	308

Tests

N	DF	-LogLike	RSquare (U)
308	2	3.3623409	0.0113

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	6.725	0.0347*
Pearson	6.734	0.0345*

Table G11: Relationship between awareness of CIMA’s use of a final case study-based examination and intended further studies

Q12.2 Count	CA	ACMA,	No intended	Total
Total %	registered	CGMA	further	
Col %	with	registered	qualification	
Row %	SAICA	with CIMA		
Yes	73 24.09 41.95 51.05	41 13.53 60.29 28.67	29 9.57 47.54 20.28	143 47.19
No	101 33.33 58.05 63.13	27 8.91 39.71 16.88	32 10.56 52.46 20.00	160 52.81
Total	174 57.43	68 22.44	61 20.13	303

Tests

N	DF	-LogLike	RSquare (U)
303	2	3.3108853	0.0112

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	6.622	0.0365*
Pearson	6.603	0.0368*

Table G12: Relationship between the perceived need for the introduction of a case study-based module in the current accounting syllabus at Unisa and the age of students

Q14.3 Count	Below 25	Older than	Total
Total %	years	25 years	
Col %			
Row %			
Disagree	31 8.68 41.33 38.75	49 13.73 17.38 61.25	80 22.41
Neutral	16 4.48 21.33 18.82	69 19.33 24.47 81.18	85 23.81
Agree	28 7.84 37.33 14.58	164 45.94 58.16 85.42	192 53.78
Total	75 21.01	282 78.99	357

Tests			
N	DF	-LogLike	RSquare (U)
357	2	9.2430593	0.0504

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	18.486	<.0001*
Pearson	20.195	<.0001*

Table G13: Relationship between the perceived need for the introduction of a case study-based module in the current accounting syllabus at Unisa and the gender of students

Q14.3 Count	Male	Female	Total
Total %			
Col %			
Row %			
Disagree	28 7.84 17.61 35.00	52 14.57 26.26 65.00	80 22.41
Neutral	29 8.12 18.24 34.12	56 15.69 28.28 65.88	85 23.81
Agree	102 28.57 64.15 53.13	90 25.21 45.45 46.88	192 53.78
Total	159 44.54	198 55.46	357

Tests

N	DF	-LogLike	RSquare (U)
357	2	6.2602055	0.0255

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	12.520	0.0019*
Pearson	12.414	0.0020*

Table G14: Relationship between the perception that a case study-based module should be compulsory and gender of students

Q14.5 Count	Male	Female	Total
Total %			
Col %			
Row %			
Disagree	37 10.42 23.72 33.64	73 20.56 36.68 66.36	110 30.99
Neutral	42 11.83 26.92 40.00	63 17.75 31.66 60.00	105 29.58
Agree	77 21.69 49.36 55.00	63 17.75 31.66 45.00	140 39.44
Total	156 43.94	199 56.06	355

Tests

N	DF	-LogLike	RSquare (U)
355	2	6.2056208	0.0255

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	12.411	0.0020*
Pearson	12.355	0.0021*

Table G15: Relationship between indicated enrolment for an elective case study-based module and gender of students

Q14.6 Count	Male	Female	Total
Total %			
Col %			
Row %			
Disagree	28 7.91 17.83 37.84	46 12.99 23.35 62.16	74 20.90
Neutral	23 6.50 14.65 26.44	64 18.08 32.49 73.56	87 24.58
Agree	106 29.94 67.52 54.92	87 24.58 44.16 45.08	193 54.52
Total	157 44.35	197 55.65	354

Tests			
N	DF	-LogLike	RSquare (U)
354	2	10.938017	0.0450

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	21.876	<.0001*
Pearson	21.323	<.0001*

Table G16: Relationship between the perception that the myUnisa platform can be successfully used for incorporating case studies into the learning material and the age of students

Q15.1 Count	Below 25	Older than 25	Total
Total %	years	years	
Col %			
Row %			
Yes	56	242	298
	15.86	68.56	84.42
	73.68	87.36	
	18.79	81.21	
No	20	35	55
	5.67	9.92	15.58
	26.32	12.64	
	36.36	63.64	
Total	76	277	353
	21.53	78.47	

Tests			
N	DF	-LogLike	RSquare (U)
353	1	3.8319089	0.0208

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	7.664	0.0056*
Pearson	8.486	0.0036*

Table G17: Relationship between the perceived level for the introduction of case studies into ODL accounting education and gender of students

Q16	Count	Male	Female	Total
	Total %			
	Col %			
	Row %			
First year		51	76	127
		14.21	21.17	35.38
		31.88	38.19	
		40.16	59.84	
Second year		51	72	123
		14.21	20.06	34.26
		31.88	36.18	
		41.46	58.54	
Third year		35	22	57
		9.75	6.13	15.88
		21.88	11.06	
		61.40	38.60	
Postgraduate level		23	29	52
		6.41	8.08	14.48
		14.38	14.57	
		44.23	55.77	
Total		160	199	359
		44.57	55.43	

Tests

N	DF	-LogLike	RSquare (U)
359	3	3.9982067	0.0162

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	7.996	0.0461*
Pearson	8.022	0.0456*

Table G18: Relationship between the perception of whether Unisa adequately prepares its students for the workplace and the gender of students

Q17.3 Count	Male	Female	Total
Total %			
Col %			
Row %			
Disagree	39 10.96 24.68 37.50	65 18.26 32.83 62.50	104 29.21
Neutral	39 10.96 24.68 33.62	77 21.63 38.89 66.38	116 32.58
Agree	80 22.47 50.63 58.82	56 15.73 28.28 41.18	136 38.20
Total	158 44.38	198 55.62	356

Tests			
N	DF	-LogLike	RSquare (U)
356	2	9.5020966	0.0389

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	19.004	<.0001*
Pearson	18.928	<.0001*

Table G19: Relationship between the perception that myUnisa can be used for facilitating case study discussions and age of students

Q17.4 Count	Below 25	Older than 25	Total
Total %	years	years	
Col %			
Row %			
Disagree	13	29	42
	3.62	8.08	11.70
	17.11	10.25	
	30.95	69.05	
Neutral	18	45	63
	5.01	12.53	17.55
	23.68	15.90	
	28.57	71.43	
Agree	45	209	254
	12.53	58.22	70.75
	59.21	73.85	
	17.72	82.28	
Total	76	283	359
	21.17	78.83	

Tests

N	DF	-LogLike	RSquare (U)
359	2	3.0031111	0.0162

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	6.006	0.0496*
Pearson	6.292	0.0430*

Table G20: Relationship between the awareness of an increased pervasive skills focus of professional accounting bodies and gender of students

Q17.6 Count	Male	Female	Total
Total %			
Col %			
Row %			
Disagree	34 9.44 21.12 41.46	48 13.33 24.12 58.54	82 22.78
Neutral	29 8.06 18.01 32.58	60 16.67 30.15 67.42	89 24.72
Agree	98 27.22 60.87 51.85	91 25.28 45.73 48.15	189 52.50
Total	161 44.72	199 55.28	360

Tests

N	DF	-LogLike	RSquare (U)
360	2	4.8350746	0.0195

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	9.670	0.0079*
Pearson	9.542	0.0085*

Table G21: Relationship between the awareness of an increased pervasive skills focus of professional accounting bodies and intended studies towards membership of professional accounting bodies

Q17.6 Count	CA	ACMA, CGMA	No intended	Total
Total %	registered	registered with	further	
Col %	with SAICA	CIMA	qualification	
Row %				
Disagree	41 13.27 22.65 58.57	13 4.21 19.12 18.57	16 5.18 26.67 22.86	70 22.65
Neutral	33 10.68 18.23 45.21	19 6.15 27.94 26.03	21 6.80 35.00 28.77	73 23.62
Agree	107 34.63 59.12 64.46	36 11.65 52.94 21.69	23 7.44 38.33 13.86	166 53.72
Total	181 58.58	68 22.01	60 19.42	309

Tests

N	DF	-LogLike	RSquare (U)
309	4	5.2411265	0.0176

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	10.482	0.0330*
Pearson	10.485	0.0330*

Table G22: Relationship between the perception of the fairness of assessing pervasive skills competency via case study-based examinations and being either a full-time or part-time student

Q17.7 Count	Full-time student	Part-time student	Total
Total %			
Col %			
Row %			
Disagree	20 5.59 36.36 27.40	53 14.80 17.49 72.60	73 20.39
Neutral	18 5.03 32.73 16.82	89 24.86 29.37 83.18	107 29.89
Agree	17 4.75 30.91 9.55	161 44.97 53.14 90.45	178 49.72
Total	55 15.36	303 84.64	358

Tests

N	DF	-LogLike	RSquare (U)
358	2	6.1389225	0.0400

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	12.278	0.0022*
Pearson	12.931	0.0016*

Table G23: Relationship between the perception of fairness of assessing pervasive skills competency via case study-based examinations and the gender of students

Q17.7 Count	Male	Female	Total
Total %			
Col %			
Row %			
Disagree	27 7.52 16.77 36.99	46 12.81 23.23 63.01	73 20.33
Neutral	36 10.03 22.36 33.64	71 19.78 35.86 66.36	107 29.81
Agree	98 27.30 60.87 54.75	81 22.56 40.91 45.25	179 49.86
Total	161 44.85	198 55.15	359

Tests

N	DF	-LogLike	RSquare (U)
359	2	7.2307260	0.0293

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	14.461	0.0007*
Pearson	14.347	0.0008*

Table G24: Relationship between the perception that ethical and moral values can be further enhanced by case studies and intended further qualification with professional accounting body

18.4	Count	Chartered accountant (CA) registered with SAICA	Chartered management accountant (CMA) registered with CIMA	No intended further qualification	Total
	Total %				
	Col %				
	Row %				
Disagree	2	3	6	11	
	0.64	0.96	1.93	3.54	
	1.10	4.35	9.84		
	18.18	27.27	54.55		
Neutral	22	8	10	40	
	7.07	2.57	3.22	12.86	
	12.15	11.59	16.39		
	55.00	20.00	25.00		
Agree	157	58	45	260	
	50.48	18.65	14.47	83.60	
	86.74	84.06	73.77		
	60.38	22.31	17.31		
Total	181	69	61	311	
	58.20	22.19	19.61		

Tests

N	DF	-LogLike	RSquare (U)
311	4	5.2548316	0.0174

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	10.510	0.0327*
Pearson	11.666	0.0200*

Warning: 20% of cells have expected count less than 5, ChiSquare suspect.

Table G25: Relationship between the perception that time management skills can be further enhanced by case studies and intended further qualification with professional accounting body

18.8	Count Total % Col % Row %	Chartered accountant (CA) registered with SAICA	Chartered management accountant (CMA) registered with CIMA	No intended further qualification	Total
Disagree	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	3 0.97 4.92 100.00	3 0.97
Neutral	17 5.50 9.50 58.62	8 2.59 11.59 27.59	4 1.29 6.56 13.79	29 9.39	
Agree	162 52.43 90.50 58.48	61 19.74 88.41 22.02	54 17.48 88.52 19.49	277 89.64	
Total	179 57.93	69 22.33	61 19.74	309	

Tests

N	DF	-LogLike	RSquare (U)
309	4	5.3436997	0.0178

Test	ChiSquare	Prob>ChiSq
Likelihood ratio	10.687	0.0303*
Pearson	13.113	0.0107*

Warning: 20% of cells have expected count less than 5, ChiSquare suspect