UNIVERSITY OF KWAZULU-NATAL

Professional skepticism and its effect on the professional judgment of trainee accountants from the Durban and Midlands regions of KwaZulu-Natal.

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Graduate School of Business & Leadership
College of Law and Management Studies

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Declaration

I Favourite Mhlongo declare that:

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Signature____________________________________  Date: ____________________
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  “O Lord, You are my God. I will praise You. I will give thanks to Your name. For You have been faithful to do great things, plans that You made long ago”
  
  – Isaiah 25:1

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ABSTRACT

Auditors are expected to exercise appropriate levels of professional scepticism when conducting audits in order to identify and evaluate circumstances that may cause suspicion about evidence obtained. Demonstrating professional scepticism will differ from auditor to auditor depending on a situation at hand and include amongst other things, a critical assessment of audit evidence, devoting special attention to inconsistencies and performing validations on evidence collected. There is no consensus amongst the stakeholders in the profession about how auditors develop professional scepticism and how it affects professional judgment. Different views are also held by about the nature of professional scepticism, whether it is a skill, state, a mindset or a trait as that is likely to affect how it may be developed or acquired. The study aimed to determine if education and training, professional experience and culture are factors that influence the development of professional scepticism by trainee accountants. The study also sought to investigate whether the professional scepticism level of trainee accountants affects their professional judgment. A quantitative study with a sample size of 200 trainee accountants serving SAICA TIPP articles was conducted. A stratified random sampling method was applied in determining the sample and 73 trainee accountants responded to the survey. An online questionnaire was administered to collect the research data. A completion rate of 67% and a response rate of 37% were obtained. The findings indicated that training and education and professional experience have an influence on the professional scepticism of trainee accountants. The findings also revealed that professional scepticism affects the professional judgment of trainee accountants. The results did not suggest that culture influences professional scepticism. It is recommended that Regulators facilitate dialogue with the stakeholders on the issue, included amongst the stakeholders should be academics in this discipline as they lay the foundation for a career in auditing in accounting graduates. It is also recommended that the SAICA Competency Framework include professional scepticism as one of the exit-level competencies after a training period. Academics are encouraged to work closely with audit firms and SAICA in curriculum development initiatives in order to ensure that curricula respond to requirements of the profession with regards to professional scepticism. The study was limited to two regions in KwaZulu-Natal, the Durban and Midlands regions. The study excluded trainee accountants in the TOPP training programme.
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**TERMINOLOGY**

**Audit procedure:** Specific acts performed as the auditor gathers evidence to determine if specific audit assertions are being met.

**Assertion:** Representations by management, explicit or otherwise, that are embodied in the financial statements, as used by the auditor to consider the different types of potential misstatements that may occur.

**Financial statements:** A structural representation of historical financial information, including related notes, intended to communicate an entity’s economic resources or obligations at a point in time or the changes therein for a period of time in accordance with a financial reporting framework.

**Professional scepticism:** An attitude that includes a questioning mind, being alert to conditions which may indicate possible misstatement due to errors or fraud, and a critical assessment of audit evidence.

**TIPP:** Training Inside Public Practice

**TOPP:** Training Outside Public Practice

**Fraud:** Intentional misstatement that can be classified as fraudulent financial reporting and misappropriation of assets
**Professional judgment:** The application of relevant training, knowledge and experience within the context provided by auditing, accounting and ethical standards, in making informed decisions about courses of action that are appropriate in the circumstances of the audit engagement.

**Risk assessment:** The identification, analysis and management of risks relevant to the preparation of financial statements that are fairly presented in accordance with the applicable financial reporting framework.

**Materiality:** Misstatements, including omissions, that individually or in aggregate, could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

**Source:** Crous, C. et. al. (2012)
CHAPTER ONE

INTRODUCTION

1.1 Introduction

Users of financial statements rely on audited financial statements when making economic decisions. The auditing exercise enhances the credibility of financial statements and provides confidence thereon. The main objective of auditors is to conduct audits in terms of the International Standards on Auditing (ISAs) with the view of testing for fair presentation. Achieving fair presentation implies that the financial statements are free of material misstatements. Auditors aim to gather audit evidence in order test the assertions of management which are embodied in the financial statements in terms of ISA 500. ISA 500 provides guidance to auditors on how to obtain sufficient and appropriate audit evidence in order to reach conclusions about the fair presentation of financial statements and to report their audit opinion in an audit report. The sufficiency of the audit evidence relates its quantity whereas its appropriateness relates to its reliability and relevance in terms of proving assertions.

Auditing is a discipline that requires professional judgment. All audit decisions involve the application of considerable judgment. Professional judgment should be exercised by all auditors when evaluating audit evidence gathered in relation to an audit. Some researchers have claimed that the auditors’ professional judgment is affected by the level of professional scepticism exercised. Prior research has also indicated that there is no single definition of professional scepticism. Professional scepticism is defined by ISA 200 as “an attitude that includes a questioning mind, being alert to conditions which may indicate possible misstatement due to fraud and a critical assessment of audit evidence”. Hurtt (2010:151) states that professional scepticism is “a multi-dimensional construct that characterizes the propensity of an individual to defer concluding until the evidence provides sufficient support for one alternative/explanation over others”. Nelson (2009:1) adopts the presumptive doubt view and defines professional scepticism as “indicated by auditor judgments and
decisions that reflect a heightened assessment of the risk that an assertion is incorrect, conditional on the information available to the auditor”. Some researchers, however, believe that the concept of professional scepticism is not explained with precision which may cause possible confusion to auditors (Nickell 2012:3)

Current literature on the subject suggests that audit failures are caused by inappropriate levels of professional scepticism exercised by auditors. There is no general consensus at this particular stage amongst researchers about how auditors acquire or develop acceptable levels of professional scepticism and how the level of professional scepticism affects audit judgment and sceptical behaviour. The research aimed to investigate factors that impact on the acquisition of professional scepticism by trainee accountants. The three factors investigated were: education and training, professional experience and culture.

### 1.2 Motivation for the study

Reading cases on audit failure that indicated inappropriate professional scepticism exercised by auditors as one of the major contributors to such failure identified an area worth researching as audit failures lead to loss of public confidence of the profession. The researcher pondered on two issues, whether scepticism could be taught to accounting students who eventually enter into training contracts as trainee accountants or whether it may only be acquired through work experience in the auditing field. In trying to predict possible solutions, the researcher reflected on the role of culture on professional scepticism as it had been highlighted in some research studies. The researcher debated the possibility that professional scepticism can be learned and questioned the role that may be played by academics in the auditing discipline in teaching prospective auditors to a point where they achieve acceptable levels of professional scepticism for novice auditors or if this was impossible to achieve. The other possibility was that professional scepticism was only developed during practical experience, as trainee accountants serve their articles. The influence of professional scepticism on professional judgment was also questioned by the researcher, in all the considerations, the influence of culture could not be ignored by the researcher. This research project was then developed with a
view of obtaining understanding on whether education/training, professional experience and culture could influence the development or enhancement of professional scepticism of trainee accountants in a South African context.

**Benefits that may be derived from the study**

The research investigated a subject area that has been indicated by prior research studies as an area of challenge. There is a knowledge gap in terms of research studies into the subject of professional scepticism and judgment at an early stage of an auditing career, most research studies have been conducted on chartered accountants and registered auditors, not trainee accountants. The contribution made by trainee accountants in audit assignments is significant. No similar studies on the subject have been conducted in a South African context.

The study will make an incremental contribution to existing literature on the factors that influence professional scepticism and on its effect on professional judgment. A contribution will be made to the debate currently taking place and the study sought to provide answers to the research problem. The following stakeholders were expected to benefit from the research findings:

Regulators and Standard-Setters

The standard-setters will find the results of the study beneficial when revising International Standards on Auditing (ISAs) as currently the ISAs lack practical guidance on matters relating to professional scepticism and do not indicate a firm stance on whether professional scepticism is a skill, a trait, a mindset or mood state. The research findings could be considered when revising the SAICA Training Regulations to include the responsibilities of the Training Officers with regards to the development of trainee accountant’s professional scepticism and could be considered when revising the South African Institute of Chartered Accountants (SAICA) Competency Framework that stipulates entry-level requirements for becoming a SAICA member.
Employers: Audit Firms

Audit firms, are expected to benefit in terms of identifying and responding to training needs of trainee accountants. The recommendations of the study may be used when developing policies and procedures aimed at providing guidance to trainee accountants on issues relating to professional scepticism and worth to consider when assembling engagement teams, in terms of ensuring that teams are composed of trainee accountants with varying degrees of professional scepticism. The audit firms may consider the results of the study to plan and review their participation in the development of curricula offered at Higher Education Institutions as a joint effort involving the SAICA, Academics and representative of the various audit firms.

Human Resource Departments of Audit Firms

The results of the study will be of benefit to the Human Resource Departments of the various firms when attracting trainee accountants. The results could be considered when screening applicants on the basis of their scepticism through psychometric tests, interviews or case-study based entrance assessments.

Academics in the Accounting & Auditing discipline

The results of the study is expected to be of interest to academics in the accounting and auditing fields in terms of ensuring through curriculum development that auditing syllabi taught at Higher Education level address the necessary skills, knowledge and competencies required of prospective auditors.

Trainee Accountants

The findings of the research could be of interest to trainee accountants, in terms of their professional development. The trainee accountants may use the results of the
study to explore strategies that they may be apply when intending to enhance their scepticism.

1.3 Focus of the study

The research was conducted in the Durban and Midlands regions of KwaZulu-Natal where there are SAICA Accredited Training Offices (Accounting firms) that offer the two types of training, Training Inside Public Practice (TIPP) and Training Outside Public Practice (TOPP). The research focused on trainee accountants that were currently undergoing the SAICA accredited training (serving articles) in TIPP based training offices in 2015. There are 45 TIPP training offices in the Durban region and 13 TIPP training offices in the Midlands region. Each of the training offices offers training to trainee accountants according to the SAICA Training Regulations 2015. The SAICA regulates the training of trainee accountants and serves the interest of chartered accountants in South Africa. The study did not include trainee accountants in TOPP training contracts and those serving TIPP articles in other regions of KwaZulu-Natal. Trainee accountants in TOPP training contracts were excluded because the study was aimed at trainees with exposure to different audit settings as opposed to just one.

1.3.1 Trainee Accountants

Trainee accountants are also referred to as ‘trainee auditors’. Trainee accountants are individuals who are in possession of a degree qualification with specialisation in the four major subjects: Financial Accounting, Management Accounting, Taxation and Auditing. Auditing firms recruit trainee accountants to enter into a three-year training contract, provided that a trainee is in possession of an Honours Bachelor of Commerce (CTA) degree or equivalent and could be longer, depending on the entry qualifications and non-relevant degree, the training period is 4 years. If a trainee enters a training contract with a Matriculation Certificate or equivalent, the training period is 5 years for trainees with non-accredited Bachelor of Commerce and Bachelor of Technology Degrees. It is expected of trainee accountants to write a
two-part Qualifying Exam (QE) in order to qualify as Chartered Accountants. The training contract of trainee accountants is regulated by the South African Institute of Chartered Accountants (SAICA). The SAICA may cancel a trainee accountant’s contract if he/she is found guilty of unprofessional conduct or if the trainee has contravened the Regulations and SAICA By-laws.

1.4 Problem statement

Current literature suggests that most audit failures are caused by inappropriate levels of professional scepticism exercised by auditors. Various interventions and suggestions have been made through previous research studies in an attempt to provide solutions but the challenge still exists. There is no general consensus at this particular stage amongst researchers about how auditors acquire or develop acceptable levels of professional scepticism and on whether the level of professional scepticism affects professional judgment and sceptical behaviour. This challenge is complicated by the fact that there is lack of common understanding about the nature of the professional scepticism, whether it is a skill, a mindset, a trait or a state. A single definition of ‘professional scepticism’ as a result is not adopted by the various stakeholders in the profession, including regulators, standard-setters, audit firms, shareholders, the public, audit professionals and academics. Based on the above factors, there is a need for solutions to be found to address the challenge.

1.5 Research questions

1. Does the nature of education and training provided to trainee accountants at Higher Education affect their professional scepticism levels?

2. Does the professional experience of trainee accountants obtained through serving TIPP articles affect their professional scepticism levels?

3. Does culture impact on the professional scepticism levels of trainee accountants?

4. Does the level of professional scepticism of trainee accountants affect their
professional judgment?

1.6 Research objectives

1. Determine if education and training provided to trainee accountants at Higher Education affect their level of professional scepticism.
2. Investigate whether the professional experience of trainee accountants, obtained through serving TIPP articles affect their level of professional scepticism.
3. Determine if culture has an impact on the professional scepticism of trainee accountants.
4. Investigate if professional scepticism levels of trainee accountants affect their professional judgment.

1.7 Research approach/ methods

The researcher adopted a quantitative approach to conduct the study. The study was non-experimental; no intervention was introduced by the researcher. The purpose of the research is Descriptive, as the researcher hopes to describe and to explain the relationship between the variables being studied.

The paradigm that was adopted by the researcher is Positivism. According to du Plooy-Cilliers, Davis & Bezuidenhout (2014), adopting a paradigm assists the researcher in deciding what is worth investigating for its perceived importance and also assists the researcher in deciding on the best process to undertake the research.

The research population was made up of all trainee accountants currently serving training articles in 2015 in the 58 accredited training offices, registered with the South African Institute of Chartered Accountants (SAICA) in the Durban and Midlands regions currently offering TIPP (Training Inside Public Practice) contracts.
Trainee accountants in TOPP (Training Outside Public Practice) contracts were excluded from the study.

Probability sampling was chosen with a view of ensuring that each participant within the population had an equal chance to be selected as part of the sample. The type of sampling method used was Multi-stage cluster sampling; this method was selected because the population size is high and widespread.

Data was analyzed and synthesized following a quantitative approach through descriptive analysis using the QuestionPro software because of the speed and efficiency of computerized processing as opposed to manual analysis.

1.8 Limitations of the study

There were various limitations to this study. The study focused on a sample drawn from one out of nine provinces, KwaZulu-Natal and was further narrowed to two regions, the Durban and Midlands regions. The location of the study was selected based on the fact that it was within close proximity to the researcher’s location. All other trainee accountants currently serving training articles in other areas within South Africa were not included in the study. The study also excluded trainee accountants in the TOPP training programme.

A distinction was also not made in relation to the different experience levels of trainee accountants when data analysis was performed. The results obtained could have been affected by the different professional experience levels of trainee accountants. The use of an online survey tool, QuestionPro could have excluded trainees who had no internet access at the time data was collected from participating. Time was another limitation, research participants did not respond immediately to the online survey, this was as a result of the timing of the data collection as it coincided with a busy work period as audits were being finalised, time pressure to complete audit assignments lowered the response rate and time taken to respond to the survey. The sending of the online survey link and the two subsequent
reminders indirectly to the trainee accountants also delayed responses. Most Human Resource Departments of the various audit firms, preferred, for confidentiality purposes, that the online survey link be sent to their email addresses (HR) and they then forwarded to the research participants on a random basis according to the number of requested participants provided by the researcher. A completion rate of 67%, and a response rate of 37% were achieved in the study. A bigger sample size would have been favourable in terms of the generalisability of the results.

1.9 Ethical consideration

It is of utmost importance for a researcher to consider ethics in the manner in which the research is undertaken. The researcher believes strongly in ethical values and morals and this was evident in the manner in which the research was undertaken. It was necessary to protect the rights and identities of participants throughout the research, especially in the data collection and analysis stage. Without ethical consideration, the researcher runs the risk of unintentionally harming hi/her research participants, being embarrassed or even ruining their reputations and generating public disapproval (Royse, 2003). The objective and purpose of the study were communicated to all the participants so that they may choose whether or not to be involved in the research. All the participants were free to withdraw from the research at any time without any negative consequences.

All research participants as well their respective identities remained anonymous throughout the research. All participants were informed of the confidentiality of their identity and responses. The responses of participants were treated with the strictest care. The researcher informed all research participants about how the results of the research were to be used. Truthfulness and respect was be maintained in all the research stages. The research did not involve minors and abused women. The researcher refrained from using offensive language in the data collection instrument and in all other correspondence with the participants. All participants participated at their free will and all provided their consent online by agreeing to the terms of the research, which served as proof of their consent. All research participants were
informed that they may withdraw their participation in the research at anytime without prejudice. A Gatekeepers’ letters was sought and obtained from the South African Institute of Chartered Accountants (SAICA) as regulators of trainee accountants and their training programmes. The researcher was fully aware that they were accountable for the information and as a result data gathered from trainee accountants was treated with the strictest care, secured and presented. The researcher had no conflict of interest. There was no intention to bring harm, risk or any negative consequences to research participants as a result of their participation in the research study.

1.10 Structure of the thesis

Chapter One provides a background, objectives and methodology applied in the study.

Chapter Two provided a review of literature studied. The focus of the review was to examine the current body of knowledge applicable to the study.

Chapter Three provides a description of the research methodology applied in the research study. The data collection, data analysis methodologies are provided. Ethical principles applied in the study are also indicated in this chapter.

Chapter Four presents the results obtained in the research study from the research participants.

Chapter Five provides a discussion of the findings presented in Chapter Four. These results are analysed and compared with the findings indicated in other studies on the subject.
Chapter Six summarises the research study and provides recommendations on how the research problem could be solved by various stakeholders that may have interest on the subject.

1.11 Summary

This chapter provided an introduction to the research study and also indicated the background, context and limitations of the study. The following chapter will provide the literature review pertinent to the study.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This literature review chapter will provide the necessary theoretical background relevant to the research topic. The literature is based on secondary sources in the form of published works of scholars that have been reviewed and contextualised. The literature answers the research questions and help to achieve the objectives of the study.

2.2 The need for audits

Users of financial statements rely on audited financial statements when making economic decisions. The auditing exercise enhances the credibility of and provides confidence about the financial statements. The overall objective of auditors is conduct audits in terms of the International Standards on Auditing (ISAs) with the view of testing for fair presentation. Fair presentation indicates that the financial statements are free of material misstatements whether due to fraud or error. Auditors gather evidence in order test the assertions of management embodied in the financial statements.

The auditing discipline developed in response to the needs of society (Duits, 2012). Management should be held accountable for the manner in which they manage businesses and for the manner in which they utilise funds invested in the entity. This need for accountability by directors creates a need for the audit profession to independently assess whether the directors (management) are meeting their obligations. Audits are also designed to reduce risk in terms of financial information prepared by organisations. This risk is termed information risk. Information risk is
the risk that users of financial statements may base their financial decisions on incorrect information.

ISA 500 states that auditors should obtain sufficient and appropriate audit evidence in order to reach a conclusion about the fair presentation of financial statements which must then be reported via their audit opinion. The sufficiency of audit evidence relates to the quantity of evidence gathered and the appropriateness thereof relates to its’ reliability and relevance. Audit services are critical in ensuring that capital markets are protected through audited financial statements and are important in reducing the risk of errors and fraud in financial statements. The audit profession has evolved from a routine checking of financial records to virtually part of the governance process of companies as a result of a constant increase in the complexity and number of legislations, regulations and standards governing companies (Accountancy SA, 2009). The audit profession “should be proud of the positive contribution it continues to make in a complex, challenging and ever critical world” Nelson (2010:1). It is suggested that the profession develops approaches to audits of larger entities and such approaches should pay attention to the needs of a wider variety of stakeholders than just investors and should meet market demands (ACCA, 2010).
The need for auditing (as indicated in Figure 2.1) is discussed in the auditing theory and provides a framework for understanding the relationship between parties to the audit process. The audit theories include the policeman theory, the lending credibility theory, and the theory of inspired confidence, the agency theory, the quasi-judicial theory and moderator of claimant's theory. The need for audits has evolved over time, from the policeman theory, which focused mainly on the arithmetic accuracy of financial information and fraud detection to the verification of truth and fairness (Duits, 2012).

The agency theory is widely used in past research studies in relation to the need for
audits and is based on the principle that the principal delegates its authority to the agent. The agent, bearing in mind the interest of the principal must serve the principal. The principal does not have access to all available information at the same time; the agent is exercising judgment on its behalf. The principal has to be convinced that the agent is acting in the best interest of the entity. In order to ensure that the interest of the principal is served and to avoid irregular activities by the agent, the principal provides incentives to the agent, these costs are unavoidable in the principal-agent relationship (Duits, 2012). The theory of inspired confidence emphasises that auditors must perform their functions in a manner that does not betray the expectation of a ‘rational’ outsider but on the other hand, they are discouraged from arousing greater expectation than their audits may justify (Duits, 2012)

2.3 The role of the Regulators of the auditing profession

There are different professional bodies and standard-setters that play a role in the regulation and in the setting of standards applicable for the profession. These include the IAASB, IFAC, and the SAICA. The IAASB is responsible for the setting of auditing standards and standards for related services offered in the auditing profession, it is also responsible for the facilitating convergence of national and international standards. The IFAC has its role centred on serving public interest by facilitating the adoption, development and implementation of International Auditing Standards; it also seeks to contribute to the development of high-quality accounting practices. SAICA, a leading professional body in South Africa is responsible for the registration and management of trainee accountants’ training contracts.

2.4 Nature of auditing

Auditing is a discipline that requires professional judgment. Professional judgment should be exercised by all auditors when evaluating audit evidence obtained in relation to an audit. ISA 200 states that one of the objectives of an auditor is “to obtain reasonable assurance about whether the financial statements as a whole are free of material misstatement, whether due to fraud or error, thereby enabling the
auditor to express an opinion on whether the financial statements are prepared in all material respects, in accordance with an applicable financial reporting framework” (IFAC: 3). It further indicates that an auditor is required to exercise professional judgement and maintain professional scepticism throughout the planning and performance of the audit.

2.5 Types of services offered in the audit profession

There are various types of services that are offered by the auditing profession. Such services could be assurance or non-assurance engagements. An assurance engagement is an engagement whereby an auditor declares his/her opinion at the end of the assignment. A non-assurance engagement on the other hand is an engagement where an opinion is not issued at the end of the engagement. Audits and reviews are assurance engagements. Non-assurance engagements include agreed-upon procedures, advisory services and compilations and are also referred to as Non-Audit Services (NAS). Auditors can undertake statutory engagements as well as non-statutory engagements. Statutory engagements are conducted because of a legal requirement e.g. requirements of the Companies Act 2008. Non-statutory engagements are those that are conducted because of other obligations and requirements and are usually at the request of a client or other stakeholders.

2.6 The need for trainee accountants with relevant skills and knowledge

Many young South Africans aspire to become chartered accountants as this profession offers decent remuneration; it enjoys a good reputation and offers mobility and skills that are applicable in virtually every corporate sector. Attracting and recruiting successful trainee accountants is a task that requires careful planning and execution as the most valuable asset in any organisation is its human capital. Audit firms in South Africa are experiencing the same global challenge as many other firms in other countries that of significant shortages of trainee accountants (Accountancy SA, 2009). The statistics from FASSET (2014) indicates the shortage in Table 2.1. The shortage of trainee accountants has led to competition amongst the audit firms
to attract and retain trainee accountants with the expected level of competence, values and skills.

Higher Education institutions are producing accounting graduates for this profession but still a challenge persists. Table 2.2 indicates the number of undergraduate and post-graduate qualifications produced by Higher Education in South Africa (FASSET, 2014:46). Careful consideration should be made when selecting accounting graduates into the profession as such may affect the productivity of the audit firm. Strbac & Roodt (2005) state that recruiters need to identify and recruit graduates who demonstrate similar characteristics as those who are performing successfully in the firm already; ideally, the psychological profile of graduate applicants should match the demands of the position being applied for. Careful selection favours both parties, for the applicant, it leads to better job performance because the fit is just right, for the employer, it may reduce staff turnover. A study conducted in 1997 by Harvey-Cook suggested that the academic performance of accounting graduates and their verbal ability should be considered when selecting and recruitment is undertaken (Strbac & Roodt, 2005).

Trainee accountants that are required in the accounting and auditing profession are the ones’ possessing the necessary skills, competencies and ethical values. Skills and competencies including communication skills, interpersonal skills, and information technology skills are crucial in this particular field. Students should start developing the skills and competencies required in this profession as early as possible before professional experience begins. A study conducted by Strbac & Roodt (2005) concluded that numerical ability, academic achievement and language competency affected the performance of a trainee on the job whereas previous studies had indicated innovation, self-confidence, perseverance and integrity as important factors. According to the SAICA Training Programme Prescribed Competencies (2012), such skills are necessary for trainee accountants to obtain by the end of their three-year training contracts with approved training providers.
The personality traits of trainee accountants are also worth reviewing as they may affect their behaviour and judgment. Holland (1973) defines a personality type as a product of an interaction between a variety of cultural and personal forces such as peers, social class, culture, parents and the physical environment. Professional values and ethics are also important to consider when recruiting trainee accountants. Candidates who display professionalism and maturity indicated by Collins (1987) are preferred candidates by accounting firms. “Targeted recruitment efforts are made to attract individuals with qualities that all auditors should display, including determination, self-confidence, intellectual curiosity. Scepticism along with ethics and professional judgment are considered important qualities in people studying towards being a chartered accountant” Murray (2012:37). Aspiring accounting graduates must be aware of the professional responsibilities they have to society as early as possible in their professional development. In a study conducted by Byrne and Willis (2005), it was concluded that students preferred careers that are granted a high status by society, this is the same reason that auditing firms should attract and retain high quality trainee accountants so that the reputation associated with the profession is not put in jeopardy.

Table 2.1. Scarc skills in FASSET’s Sector: 2014
### Table 2.2. NQF Levels 6 and 7 (Accounting): Qualifications awarded by public higher institutions

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<tr>
<td>Total</td>
<td>8,754</td>
<td>74,232</td>
<td>8,402</td>
<td>9,256</td>
<td>9,268</td>
<td>9,677</td>
<td>10,044</td>
<td>10,046</td>
<td>10,449</td>
<td>10,714</td>
<td>2,170</td>
</tr>
<tr>
<td><em>Average annual growth:</em></td>
<td>4.9%</td>
<td>3.2%</td>
<td>5.98%</td>
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</table>

*Source: Department of Higher Education and Training (HEWS) 2003 to 2013.*

2.7 The IFAC Conceptual Framework

SAICA is an accounting professional body in South Africa that serves the interest of its members, whether in public practice or not, it's registered with the International Federation of Accountants (IFAC). The IFAC is an organisation that comprises of 167 members and has associates in 127 countries. Its mission is to serve the interest of the public by re-enforcing the accounting profession throughout the world (IFAC, 2012). IAASB – The International Auditing and Assurance Standards Board is the board that is responsible for the development of auditing and assurance standards, this board also provides guidance to all professional accountants together with the Public Interest Oversight Board that oversees the functions of the IAASB. It is an objective of the IAASB to protect the interest of the public by setting high-quality auditing, assurance as well as other related standards with the view of achieving consistency and high audit quality achievement. This board also seeks to promote and protect public confidence of the auditing profession. The IFAC revised its Code of Ethics in 2012; which is structured in a manner that establishes moral obligations or responsibilities in its members. It is noted that not all countries that belong to the IFAC have adopted the Code of Ethics, and in other countries, it not adopted in the same way.

2.8 Fundamental Principles

The SAICA Code of Professional Conduct (the Code) provides guidance to chartered accountants as to how they can ensure that they comply with the fundamental principles. Trainee accountants who in a formalised training contract with a SAICA Training Provider, are also bound by the Code. Breach of the Code is regarded as improper conduct and is a punishable offence. There are five fundamental principles that trainee accountants and registered auditors have to comply with according to the SAICA Code of Professional Conduct. These fundamental principles are: integrity, confidentiality, professional behaviour, objectivity and professional competence and due care (Jackson & Stent, 2012). The responsibility for due care implies that auditors should exercise appropriate levels of professional scepticism when undertaking audit work. Professional scepticism is essentially the due care that auditors need to exercise when undertaking audit work (Curtis, 2014).
Accountants and auditors are also, according to the SAICA Conceptual Framework supposed to identify possible threats that may pose challenges in terms of compliance with the fundamental principles and if such exist, evaluate the significance of the threat and thereafter apply appropriate safeguards. The threats could be self-interest, self-review, familiarity, advocacy and intimidation. A self-interest threat exists when an auditor has a direct or indirect financial or other interest in the audit client. A self-review threat exists when an auditor is facing a situation where they have to review or pass judgment on work previously performed by them. An advocacy threat exists when an auditor promotes a client’s position to a point where their own objectivity is undermined. A familiarity threat results from a close relationship between the members of the client company and the auditor. Intimidation threat exists in situations where the auditor is deterred from acting in a particular way (objectively) as a result of actual or perceived threats.

Appropriate safeguards are also suggested by the SAICA Code of Professional Conduct (Jackson & Stent, 2012). Safeguards are divided into three categories i.e. those created by the profession or regulation, those provided by the work environment and those created and maintained within the client. Applying appropriate levels of professional scepticism is part of exercising due care and skill as required by the Code. It is required of audit firms to ensure that audit professionals, including trainee accountants assigned to the audit engagement are individually and collectively technically proficient (Coppage & Shastri, 2014)

2.9 Public accountability and Public reputation

The public at large directly or indirectly rely on auditors to provide them with assurance about financial statements when making economic decisions. It is expected of auditors to accept duties from the public and to serve their interest rather than that of client management. If auditors fail to accept the responsibility public trust will be lost. Upholding the public interest is necessary because when the public perceives that the financial statements are unreliable, then they are likely to discredit
the entire auditing profession which is undesirable. Such reliance requires auditors to accept responsibility from the members of the public.

Courses offered at University are expected to foster the responsibility of accountants and auditors to the greater public (Espinosa-Pike & Barrainkua, 2011). Gaining public trust and confidence is one of the objectives of the auditing profession. Users of financial statements would not perceive published financial statements as reliable if an audit was not undertaken to verify such statements. The audit profession should strive towards maintaining public trust and abandon the profit maximisation goal. The result of the business failures, corporate collapses as well as fraudulent financial reporting scandals that took place in the 1990’s and early 2000’s had a negative effect on the credibility of the auditing profession (Accountancy SA, 2009).

In South Africa, the Auditing Professions Act 2004 is a government’s intention to ensure that the auditing profession performs its monitoring role and provides stricter requirements regulating auditors and audit firms (Accountancy SA, 2009).

The APB promotes public accountability in their definition of an audit as “An evidence based process that is meant to assess and report on the truth and fairness of the financial statements prepared by directors to whom capital resources are entrusted by shareholders” APB (2012:4). Serving the interest of the shareholders requires auditor independence, which is crucial to fulfil the public accountability motive. The regulators, in trying to ensure that auditors fulfil on this mandate have established rigid independence standards and a penalty system (Espinosa-Pike & Barrainkua, 2011). The welfare of the shareholders must be kept in mind by auditors whose behaviours are based on ethical principles that are the same irrespective of the company they may be working for (Satava, Caldwell & Richards, 2006).

The expectations gap in auditing is a challenge that must be addressed in the profession. The public has certain expectations of the audit profession. Such an expectation involves the public expecting auditors to detect fraud in the financial statements. The public in general expect auditors to be fraud detectives. More work is required in this regard in addressing and educating the public about the nature of
the audit function and its limitations. Academic courses offered in the accounting qualifications at Higher Education should promote and inculcate the public interest motive in all their students, particularly those whose interest is in the auditing field. The problem could be eradicated if all audit professionals developed professional attitudes of serving the public and not profit maximisation as early as possible in their professional careers. Espinosa and Barrainkua (2011) suggest that if auditors view their principal role as that of serving their managerial clients, rather than the public or other stakeholders it could influence their acceptance of their responsibilities and might affect what they see as useful knowledge and as appropriate actions.

2.10 Ethical behaviour in auditing

Auditors and accountants are often faced with ethical dilemmas in their day-to-day work experiences. Possessing the appropriate ethical values assist auditors when faced with such dilemmas. Synthesis of past research studies on ethical conduct indicate that one of the problems in dealing with such dilemmas is that in some cases, both trainee and experienced auditors are not aware that they are facing such ethical dilemmas. It is recommended then, that through early education and training, students are taught how to recognise ethical issues that they may face during the course of their work (Cohen, Pant & Sharp, 2001). Ethical training has been found to be effective in this regard and also assists in ethical reasoning. Previous research studies have also indicated the benefit of anticipatory socialisation whereby aspiring accountants and auditors to adopt professional ethics of a reference group while undertaking post-degree training, just before students enter the profession, during this phase they are socialised to serving the public and in the ethical values of the profession, this early socialisation has been found to have long-lasting effect (Espinosa-Pike & Barrainkua, 2011). A greater concern with ethical reasoning and professional ethics increases an auditor’s scepticism (Shaub & Lawrence, 1996)

Jackson & Stent (2012) state that ethical issues are perceived differently by individuals from different religious, racial and cultural backgrounds thus making it difficult for the standard setters to establish hard and fast rules about the ethical conduct of auditors. When auditors undertake their attest duties, the focus should be on the proper undertaking of such duties rather than the outcome of their audit
opinions. The duties must be faithfully undertaken, in accordance with International Standards on Auditing. These standards provide adequately for guidelines that must be followed when performing audits with the view of detecting material misstatement that may be present in the financial statements whether due to fraud or error. These guidelines, however, may only be effective if auditors work ethically. Understanding the demographic differences is important for audit firms as it allows for firms to tailor their ethics training to address the specific groups (Pierce & Sweeney, 2010). Early professional development in the form of university courses offered to undergraduate accounting students should inculcate ethical awareness and ethical consideration, the earlier the intervention, the better the results (Espinosa-Pike & Barrainkua, 2011).

In order to improve audit quality and ethical values, the accounting profession must seek to attract talented members, possessing not only technical expertise, but professional values as well (Abdolmohammadi, Read and Scarbrough, 2003). Hosmer (1994:20) suggests that “ethical principles are not subjective measures that vary with cultural, social and economic conditions; they are objective statements that transcend countries, religions and times”. Rest (1979) as cited in Pierce & Sweeney (2010:79) identified four stages of ethical judgment as “recognition of an ethical problem, ethical judgment, ethical intention and ethical action”. Satava, Caldwell & Richards (2006:275) summarises ten ethical perspectives (Table 2.3) relevant to auditing as follows:

<table>
<thead>
<tr>
<th>Ethical perspective</th>
<th>Driving value</th>
<th>Accounting and auditing application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-interest (Protagoras)</td>
<td>Perceived personal interest</td>
<td>Self-serving bias was at the heart of the recent debacles involving Enron, WorldCom, etc.</td>
</tr>
<tr>
<td><strong>Utilitarian benefits (Bentham and Mill)</strong></td>
<td>Pursuit of the greatest good for the greatest number</td>
<td>Long-term and short-term benefits may be worlds apart – and may not have readily apparent consequences.</td>
</tr>
<tr>
<td><strong>Personal virtues (Plato and Aristotle)</strong></td>
<td>Others are owed proper treatment</td>
<td>Keim and Grant (2003) suggest that key virtues of courage and integrity preserve auditing intent.</td>
</tr>
<tr>
<td><strong>Religious injunctions (St. Augustine)</strong></td>
<td>Reciprocity and compassion build community</td>
<td>The Golden Rule is identified as a key religious construct, applies to auditing intent.</td>
</tr>
<tr>
<td><strong>Government requirements (Hobbes and Locke)</strong></td>
<td>Law representing the minimal moral standards of society</td>
<td>Governmental and professional FASB standards have traditionally been rule-based in practice.</td>
</tr>
<tr>
<td><strong>Universal rules (Kant)</strong></td>
<td>Rules that eliminate the self-interest of those deciding</td>
<td>Rules and principles must intermesh to achieve desired intent.</td>
</tr>
<tr>
<td><strong>Individual Rights (Rousseau and Jefferson)</strong></td>
<td>Actions that protect individual guaranteed rights</td>
<td>Stakeholder rights may not have been part of the measured outcome but are becoming more important.</td>
</tr>
<tr>
<td><strong>Economic efficiency (Adam Smith)</strong></td>
<td>Economic efficiency</td>
<td>Auditing must be thorough enough to identify the costs to society for financial misrepresentation.</td>
</tr>
<tr>
<td><strong>Distributive Justice (Rawls)</strong></td>
<td>Disadvantaged owed a Social Contract</td>
<td>Misreporting in financial statements and audits may harm society – evidenced in the aftermath of recent events.</td>
</tr>
<tr>
<td><strong>Contributing liberty (Nozick)</strong></td>
<td>Rights of liberty within the constraints of the law.</td>
<td>The auditor protects the public interests so that the public’s rights are not violated.</td>
</tr>
</tbody>
</table>

*Adapted from* Satava, D., Caldwell, C. and Richards, L. (2006). Ethics and the
2.11 The auditor’s responsibility for fraud and error – detection and prevention

ISA 240 – The auditors’ responsibility for fraud and error indicates that the auditor does not have a responsibility for fraud prevention and detection, such a responsibility lies with those charged with governance in client companies because they are entrusted with supervision of such organisations, however some auditors and trainee accountants believe that fraud detection is their moral obligation (Espinosa-Pike & Barrainkua, 2011). The misstatements that may be found in reported financial statements could be as a result of fraud or error. The distinction between fraud and error is the intention within which an act is undertaken. Fraudulent activities include misappropriation of company assets and fraudulent financial reporting. Fraudulent financial reporting includes the falsification of financial records, manipulation and alteration of records to achieve a desired outcome and misapplication of accounting policies and estimates. The auditor is required to identify fraud risk factors, these are factors that may indicate the presence of fraud in the financial statements, and include, incentives/pressure (e.g. when there is pressure to meet certain targets and expectations of other parties in terms of financial results and performance), attitude and rationalisation (e.g. when there are factors that predisposes management to fraud, e.g. if they have a history of allegations against them from fraud and misconduct) and opportunity. (the existence of an ineffective control environment created by those in governance that increases the likelihood of fraud) According to Hogan et al (2008), standard setters in the auditing field recommend that forensic accounting courses be offered, such courses should be designed to identify risk factors to be performed during an audit. A general observation by accounting researchers has indicated that professional scepticism is related to fraud detection.
2.12 Audit Quality

“Audit quality is the degree to which an audit provides a basis for belief that financial statements do not contain material misstatements after the completion of the audit” Wedermeyer (2010:321). It is the actions of auditors that affect audit quality (Nelson, 2009). The IAASB chairman shared his view in a staff question and answers document on professional scepticism as follows “A high-quality audit features the exercise of professional judgment by the auditor and, importantly, a mindset that includes professional scepticism throughout the planning and performance of the audit” IFAC (2012:12). The Chairman of the Audit Committee of the Royal Bank of Scotland Group highlight the unfortunate reality about how audit success is sometimes measured, he indicates that “professional auditing is in a sense unique, in that it is the only profession that is measured almost exclusively by its mistakes, proven or otherwise, little is reported on the huge progress that has been made to improve auditing standards” Nelson (2010:1). Nelson (2009) shares the same view that the actions of auditors affect audit quality. Audit quality could also be affected by a variety of other factors. The PCAOB identifies a model for audit quality in Figure 2.2 below:
2.13 Professional scepticism

2.14.1 Definition

The origins of the word ‘scepticism’ originate from the Greek word ‘skepsis’, a noun from which the verb that means ‘to enquire’ originates. A current challenge exists in that there is no single globally accepted definition of professional scepticism. Toba (2011) states that one of the limiting factors in terms of arriving at developing an acceptable framework for professional scepticism is the absence of knowledge about what constitutes professional scepticism as well a clear definition thereof. Professional scepticism is defined by ISA 200 as “an attitude that includes a
questioning mind, being alert to conditions which may indicate possible misstatement due to fraud and a critical assessment of audit evidence”. Friedstad & Wright (1999) indicate that professional scepticism is formed when individuals create cognitive categories of the information they receive and treat it according to a set of stereotypes or beliefs regarding what they may feel the particular message is trying to achieve. Auditing professionals are encouraged to demonstrate their professional scepticism by ensuring that they confirm and evaluate evidence presented to them before arriving at a conclusion.

The very essence of professional scepticism is doubt. Curtis (2014) argues that scepticism is not a complete lack of trust but is an act of confirming all information received from different sources, including clients. Professional scepticism is “a multi-dimensional construct that characterizes the propensity of an individual to defer concluding until the evidence provides sufficient support for one alternative/explanation over others” Hurtt (2010:151). Toba (2011) believes that professional scepticism is a concept which results from two elements, the epistemic and psychological aspects of cognition. The psychological aspect of cognition is related to the auditor’s disposition to question audit evidence. This aspect also relates to the auditor’s questioning mind. Simply stated, professional scepticism is the due care that auditors need to exercise when carrying out their audit duties. Toba (2011) concurs with Hurtt (2010) that professional scepticism is a multi-faceted concept. Applying professional scepticism does not imply that auditors can be too critical, cynical or insulting but should make them more competent when collecting and evaluating audit evidence (Noviyanti & Winata, 2015). Various other standards define professional scepticism as “having a questioning mind, a willingness to suspend judgment about the honesty of client management and using a critical assessment of audit evidence” (AICPA 2002 and SAS 82). Velina (2012) indicates that professional scepticism is a situationally induced skill, induced by client-specific experiences. Hurtt (2010), supporting the multi-dimensional nature of professional scepticism identified six characteristics of profession scepticism “a questioning mind, a suspension of judgment, a search for knowledge, interpersonal understanding, self-esteem and autonomy” Hurtt (2010:151). Hurtt, Eining & Plumlee (2008) suggest that the characteristics of professional scepticism should lead to increased
information search, increased generation of alternative. Increased scrutiny of the reliability of the source and increased contradiction detection. When an auditor doubts the representations of management such doubt is expected to induce further enquiry. In applying and maintaining professional scepticism, Coppage & Shastri (2014) suggest that following strategies (Table 2.4) are kept in mind:

Table 2.4: Strategies for maintaining professional scepticism

<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>1.</td>
<td><strong>Remain alert to conditions that might indicate the possibility of risk of material misstatement, circumstances that might cause financial statements to be materially misstated</strong></td>
</tr>
<tr>
<td>2.</td>
<td>Have a critical and questioning mind and not be satisfied with anything less than evidence that is persuasive</td>
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<tr>
<td>3.</td>
<td>Determine that proper assumptions have been used for estimates</td>
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<tr>
<td>4.</td>
<td>Neither assume that management’s unquestioned honesty</td>
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<td>5.</td>
<td>Recognise the effects of pressures on management and remain aware of management bias</td>
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<td>6.</td>
<td>Develop appropriate procedures that are responsive to assessed risk of material misstatement</td>
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<tr>
<td>7.</td>
<td>Do not accept information or evidence without verification, apply systematic doubt</td>
</tr>
<tr>
<td>8.</td>
<td>Recognise the existence of possible fraud conditions and appropriately follow up</td>
</tr>
<tr>
<td>9.</td>
<td>Recognise and effectively respond to increased risk of material misstatement arising out of economic crisis</td>
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2.14.2 The importance of exercising professional scepticism

Auditors are required to exercise professional scepticism when undertaking audit work, this requirement is documented in International Auditing Standards and is expected by the public of auditors (Boyle & Carpenter, 2015). Being sceptical enable auditors to identify and evaluate circumstances that may cause suspicion about the evidence obtained in an audit. Exercising appropriate levels of professional scepticism enables the auditor to better conduct risk assessment and fraud detection. The IFAC identified five areas where the exercising of appropriate levels of professional scepticism is specifically required:

- Accounting estimates and related disclosures
- Areas around a client’s use of the going concern basis for accounting
- Related party relationships and transactions
- Consideration of a client’s compliance with laws and regulations
- Client fraud

Penning (2014: 3)

Chung, Cohen & Monroe (2006) highlight the importance of professional scepticism in exercising independence by auditors and to the auditor’s conservatism. Both independence and conservatism are critical in terms of ensuring that financial statements are not biased in favour of management and that are free of material misstatements. In exercising appropriate levels of professional scepticism, public interest is put before the interest of the client when designing audit procedures. Velina (2012) argues that when an auditor fails to apply an appropriate level of professional scepticism, the client tends to have an influence over the auditor. The result of a lack of professional scepticism is that the auditor will merely rationalise and document the assertions of management (Murray, 2012). When exercising appropriate levels of professional scepticism it is not because an auditor seeks to detect fraud, but such practice is necessary in other areas as well such as when dealing with accounting estimates, when evaluating fair value measurement and when evaluating assumptions, policies and procedures adopted by management. The raised interest in the acquisition and application of professional scepticism is as a result of many reasons including increased complexity in financial transactions,
large-scale accounting fraud that even prompted regulatory reform such as the Sarbanes-Oxley Act, the increased use of subjective estimates, findings that suggest audit deficiencies as a result of professional scepticism and the demand of users of reliable financial information (Glover & Prawitt, 2014). Other reasons that have caused a heightened concern over the acquisition and application of professional scepticism include: corporate fraud, increased complexity in accounting systems, the increase in the use of accounting estimates and fair values which require more judgment in terms of evaluations and estimations.

Demonstrating professional scepticism will differ from auditor to auditor depending on a situation at hand but will include amongst other things, a critical assessment of audit evidence, devoting special attention to inconsistencies and performing validations on evidence collected. Sceptical auditors will not only focus on the audit evidence provided but will also focus on the nature and functioning of internal control systems that produce financial information in terms of design and effectiveness. A challenge identified by previous research studies is on demonstrating visible professional scepticism. The provision of information by regulators on how they determine if professional scepticism was insufficient or not in various audit situations could benefit auditors in the development of strategies to increase visible scepticism and behaviour that constitutes scepticism should be identified in order to overcome this challenge (Murray, 2012).

2.15 Perspectives: Professional scepticism

There are two competing perspectives that may be adopted by both practicing auditors and trainee accountants in applying professional scepticism, the presumptive doubt perspective as well as the neutrality perspective. It is important to understand how the two perspectives work in order to evaluate which perspective would address client risk optimally (Qaudackers, Groot and Wright, 2014). Glover & Prawitt (2014) suggest a professional scepticism continuum which serves as an alternative to the two perspectives.
2.15.1 Presumptive Doubt Perspective

Nelson (2009:1) adopts the presumptive doubt view and defines professional scepticism as “indicated by auditor judgments and decisions that reflect a heightened assessment of the risk that an assertion is incorrect, conditional on the information available to the auditor”. With the presumptive doubt perspective, the auditor generally assumes that there is some dishonesty on the part of management and the evidence is gathered with the view of proving otherwise. An auditor that adopts a presumptive doubt perspective is the one that will generally be sensitive to the risk of material misstatement unless the evidence suggests otherwise.

According to Toba (2011), a presumptive doubt perspective stresses the importance of adopting a proactive approach when assessing audit evidence provided by management. He further indicates that a presumptive doubt perspective is necessary in an audit. As a suggestion, auditors are meant, according to this perspective, to trust their instinct and check out their suspicions. The presumptive doubt perspective is the one widely used and adopted by auditing standards recently (Peytcheva, 2013). “The only way to prepare auditors to recognise fraud is to sharpen their inquisitiveness, to increase their sensitivity to fraud, and to strengthen the depth of professional scepticism starting at the planning stage of the audit” Toba (2011:108). The presumptive doubt perspective is said to be gaining more support recently as the auditing standards are also emphasizing that questioning mindset is to be applied at all stages of the audit. This perspective emphasizes an asymmetric rather than a symmetric doubt by auditors, when asymmetrical doubt exist in auditors, they are likely to doubt that an assertion made by management is true rather than doubt that it is false (Nelson 2009). Presumptive doubt auditors do not perceive client management as the credible source of audit evidence, as a result all the evidence they provide is not assumed to be true. The ISAs also promote the presumptive doubt perspective as it suggests that auditors should recognise the possibility of misstatements whether due to fraud or error “not withstanding the auditors past experience of the honesty and integrity of the entity’s management and those charged with governance” Nickell (2012:7). The ideal situation is to strike a balance between the two perspectives, which would mean a balance between efficiency and effectiveness. Quadackers, Groot & Wright (2014) believe that the presumptive doubt perspective is closely related to sceptical behaviour by auditors.
particularly in high-risk settings where professional standards prescribe more sceptical judgment and sceptical action and is more visible in auditing standards than the neutrality perspective.

2.15.2 Neutrality Perspective

The neutrality perspective suggests that auditors should not assume that the financial statements could contain misstatements whether due to fraud or error, until evidence has been obtained that suggest such. SAS No 1 explains a neutral perspective as a situation where “the auditor uses the knowledge, skill and ability called for by the profession of public accounting to diligently perform, in good faith and with integrity, the gathering and objective evaluation of evidence” Nelson (2009:3). The auditor neither assumes that management is dishonest nor assumes unquestioned honesty. The neutrality view is “the attitude that the auditor should neither unquestionably assume management’s honesty nor flatly deny it, but should rather maintain neutrality on that question” Toba (2011:102).

The neutrality perspective emphasizes the importance of not being biased when conducting audits. Hurtt (2010:151) supports this perspective in her definition of professional scepticism as “the propensity of an individual to defer concluding until evidence provides sufficient support for one alternative/explanation over others”.

2.15.3 Professional Scepticism Continuum

Glover & Prawitt (2014) proposed a professional scepticism continuum as illustrated in Figure 2.3. The professional scepticism continuum indicates that the application of professional scepticism will depend on risk characteristics of the account being audited and further indicates that regulations, if not properly aligned with risks associated with various accounts will threaten the application of professional scepticism.
Figure 2.3   Professional Scepticism Continuum

Adapted from Glover, S. M. and Prawitt, D. F. (2012). **Enhancing Board Oversight.** COSO. Available

### 2.16 Nature of professional scepticism

Various research studies have explained the nature of professional scepticism in various ways such as a trait (Hurt 2010), as a state (Chung, Cohen & Monroe 2006), as a skill (Carpenter, Durchi & Gaynor, 2011) (Rittenburg, 2012) (Curtis, 2014) and as a mindset (Toba, 2011).
2.16.1 Scepticism as a Trait

Hurtt (2010) believes that professional scepticism is a trait and a state that may be influenced by situational variables and identified six characteristics that he believed to comprise professional scepticism, such as, “a questioning mind, a suspension of judgement, a search for knowledge, interpersonal understanding, self-esteem and autonomy. Hurtt (2010) developed these characteristics after reviewing research on scepticism from the auditing, psychology, and consumer behaviour and philosophy fields. These characteristics were used to develop a scale to measure trait professional scepticism and its relationship with fraud detection.

Studies that are in favour of professional scepticism being perceived as a trait, suggest that professional scepticism starts developing before any training or professional experience begins. Auditors who are more sceptical by nature are likely to believe that the client is not trustworthy because of their innate suspicions and are likely to investigate conditions suggesting aggressive financial reporting. Such auditors are also prone to believe that misstatements discovered in the financial statements are intentional in nature, and thus fraudulent (Nelson, 2009).

Curtis (2014) states that as far as education, training and experience may play a vital role, everyone is unique and how individuals display professional scepticism will differ from one individual to the next.

2.16.2 Scepticism as a State

Different audit situations and conditions are claimed to evoke certain states in auditors. Chung, Cohen & Monroe (2006) argue that mood states affect professional scepticism. Their study was aimed at determining if professional scepticism may be influenced by moods. An experiment that manipulated three varying mood types was undertaken on practicing auditors. The mood types studied were: positive, negative and neutral. The results of the study indicated that mood states do affect one’s judgment and that those with negative mood states displayed higher levels of professional scepticism than those with positive mood states. Peytcheva (2014)
studied the effect of two state scepticism prompts based on the presumptive doubt view and the effect of a cheater-detection prompt based on the social contracts theory, the results indicated that cognitive performance is improved by the presence of professional scepticism and that personality traits of professional scepticism are a significant predictor of cognitive performance.

### 2.16.3 Scepticism as a Skill

Carpenter, Durtchi & Gaynor (2011) claims that professional scepticism is a fundamental skill that may be taught or developed through education and training at an early stage of professional development. Carpenter, Durtchi & Gaynor (2011) conducted a study on the impact of a forensic accounting course as an addition to the auditing courses currently being offered by universities on the professional scepticism levels of students. The forensic accounting course was a semester course that focussed on fraud detection and fraud investigation techniques. The study sought to determine if the forensic accounting course had an incremental benefit on the level of professional scepticism of future auditors (students). The results of the study indicated that those students who completed the forensic accounting course were found to have ‘more accurate fraud judgements’ than those who had not been through the course. The results also indicate that training and education may enhance one’s professional scepticism and judgment. The report by Penning (2014) acknowledges the role of training in the development of professional scepticism. In this report, it is suggested that junior audit staff may be more sceptical due to their recent training and exposure to detected fraud. Rittenburg (2012) claims that professional scepticism may increase or diminish over time. He further suggests that continuous training and development should be provided and encouraged.

### 2.16.4 Scepticism as a Mindset

Some research studies have indicated that professional scepticism is a mindset (Curtis, 2014, Toba, 2011). Mindsets are important for explaining human judgment and decision-making and are influenced by situational cues such as a demand for a particular task and are different from goals in that they lack the motivational
component central to goals (Hamilton et.al, 2011). According to Toba (2011), there are two contributors to an auditors’ professional scepticism, i.e. psychological and epistemic aspects of cognition. Three issues that explain why professional scepticism is difficult to deal with in the auditing field. The three issues are: “Fear of increase in professional responsibility, increasing complexity in the external audit environment and the evidential positiveness under which auditors behave” Toba (2011:92). Curtis (2014) argues that a sceptical mindset should be practiced by all individuals who are involved in the ‘financial reporting supply chain’.

The APB also suggests that professional scepticism is a mindset that is captured in their statement that “professional scepticism is therefore rather found within the mental processes of an audit team member” (Penning, 2014:2). “A sceptical mindset and nature comes with more experience and training-by-doing in the industry” Curtis (2014:17) The chairman of the International Assurances Board (IAASB) Arnold Schilder believes that the adoption and application of a sceptical mindset is a personal and professional responsibility that every auditor should embrace (Coppage & Shastri, 2014). Braun & Stallworth (2009) argue that professional scepticism and independence in mental attitude is fundamental to the effectiveness of an audit. Coppage & Shastri (2014) suggest that a sceptical mindset (Figure 2.4) is made up of the following:

![Sceptical Mindset Diagram](image)

**Figure 2.4: Sceptical Mindset**

2.17 Factors that may influencing professional scepticism

Researchers differ in views on what affects the level of professional scepticism in auditors. A discussion on what has been identified by different scholars on factors that may affect the development, application and maintenance of appropriate levels of professional scepticism follows:

2.17.1 Client/Auditor relationships (arm’s length relationships)

The relationship between auditors and client management is a relationship that is necessary for the audit to be conducted in an efficient manner and should benefit both client and auditor. Auditors, when gathering audit evidence, depend on the cooperation and buy-in of client management. The auditor should, according to ISA 200, in all material respect, maintain independence in all client relations. Independence has a close relationship with objectivity. Objectivity in the context of auditing, relates to the ability of the auditor to perform and formulate decisions in an unbiased manner. Objectivity is necessary in the exercising of professional scepticism by auditors. There is a close relationship that exists between auditor independence and professional scepticism as “a lack of objectivity can result in auditor bias towards audit evidence and nullify even the best efforts of the auditor in applying professional scepticism” Penning (2014:2). Nelson (2009) argues that it is crucial for auditors, as International Standards on Auditing suggest conducting audits in an objective manner, regardless of past experience and relationship with the client. The auditor is to consider the possibility of the existence of misstatements which may be as a result of fraud or error in the financial statements in all audits, new and recurring.

Client-auditor relationships should be professional and based on agreed upon terms, as should be indicated in the engagement letter. An engagement letter is a document that is developed and signed at the planning stage of the audit that indicates the terms and responsibilities of all parties to an audit. It is necessary to understand how client-auditor relationships impact professional scepticism (Nickell,
Auditor-client relationships as a result of past experience with clients have been identified by prior research as a factor that may affect audit decisions and judgments. Stronger client-auditor relationships are likely to yield services from the auditor that go beyond core audit requirements (Herda & Lavelle, 2013). Velina (2012) explains that favourable past experiences with clients may lead to the perception that they are trustworthy and hence if there are existing misstatements in the annual financial statements, such are unlikely to be uncovered by the auditor. Shaub & Lawrence (1996) argue that professional scepticism should increase when there are related-party transactions, when the client is under financial stress and when there is poor auditor-client communication. Kopp, Lemon & Rennie (2003) state that certain client-auditor relationships have characteristics that may cause an increase in trust to worrisome levels e.g. when auditors provide advisory services to the client, the provision of such services is likely to impact negatively on independence, objectivity, neutrality and professional scepticism.

Some business models adopted by audit firms encourage strong business relationships with client management and audit committees, such business models may result in auditors putting the interest of management before that of shareholders (Murray, 2012). Research studies have indicated that a social exchange relationship exists between an auditor and the client, this relationship develops through positive interactions between the exchange partners and results in a sense of relational obligation between them (Herda & Lavelle, 2013). Auditors are also likely to be committed to the long-standing clients as they perceive that they support them to carry out their duties.

2.17.2 Auditor rotation/tenure

Audit tenure indicates the number of audit terms that auditors have been given in relation to one audit client. ISA 220 – Quality control for audits of historical financial information promotes auditor rotation in order to improve audit quality. Auditor rotation is aimed at ensuring auditor independence and is a control measure which facilitates the application of appropriate levels of professional scepticism. Rotating after a certain number of years is believed to achieve independence in appearance but does not ensure independence in attitude as auditor rotation does not
necessarily imply that auditors will be making independent, unbiased audit judgments. Auditor rotation has been identified by some researchers as one of the factors that may affect the development and application of professional scepticism by auditors. Longer audit tenures have been criticised by the public, regulatory bodies and academics as it is believed to lead to loss of independence by auditors.

In the U.S.A the auditor rotation is not mandated, but a five year rotation period is recommended. South Africa favours audit partner rotation over mandatory audit firm rotation (Accountancy SA, 2009). The Companies Act 2008 applies a strict mandatory partner rotation of five years. From June 2016, in the countries in the European Union, rotation is after a 10-year period. Toba (2011) states that longer audit tenure may result in an auditor being less challenged, compromised and thus less sceptical. Longer audit tenure brings with it a set of advantages and disadvantages. “As the auditor-client relationships lengthens, a behavioural bond develops between auditor and auditee as they become more familiar with each other and mutual trust replaces the auditor’s necessary professional scepticism” Latham, Jacobs & Rouch (1998:168). Individuals who are in support of longer audit tenures believe that it is beneficial to both client and auditor in the sense that the auditor does not have to take a long time to understand the client’s internal control system, logistical issues and nature of operations, thus saving time and audit costs.

Other supporters of longer auditor tenure also claim that such is beneficial in terms of obtaining specific client knowledge that may enhance the effectiveness and quality of the audit. Sedaghat (2013) believes, however that longer audit tenures could compromise independence and could result in auditors being more comfortable, complacent and slack in their duties. It is likely that repeated encounters with the same client could lead to trust by the auditor and thus affect their questioning mind which could potentially put professional scepticism at risk. “These threats to independence do not come from space; these threats emerge mostly from the actions of the auditor” Chia-Ah and Karlsson (2010:25). Kopp, Lemon and Ronnie (2003) state that during an audit process, auditors have opportunities to demonstrate good faith but also claim that professional scepticism could prevent the development of excessive trust by the auditor.
Longer audit tenures provoke the auditor to develop some form of interest in clients, whether direct or indirect and put the auditor independence at risk (Chia-Ah and Karlsson, 2010). Nelson (2009) emphasises the fact that auditors should operate under the mindset that material misstatements could exist regardless of past experiences with the client which are likely to make the auditor trust the client more. Past research also indicates that the moral development of auditors affects the way in which auditors perceive sensitive information about the competence and integrity of the client. Auditors with longer audit tenures are likely to want to be loyal to both parties but such loyalty creates a challenge in terms of independence in appearance, which is what most members of the public care mostly about (Chia-Ah and Karlsson, 2010).

Contrary to popular belief, a study conducted by academics in the United States as reported by (Warmoll, 2005) on auditor rotation and its impact on professional scepticism, it has emerged that auditor rotation may have an opposite effect on professional scepticism, the study indicated that auditor rotation has a negative impact on professional scepticism and that “Rotation and a sceptical mindset interact to the detriment of audit effort and financial reporting quality” Warmoll (2015:1). The same views are shared by McCann (2015) (CFO), as he reviewed the same issued indicated by the United States academics, he believes that auditor rotation inhibits professional scepticism. Both reviewers indicated that rotating auditors are likely to choose high levels of audit effort than those who do not rotate, and found that in general, auditors preferred low-effort, low-cost audits if they are of the opinion that managers are unlikely to select aggressive financial reporting. South Africa’s response to the European Union’s directive to rotate auditors every ten years was not in favour of the decision; this is indicated in a report by GAA (09/10/2014). The panel felt that South Africa had adequate mechanisms in place to ensure audit quality, other than mandatory auditor rotation. The issue of rotation was not perceived as a solution to independence, familiarity threat and audit quality. Good leadership and a good tone set at the top in the accounting firms was seen as a solution to the challenge. The other perception is that rotating clients exposes
auditors to a higher possibility of bad audits, recurring audits on the other hand are perceived as more efficient than first audits because first audits represent a learning curve for auditors who are still obtaining an understanding of the entity and its environment.

2.17.3 Mood states

“Mood is a state of mind or a feeling that tends to be task-irrelevant whereas the emotions and evaluations that were the subject of prior accounting studies generally are triggered by the task itself”.

Chung, Cohen & Monroe (2006) believe that the accounting researchers have ignored the aspect of human behaviour, particularly on affective states that may potentially affect emotions and moods. A study was conducted by Chung, Cohen & Monroe (2006) on the effect of mood states on the professional scepticism level of auditors, the study evaluated the effect of moods on practicing auditors and if such auditors displayed unconstructive effects of positive moods. Three types of moods were examined, positive, negative and neutral. The results of the study suggested that those practicing auditors with negative mood states displayed the highest professional scepticism by making significantly conservative decisions whereas those with positive mood states made least conservative judgments because they would rather avoid negative situations that may impact on their positive mood states. The research concluded that mood states affect the application of professional scepticism; negative mood individuals applied a higher level of professional scepticism than positive mood individuals. Mood states were also found to result in cognitive impairment. Training of auditors in terms of awareness and management of different mood states was suggested in Chung, Cohen and Monroe (2006) as a measure that may be applied in mitigating the effect of moods on professional scepticism and judgment.

That is especially because the audit work-environment is target driven, in terms of concluding the audit on a pre-determined deadline. Such pressurised environments are likely to affect practicing and trainee accountants in terms of mood. Other than the work environment, the home environment is also identified as an environment that may create different moods.

2.17.4 Dependence on clients for business

Velina (2012) indicates that professional scepticism is jeopardised if the client is important in terms business to the auditor. The pressure to please a client because they represent the business and continuity on the part of the audit firm poses a threat to the application of professional scepticism. Auditing professionals are encouraged to ask questions even if dependence on the client is obvious. This is likely to strengthen the validity of an audit and lead to audit quality. An aggressive client could also put pressure on the auditor to bow to their requirements and preferences. Hurtt et.al (2013) state that industry competitiveness and the pressure on auditors to maintain it could affect professional scepticism negatively. Such is pressure is aggravated if an audit firm depends primarily on work provided by one entity as opposed to having many audit entities/clients. Hurtt et al (2013) argues that an incentive to maintain a significant client may result in less sceptical judgment and may also dominate and negate auditor industry expertise. Chia-Ah and Karlsson (2010) states that increased reliance on the client as a result of longer audit tenures is probable as the auditor is unwilling to let go of such a client even at the expense of independence. It may be challenging to behave in a sceptical manner under fear of aggravating or losing a major client (Nickell, 2012). The manner in which auditors are engaged and paid by the client puts professional scepticism at a threat. Auditors are paid in a manner that detaches them from the shareholders because shareholders are not involved in the payment process that may result in shareholders not trusting the audit process (Murray, 2012).
2.17.5 Cognitive reasoning

Cognitive reasoning is a necessary skill all auditors should possess. Very little research has been conducted on the impact of professional scepticism on the cognitive reasoning of auditors and vice versa. Most research has indicated that higher professional scepticism levels lead to increased audit work but indicate no relationship between increased audit work and cognitive reasoning. Peytcheva (2013) focussed on how state scepticism influence cognitive reasoning, the results of the study showed that a relationship exists between cognitive reasoning and professional scepticism.

2.17.6 Trait disposition

A trait is believed to be a distinguishing feature, characteristic or a quality of a personality style and arise from the interactions between personality and situations Yolles & Fink (2013). Researchers in this area have also indicated that there is a close relationship between individual traits of auditors and their level of professional scepticism. Strbac & Roodt (2005) cite Hollard (1973) in defining personality as “the product of a characteristic interaction between a variety of cultural and personality forces, including peers, parents, social class, culture and physical environment”. “While personality traits create a potential for the generation of descriptive cluster of behaviour, many consider them to represent ultimate causes of causes of patterns of behaviour” Yolles & Fink (2013:3). It has been indicated in previous research studies that it is critical for trainee accountant’s personality variables to be inclusive of critical reasoning that relates to job performance. Bandura (1996) as cited in Yolles & Fink (2013) indicate that personality indicators are believed to connect the demands of given social work and task environments with potential individual behaviour and performance.

2.17.7 Motivation

Motivation has been indicated by prior research studies to have an impact on one’s level of performance and output. It has been found that individuals perform better
when motivated to do so. Sufficient motivation and cognition are believed to be attitudinal factors that guide human behaviour, when individuals are sufficiently motivated and possess cognitive capacity to perform a particular task, their attitude towards that task would be consistent with their behaviour towards the task (Noviyanti & Winata, 2015).

2.17.8 Knowledge and skills

Nelson (2009) states that knowledge of complex professional standards helps the auditor in dealing with issues that require the exercise of appropriate levels of professional scepticism thus enabling an auditor to better identify high-frequency errors and patterns that may indicate errors and fraud.

2.17.9 Professional experience

Audit experience is acquired through exposure to different audit clients and settings. Such an exposure promotes the acquisition of various skills and competencies required in the auditing field. Various researchers have stressed the significant role played by professional experience in the development of professional scepticism, indicating that an appropriate level is achieved over time through various levels of experience (Curtis, 2014). A positive relationship between professional experience and values and skills relevant to the auditing profession has been found by prior scholarly research (Espinosa-Pike & Barrainkua, 2011). Professional experience provided to trainee accountants in the form of training articles must be such that interpersonal skills, intellectual skills, communication skills and a sense of responsibility is developed (Strbac & Roodt, 2005).

2.17.10 Earnings/Incentives

“The law of behaviour is that higher incentives will lead to more effort and higher performance” Gneezy, Meier & Rey-Biel (2011:191). This view is supported by Nelson (2009) as he indicates that audit firms could facilitate and thus promote
professional scepticism through their “recruitment, hiring, training, performance appraisal, review, decision aids, incentives and changes in tasks and institutions” Nelson (2009:2). Incentives to the application of appropriate levels of professional scepticism could include financial incentives, avoiding reputational loss, avoiding potential litigations and censure. Those who oppose the use of incentives to promote a desired behaviour or action indicate that this could backfire when such incentives are removed citing that it might lead to undesired behaviour.

Gneezy, Meier & Rey-Biel (2011) believe that using monetary incentives could send a different message to those who are to perform the tasks (agents), that they are not suitable for the task, or that task is difficult or that the principal does not trust that the agent could be intrinsically motivated. “Incentives contain information relayed from the principal to the agent, and such information can provoke unexpected effects on behaviour” Gneezy, Meier & Rey-Biel (2011:193). Professional scepticism may be put at risk when an audit team member is biased as a result of personal incentive and when lacking in detection skills (Penning, 2014). An incentive system might hinder the application of appropriate levels of professional scepticism especially if auditors are working in a particular way in order to receive an appraisal or promotion (Curtis, 2014). Nelson (2009) claims that incentives can influence professional scepticism and judgement in conscious and unconscious ways and also suggests that performance evaluation be used to screen for professional scepticism traits and emphasized that such must be linked to incentives. Nelson (2009) also claims that incentives have a dual effect on professional scepticism, firstly, it reduces judgmental mistakes that are as a result of lack of effort and secondly, it creates a drive to search for more evidence in auditors.

2.17.11 Accountability requirements

The audit profession is accountable to the users of financial statements to ensure that the financial statements presented by audited entities are free from material misstatements whether due to fraud or error. Accountability is a dynamic concept that is created when an accountability relationship is established where the trustee is expected to act with greatest bona fides to meet the principal’s intentions in the most economic and effective way possible, in this relationship the trustee (auditor) is also
expected to act with kindness, to protect the principals assets and to obey regulatory requirements (Chen, Zhong & Chen, 2012). Auditors are also accountable to the regulators of the profession to ensure audit quality. Such accountability responsibilities call for auditors to exercise due care and skill when performing audits. Due care and skill is closely related to professional scepticism. Lerner and Tetlock (1999) as cited in Endrawes & Monroe (2012) believe that accountability is a multi-construct that include hierarchical superiors, clients, third parties and others within the audit team and believe that it is concerned with the justification of decisions to users and other diverse parties.

2.18 Developing professional scepticism

The following matters are investigated research study as factors that may possibly play a significant role in the development of trainee accountants’ professional scepticism.

2.18.1 The role of education and training

At Higher Education level, prospective auditors are exposed to the theory of auditing as well as to the skills and competencies believed to be necessary for a career in auditing. Rebele (2003) states that the competencies that are to be developed within the accounting curriculum, which includes auditing, can be classified as technical knowledge and skills. It is therefore beneficial for prospective auditors to reflect about the importance of developing and applying an appropriate level of professional scepticism as a technical skill that may likely affect their professional judgement. Rebele (2003) and Braun & Stallworth (2009) suggest that academics in the auditing field should use case studies that deal with fraud-related issues and forensic materials as part of their courses, this would provide prospective auditors with exposure to sensitive fraud cases, which may be necessary for triggering sceptical thinking and behaviour.
Plumlee, Rixon & Rosman (2012) investigated whether providing training to auditors which aimed to diagnostically improve sceptical thinking that is in line with the auditing standards. An online course, providing training guidance on divergent and convergent thinking was provided to 108 auditors, the auditors were allocated to any one of the three training programs (full training: divergent and convergent training, partial training: only divergent and a control: neither convergent nor divergent). The results of the study indicated that the training was successful convergent and divergent thinking, which positively affects sceptical thinking. It was evident from the results of the study that sceptical thinking, divergent and convergent thinking are trainable skills. Curtis (2014) shares the same sentiments indicating that focusing students to studies around Enron and Arthur Anderson, which are well known cases of audit failure, will bring awareness to the consequences of not being sceptical and will help students to fine tune what is expected of them as auditors in this industry.

Rebele (2003) also suggest that watching investigative television shows e.g. the CSI may have a positive influence on the student’s scepticism development as investigative reporting is to an extent similar to an audit. If auditors and trainees are aware that corruption and fraud exist in their environment, their professional scepticism will be higher and will be as the auditing standards require (Ashari & Zahro, 2013). Experienced auditors and partners agree that the newly hired auditors of today display more scepticism than newly hired auditors in the past, the major contributor to that is the nature of the students’ educational experience that is said to support this level of scepticism (Curtis, 2014). Iskandar et.al (2014) support the input of education and training on professional scepticism by suggesting that awareness about this subject should be nurtured through formal and on-the-job training on an individual level.

Prior research has pointed out that training and education may yield positive results in trainee auditors. Curtis (2014) found that auditors who had recently graduated from college demonstrated a higher level of professional scepticism than those who had practiced for longer in the auditing field. This was attributable to the fact that over the past ten years, that has been an increased emphasis on the importance of professional scepticism and that the education that is given to trainee accountants and students plays a vital role in the development of professional scepticism. The
The role of training in the development of skills, values and knowledge is undeniable. This view is shared by Rebele (2003) in his study that investigated the impact that training provided to students using crime investigations had on the student’s development of professional scepticism. Criminal cases were analysed by students with the view of cultivating an investigative mindset and scepticism. The results indicated that using criminal cases in an auditing course could significantly develop students in exercising professional scepticism.

Nelson (2009) states that auditors with high knowledge of auditing standards are at an advantage when interacting with clients and when dealing with complex evidence that indicate error conditions. International Standards on Auditing, particularly ISA 240 – The auditor’s responsibilities relating to fraud in the audit of financial statements are believed to promote investment in the training of auditors by accounting firms in mastering different approaches of dealing with sceptical areas of the audit engagement (Curtis, 2014)

Curtis (2014) states that newly hired auditors (trainees) come with some awareness, which they obtain through education and training, at and argues that they have a questioning mindset which could cut back on costs associated with training on professional scepticism. Skills relevant to an audit are intrinsic to the training of prospective accountants and should provide insight and experience of business models, engendering professional scepticism values as well as independence of mind that would allow auditors to also provide advice to businesses (ACCA, 2010)

Carpenter, Durtschi & Gaynor (2011) investigated whether offering a forensic accounting course as part of the curriculum would be beneficial in terms developing professional scepticism and risk assessment. The study was conducted on 69 Master of Accounting students, 32 of whom had to complete a forensic accounting course and 7 auditing experts. All the students that participated had no real-world audit experience. The key goal for the study was to introduce students to situations
that would heighten their awareness of fraud thereby increasing their sensitivity to any red flags of fraud that may be present in an audit situation. The results should be that they approach any audit situation with a more questioning mind or scepticism. The results of the study indicated that students who had undergone the forensic accounting course displayed a higher fraud-risk assessment than those who had not undergone the training. Such a study validates the significant role of education and training in improving skills such as professional scepticism, fraud-risk assessment and professional judgment. Chung, Cohen & Monroe (2006) suggest that in training auditors, focus should be made in training them to be aware of their current mood states as such training may moderate the effect on professional scepticism.

Nelson (2009) claims that training on professional scepticism is necessary, in particular, training must be given to auditors about incentives, fraud indicators, error identification and on negotiation techniques. He further suggests that trainee accountants could be trained on negotiation techniques through role-playing the clients’ position in the negotiation process. Education contributes positively to the level of professional scepticism especially in terms of developing a critical thinking ability and professional judgment (Murray, 2012). Education is also beneficial to the development of professional values and perceived as a tool in transferring the meaning of public interest (Espinosa-Pike & Barrainkua, 2011).

As a result of the changes and complexity in the auditing field, the skills required of trainee accountants have changed. Not only are trainees required to exercise professional scepticism but also need to be schooled in “techniques that surpass traditional accounting and auditing” Accountancy SA (2009:3). Of critical importance as well is for trainees to be trained in skills that are relevant in modern auditing such as professional and business ethics, computer skills and communication (Accountancy SA, 2009). Nickell (2012) however believes that as long as there are still disagreements as to what constitutes sceptical behaviour and how much professional scepticism is regarded as acceptable, audit education and training is
impeded, effective training programs cannot be put together in the absence of a consensus.

2.18.2 The role of professional experience

Professional experience in the auditing field may have an impact on one’s professional behaviour and professional scepticism. Curtis (2014) states that both education and experience are important in the development of professional scepticism. Her study conducted on multiple professionals with varying audit experience also points out that real-life work situations can have a beneficial effect to a new auditor in many ways, including the improvement of listening skills and the ability to pay attention to detail and that 3 out of 5 of the professionals felt that professional experience was the one that contributed the most to their scepticism levels. Iskandar et al (2014) concluded that auditors get more information on professional scepticism through the articulation and appropriation of experience in an audit work environment.

“The learn by doing concept should be emphasised and encouraged in all levels of the audit firm”. Curtis (2014:14). Toba (2011) highlights the importance of obtaining the relevant skills to be able to detect misstatements in the financial statement, because some auditors may be unskilled in handling negative assertions and the consequences thereof. Professional experience assists auditors in developing domain knowledge and knowledge of patterns that enable them to determine whether evidence ‘add up’ (Hurtt, 2013). Espinosa and Barrainkua (2011) point out that experienced auditors are also better in terms of ethical judgment abilities, which supports the idea of professional experience being critical in developing the right skills, values and competence required in this profession. Payne & Ramsay, cited in Endrawes & Monroe (2012) indicate that the amount of work experience is one of the factors that affect professional scepticism levels of auditors. The size of the accounting firm is also believed to be a factor that influences the kind of professional experience that is received by a trainee accountant. In a study conducted by Bagley (2012) as cited in Curtis (2014), it was indicated that trainee accountants preferred to
serve their training articles with the Big Four accounting firms because of better training and resources. Chung, Cohen & Monroe (2006) recommend a positive workplace environment and discourage a negative workplace environment which is likely to develop negative mood states. Professional experience may also be a major factor in developing professional commitment. It is not only beneficial to professional scepticism but may lead to greater awareness of what is ethically acceptable and in dealing with ethically challenging situations (Pierce & Sweeney, 2010). With the challenge facing audit firms in attracting, training and retaining auditing professionals with relevant skills and knowledge to be able to undertake audits with a sceptical mindset, a psychometric examination suggested in the human resource policies and procedures as well as recruitment, mentoring and staff appraisals (Murray, 2012).

Espinosa and Barrainkua (2011) observed that auditors with lengthy professional experience displayed a higher commitment to the profession and to the public interest motive. Nelson (2009) concurs and argues that accounting firms may positively influence professional scepticism through training, hiring, reviews, and implementing decision aid models, changes in tasks, performance appraisals and appropriate incentives. He also indicates that the professional experience of auditors provides them with relevant knowledge of the frequencies of errors and non-errors that may be indicative of heightened risk of material misstatements as their professional experience provides them with abstract and detailed problem solving representations. As much as knowledge about errors and non-error conditions may be beneficial, Nelson (2009:8) believes that “if auditors learn over time to assume non-error explanations and not to pursue critical missing information, greater frequency knowledge can actually undermine professional scepticism.

2.18.2.1 Coaching and mentoring by experienced auditors during articles

Grant (2003) as cited in Theeboom, Beersma & van Vienen (2013:2) defines coaching as “a result-oriented systematic process in which the coach facilitates the enhancement of life experience and goal attainment in the personal and/or
professional lives of normal, non-clinical clients”. Keller (2008) states that coaching and mentoring relationships are based on the chemistry between people who share a common setting, the mentor being the power figure is meant to arrange career-building assignments to the one being mentored. Coaching assists trainees and junior members of the audit team to build up their instinct to challenge (Murray, 2012) and can be used effectively in an organisational setting as an intervention strategy to promote certain behaviour, contributing positively to coping, well-being, being goal directed, skills, performance, self-regulation and work attitudes (Theeboom, Beersma & van Vienen, 2013). Audit firms with strong mentoring programs that are well communicated have a best chance of surviving; these programs could be formal or informal and even assist in addressing succession issues (Keller, 2008). Trainee accountant may learn to ask probing questions to clients through being mentoring and coaching by senior audit staff. Coaching and mentoring by more experienced auditors has been identified as a useful strategy in developing appropriate professional scepticism levels. Iskandar et.al (2014) acknowledges the critical role of mentoring/coaching alongside proper education, peer reviews and in-house training.

2.19 The role of culture

An audit is an exercise that is conducted by human beings. It is a common occurrence that human beings align themselves with cultural values and beliefs. Many of the social skills learnt by human beings are through the socialisation process by parents, siblings, peers and those in close contact with. Many of these skills relate to how we are to relate and react to different situations, known and unknown.

2.19.1 Definition of culture

Culture is defined by Hofstede (1980) as cited in Endrawes & Monroe (2012) as a way of living that influences one’s values, interaction with others and shared beliefs that includes religion, education systems, language, shared-meaning systems and government philosophy”. It could also be explained as “the collective programming
of the mind that distinguishes the members of one group or category of people from
another" Hofstede (2001:1). Most research about culture and its impact on values
and behaviour indicates that cultural values are learnt by individuals largely in the
first ten years of an individual's life and that it is challenging to adopt a different set of
cultural values that are different from yours at an adult stage unless intense
indoctrination is applied for prolonged periods.

2.19.2 Power of culture

Cowperthwaite (2010:178) captures the power and existence of culture in this
manner “Culture is to society as personality is to the individual”. One’s personality
influences one’s behaviour patterns and decisions. If culture is equated to
personality, clearly the influence of it should be obvious, but research has indicated
that most individuals are not aware of the influence of culture on their behaviours.
Individualism and collectivism has been identified by previous studies to differ
according to the cultural background of an individual. Power distance is another
factor that impacts on the behaviours of individuals in an audit setting in particular.

2.19.3 Cultural influences on the audit profession

The influence of culture in an audit has been indicated as a factor that may explain
the difference in approach of different auditors performing under a common set of
requirements and conditions. Endrawes & Monroe (2012) highlight that auditors and
accounting students from different cultures are likely to have different knowledge on
auditing because of being exposed to different accounting curricula and having
different professional bodies that require differently of them, as a result they may
have different judgment about fraud and error conditions.

Culture affects the behaviour, judgment and practice of auditors (Cowperthwaite,
2010). Seyedhossein, Saudah & Maisarah (2014) believe that culture also affects
audit opinions as well as one's perception about what is what is acceptable and what
is not. Bowman (1994) believes that culture can affect a person’s learning process.
Culture affects the way auditors audit and also affect how auditors view audit evidence (Endrawes & Monroe, 2010). Cowperthwaite (2010) states that cultural upbringing affects the auditors’ communication style and judgment and further explains that our communication style affects the way human beings react to uncertainty and how we relate to social groups. Culture is also considered when auditing standards are being drawn up which is evidenced by different countries having and applying different auditing standards.

Cultural values, as indicated by Cowperthwaite (2010) determine how we perceive and differentiate between what is wrong from what is right, what is normal from what is abnormal. Culture also determines how we communicate with people of a similar or different background as ours and how individuals relate to things and people. Effective communication is important in an audit setting where work is performed in teams. Clear communication is necessary within teams and with audit clients. Communication is a critical skill to have as an auditor, as it affects how rules are interpreted, how audit opinions are formulated and communicated to the client as well as how we use enquiry as an auditing tool to obtain sufficient and appropriate audit evidence.

Cowperthwaite (2010:183) suggests that “cultures with few barriers to communication up and down the chain of command will have a different pattern of communication than those where people of unequal status is less free”. A study conducted by Sanders et.al (2009) on auditors from high power-distance (Mexico) societies and those from low power-distance societies (United States of America) in terms of their professional judgment when faced with potential auditor-client conflict. Power-distance is defined by Hofstede, (2001:83) as cited in Sanders et.al (2009:3) as “the degree of power or influence between a boss and the subordinate, as determined by the subordinate”. In cultures with a high power-distance, junior audit staff members are unlikely to communicate directly with superiors and lines of communication are formal. The effect of culture on professional judgment was studied using the four work-related values as determined by a study conducted by Hofstede in 2001, which are uncertainty avoidance, power-distance, masculinity and
femininity. The study indicated that in societies with high power-distance, auditors in such societies were unlikely to question client-management and more willing to succumb to the pressure from them. Entry-level auditors from a low power-distance society, which is also characterised by uncertainty avoidance and low collectivism culture determined lower risk assessment than those from a high power-distance culture.

Power-distance may potentially moderate the effect of accountability (Endrawes & Monroe, 2012). In a power-distance society, employees are likely to make judgments that will support the judgements of their superiors as the employees are very obedient and respectful Endrawes & Monroe (2012) Uncertainty avoidance is defined as “the desire to add structure, which thereby reduces ambiguity” and individualism/collectivism is described as “how an individual relate to society” (Sanders et al 2009:3). Members, depending on their cultural upbringing and socialisation deal with uncertainty differently from those who do not share the same background. The extent to which auditors tolerate and react to uncertainty may cause a difference in the manner and degree to which they apply International Auditing Standards (ISAs) which could have an effect on the amount of work auditors deem necessary for them to reach an audit conclusion. Cowperthwaite (2010) argues that auditors, depending on their cultural beliefs will tolerate uncertainty differently, those from a cultural background that tolerates a lower degree of uncertainty are likely to seek more evidence and more time before coming to a conclusion about an audit matter.

The cultural effect on the audit process, manifested through the behaviour and relations amongst audit team members has a significant impact on the relations between audit team members as well as their relations with clients. Individuals from high individualism cultures act as individuals with their own needs and are, in a work environment, hired and remunerated according to individual performance. Independence is preferred over loyalty in individualistic cultures. Individuals from a culture based on collectivism are viewed as members of a group and generally act in the best interest of the group, and possess a sense of loyalty and mutual obligation with other members of the same group. In terms of an audit, Cowperthwaite (2010) indicates that auditors with different cultural backgrounds tend to differ in dealing with inequalities. Inequalities relevant to an audit activity include, amongst others,
inequalities that may exist between clients and auditors, which may be based on social class, wealth, apparent intelligence, and inequality between engagement partners and staff particularly junior members of staff like trainee accountants.

Hofstede 1990, as cited in Sanders et al (2009:4) describe masculinity and femininity as “Masculinity stands for a society in which social gender roles are clearly distinct: Men are supposed to be assertive, tough and focused on material success: women are supposed to be modest, tender and concerned with the quality of life. Femininity stands for a society in which social gender roles overlap. The study revealed that all three cultural values, uncertainty, power-distance and collectivism affect the auditors’ professional behaviour and judgment. A similar study conducted by Pierce & Sweeney (2010), revealed that females displayed higher ethical views this was attributed to sex role socialisation, it was clear that with gender socialisation, females are expected to be obedient and males expected to be independent. Moral reasoning of males and females were also found to be different. Some cultures emphasize male dominance and discourage questioning or probing of a male by a female, as males represent authority, such an act is perceived as disrespectful. In such cultures authority is highly regarded and thus questioning those in authority (such as client management may not be easy for trainee accountants who are socialised into such cultures. It would be challenging to display sceptical behaviour to those in authority if your cultural upbringing does not allow you to.

Another issue relating to gender in audit settings involve the level of trust one associates with the different genders. Traditionally, women are trusted than men, this is could lead to auditors being less sceptical of female client representation, such a situation could lead to misstatements and fraud to go undetected, male representation on the other hand is less trusted, greater scepticism is exercised when the client administrator is a male (Shaub & Lawrence, 1996)

Another area that is influenced by culture in an audit setting is the development and application of auditing standards. It has been noted, through prior research studies
that some countries may have the same auditing standards but how the standards are interpreted and applied could vary depending on the various cultures. The members and associates of the IFAC belong to different countries with different religious backgrounds and beliefs and that influences the manner in which the Code of Ethics is applied in the different countries (Espinosa-Pike & Barrainkua-Aroztegi, 2014). It is noted that most countries belonging to the IFAC are countries whose religion is predominantly Christianity. The training of auditors is suggested by Sanders et al (2009) as a mitigating factor against the effect of culture on audit judgment and scepticism. Additional exposure and experience was recommended to entry level auditors to enable them to deal with the challenges pertinent to the audit function and to enable them to counter-balance the effect of culture on their professional scepticism and judgment.

Religious beliefs have an impact on the behaviour of individuals. Espinosa-Pike & Barrainkua-Aroztegi, 2014 claim that religious ideologies influence one’s judgment of what is right and wrong. When an individual is faced with an ethical dilemma, the alternatives available in order to solve the issue will be influenced by his/her religious beliefs. In a situation where there is a contradiction between religious beliefs and professional ethics, a conflict between a moral standard and religious standard will result creating challenges for the auditor. A study conducted by Keller (2008) on the influence of religion on ethical reasoning, religion was indicated as a strong foundation for ethical reasoning and also affects the expected behaviour of individuals and has a positive input in defining codes of conduct (Espinosa-Pike & Barrainkua-Aroztegi, 2014). Auditor behaviour is observed to differ cross nationally and such differences are attributable to different national and cultural determinants as studied by Bik (2010) in his study that identified five differences amongst cross cultural behaviours i.e. power distance, assertiveness, uncertainty avoidance, in-group collectivism and institutional collectivism. An auditor, like any other human being belonging to a certain culture will react to power and authority differently, according to the norms of their culture.

Bik (2014) suggests a grounded theory-based model (Figure 1.9) on how cross-national cultures affect the professional behaviours of auditors as indicated in Figure 2.5 below:
2.19.4 International perspective on culture and audits

Cowperthwaite (2010) explains the influence of culture in the audit profession by indicating that even the International Auditing Standards (ISAs) have been influenced by the cultural values of the standard setters themselves. The composition of the standard setting-body itself, which in 2008 composed of over 50% of members from the United Kingdom, United States, Canada and Australia, countries known for the high individualism values. Because the standards have an inherent cultural assumption, auditors from different cultures would have to “translate” them culturally in a manner that enables them to be applied in a culturally appropriate manner. Trainee accountants from cultural backgrounds that emphasize authority, masculinity and fear of authority must be identified and trained to think and
to act beyond cultural boundaries. Audit firm culture will also be effective in socialising trainees in such situations.

2.19.5 Influence of firm culture

Flint (1988) as cited in Endrawes & Monroe (2012:5) claims that “an audit is a social product that is influenced by society, group and individual behaviour”. Dirsmith, Covaleski & McAllister (1985) argue that individuals are socialised into the profession initially and then to a ‘clan’ that enforces group norms and values and acknowledge that organisations may have limited influence over such a process and is largely informal. Cowperthwaite (2010) highlights the importance of cultural identity and social belonging for the development of confidence and self-esteem, important characteristics for a trainee accountant who is to exercise judgment in complex and difficult situations. It is without doubt that we view and perceive our world through our cultural lenses and that allows us to relate with the world better. Cowperthwaite (2010) embraces the idea of global audit standards being set and believes it to be a historic opportunity to strengthen the auditing profession. Audit firm culture may weaken professional scepticism (Toba, 2011). The research undertaken by Hofstede indicated that firm culture is not as powerful in terms of influencing behaviour as the culture of a particular group of people from a similar cultural background. Endrawes & Monroe (2010) determined in results of a study comparing auditors from two different cultures/countries, Egypt and Australia that individual cultures were more powerful and that organisational culture had very little impact on audit judgments.

Iskandar et.al (2014) concluded that there is no obvious effect of organisational culture on the development and application of professional scepticism by auditors working within such organisations.
2.20 The effect of objectivity and independence on professional scepticism

Independence and objectivity are fundamental values in the auditing profession. It is required of auditors to evaluate the circumstances and conditions that may impact on their independence and objectivity from the preliminary engagement stage, whilst getting to know a prospective client. In order for an auditor to formulate an unbiased opinion, independence must be maintained. Independence encompasses of two components, independence of mind and independence in appearance. According to Jackson & Stent (2012) independence of mind is the ability of the auditor to express a conclusion without being influenced by issues that compromise professional judgment. Independence in appearance entail the avoidance of circumstances and facts that may lead to a reasonable and informed party to conclude that the auditor’s integrity or ability to apply objectivity has been compromised. The auditor is required to identify and evaluate circumstances that may pose a threat to their independence and is required to put in place appropriate safeguards to mitigate against such threats. If independence is impaired, public interest will be put at risk as a result (Chia-Ah and Karlsson (2010)

Eilifsen et.al as cited in Chia-Ah and Karlsson (2010) defines threats to independence as pressures and other factors that impair may impair an auditor’s objectivity. Independence is the foundation on which all attest functions should be based. A lack of independence is likely to affect all the stages of the audit negatively and could be reflected in the audit conclusion communicated through an audit report. The provision of Non-Audit Services (NAS) to audit clients is also indicated as a challenge in maintaining independence whilst independence is necessary for the maintenance of appropriate levels of professional scepticism. On the same note, however, the provision of audit services to audit clients does not automatically impair the auditor’s independence.

2.21 Trust vs. professional scepticism

Trust is a complex issue in the auditing profession. The right level of trust necessary for audit work has been argued by many researchers. Kopp, Lemon & Rennie
(2003) believe that trust is a fundamental and psychological necessity for human beings that enables them to deal with the indefinite number of future possible behaviours. The question is whether it is justified to trust fully the assertions made by management. In an audit setting, if an auditor does not trust the client, detection risk is lowered as more tests will be conducted by the auditor in order to lower the risk of material misstatement to an acceptable level. Toba (2011) believes that it is necessary to maintain a balance between doubt and trust in an audit setting. He further suggests that an auditor should withdraw from the engagement if he/she perceives dishonesty and ceases to trust. Striking a balance between trust and suspicion is a challenging task to achieve. Too much scepticism may lead to high audit fees as a result of ‘over-auditing’ whereas the opposite is also not acceptable.

A sceptical auditor “should be hard to convince, but not impossible” Mautz & Sharaf (1996:97). As most audit firms encourage good business relationships with clients, which may slowly develop into trust, a challenge results in terms of striking a balance. Too much scepticism could be detrimental to audit deficiency and could damage client-auditor relationships. Endrawes & Monroe (2012) argue that the trust between the auditors and management may influence the auditor’s perception of the nature and level of misstatements that may exist in the financial statements under audit. Shaub & Lawrence (1996) argue that as the auditor’s trust decreases their suspicion increases. Clearly, trust is a barrier to professional scepticism. APB (2010) suggests that neither doubt nor trust is necessarily absolute, and that uncertainty lies between trust and distrust.

Kopp, Lemon & Rennie (2003) suggest that clear guidelines should be provided to auditors on how show trust and exercise professional scepticism concurrently. It is likely for an auditor to trust an explanation provided by an honest client than one provided by a dishonest client. Velina (2012) suggests that positive client-specific experience may develop into trust. Shaub (1996) states that trust is mostly affected by situational factors and historical experience with the client than by dispositional factors such as traits and attitudes. Equating scepticism to suspicion could result in inefficiency in terms of the audit, as a result a balance between trust and suspicion is recommended (Velina, 2012). Kopp, Lemon & Rennie (2003) support a balance
between trust and professional scepticism but argue that the auditor must be willing to distrust. Most researchers agree that a given level of suspicion is necessary when undertaking a financial statement audit, even though they agree that suspicion and scepticism are two different constructs. Shaub & Lawrence (2002) explain that an aggressive sceptic is the one that will be constantly suspicious despite audit evidence indicating a low risk of material misstatement. It would be best if the right amount of trust necessary for an audit to be conducted effectively was determined but since trust cannot be quantified, a challenge still exists.

2.22 The relationship between professional scepticism and audit judgment

Good judgment plays a vital role in auditing, yet there are very few studies conducted on the influence of professional scepticism on audit judgment. It is critical for audit practitioners and regulators to determine the methods that may be applied to promote scepticism while auditors make professional judgments (Parlee, Rose & Thibodeau, 2014). Professional scepticism may influence audit judgments made by auditors and audit quality (Wedermeyer, 2010). Two types of scepticism may affect audit judgment i.e. scepticism related to one’s own judgment (self-scepticism) and professional scepticism related to the client (client scepticism) and are believed to produce different effects on the professional judgment of auditors (Quadackers, Groot & Wright, 2014, Nelson, 2009, Parlee, Rose & Thibodeau, 2014). Royaee, Yaghoob & Azinfar (2013) in their study investigated the relationship between professional scepticism and judgment of professional auditors in Iran by applying the criteria used in the Hurtts’ scale of professional scepticism (HPSS). The six indexes used in the HPSS were used to test the relationship they have with professional judgement. The indexes are: a) questioning mind, b) suspension of judgement, c) search for knowledge, d) interpersonal understanding, e) self-confidence and f) self-determination. The results of the study revealed that of the six HPSS indexes, three were found to have a significant and positive relationship with the decision making of independent auditors. Those three were: questioning mind, interpersonal understanding and self determination. The other three indexes were rejected as factors that may have an effect on the independent auditor’s decision making. “Professional scepticism is necessary for high-quality professional judgment, but it is
only one component of what is necessary for the auditor to exercise sound professional judgment, for example, scepticism without requisite accounting and auditing industry expertise is not sufficient to obtain high-quality judgment” Glover & Prawitt (2013:2).

Bias has been identified in previous research studies as a factor that may also influence audit judgments. The Committee of Sponsoring Organisations of the Treadway Commission (COSO) and KPMG identified five types of biases that may impact on audit judgment: availability bias, anchoring and adjustment bias, overconfidence, confirmation as well as the rush to solve. Overconfidence occurs when the auditor overestimates their abilities to perform certain task and in making accurate decisions which could be problematic, it could manifest itself in taking too many projects, overpromising on audit deadlines and skipping information searches. (Glover & Prawitt, 2012). Rasso (2015) argues that the inability to process audit evidence leads to poor judgment that may include taking a decision to end data collection prematurely, such judgments are associated with a lack of scepticism. Even the most conscientious auditor needs to be aware of hidden bias which all humans are unintentionally susceptible particularly when generating hypotheses for changes in accounts, when seeking and evaluating evidence and when assessing risk (Fay, 2015).

Nelson (2009) believes that when traits combine and interact with incentives and knowledge are likely to produce behaviour and judgment that reflect professional scepticism. Some researchers, however believe that there is a lack of consensus currently in academic literature on the impact of professional scepticism on audit judgment (Peytcheva, 2013)
2.23 Sceptical mindset and sceptical behaviour

A sceptical mindset and sceptical behaviour are of utmost importance in the audit process. Previous research studies in this area have shown a positive relationship between a sceptical mindset and sceptical action/behaviour. Some researchers however, argue that it may be possible that a sceptical mindset does not lead to sceptical behaviour. Hurtt et al (2013) argues that professional judgment may be exercised by auditors but they may not act on such judgment because of various reasons, which could be based on the auditor as well as the client. It is possible that an auditor may recognise an error condition or situation but opt, because of time constraints, tight audit budgets and other pressures choose not to act upon such a discovery. What is important to bear in mind is that the audit environment itself must promote sceptical thinking and mindsets, the outcome of which leads to increased audit evidence search and validations. Nelson (2009) argues that sceptical judgment is the driver of sceptical action but such depends on the auditor’s traits, knowledge and incentives. Shaub & Lawrence (2002) as cited in Nelson (2009) believes that professional judgment needs to reach a particular threshold for the auditor to start displaying sceptical action, but acknowledge however, that there could be barriers to sceptical action such as time pressures, pressure from peers, pressure from management and budgets.

2.24 Effect of professional scepticism on audit failures

“Failure in applying appropriate levels of professional scepticism has led to many audit failures” Penning (2014:2). Audit failures affect users of financial statements as well as the reputation of the auditing profession. A positive correlation has been proven by past researchers between low professional scepticism and audit failures (Rasso, 2013). Velina (2012) also explains that a lack of professional scepticism has led to many publicised audit failures and loss of investor confidence. Audit failure impacts on public trust and confidence of auditors, which, according to Kopp, Lemon & Rennie (2003) are areas of challenge in the auditing profession. Litigations, restatements, enforcement actions, discovery of fraud or other subsequent events including business failures may all indicate that the audit may have not been effective at the date of issuing an audit report (Wedermeyer, 2010). Toba (2011)
indicates that exercising inappropriate levels of professional scepticism may have a disastrous effect on audit quality and may lead to audit risk. “Audit risk is that risk that the auditor may express an inappropriate opinion when the financial statements are materially misstated” Jackson & Stent (2012:7/4).

The inherent limitations of an audit may also weaken the ability of auditors to exercise appropriate levels of professional scepticism as in an audit setting; auditors depend on the co-operation of management. Management must provide information for audit purposes and if such information is withheld, the auditor will be unable to detect material misstatements if any. Audit failure may also lead to financial loss to those who rely on audited financial information to make economic decisions. Beasley et al (2013) in their executive summary focusing on the enforcement actions against auditors by the U.S Securities and Exchange Commission (SEC) identified failure to exercise appropriate levels of professional scepticism as a challenge that leads to audit failure. The report identified and ranked problem areas that led to enforcement actions against auditors (SEC Fraud Investigations – 1998 to 2010). Demonstrating inappropriate levels of professional scepticism was ranked third on the list of ten items with 60%. The list was arranged from the one to sixteen, one indicating the highest audit deficiency to sixteen, the lowest deficiency contributing to alleged fraudulent financial reporting that was investigated in public companies in the United States of America.

There has been a heightened concern from users of financial statements since the publicised corporate scandals e.g. Enron, WorldCom etc took place about auditors not applying sufficient scepticism. Curtis (2014) believes that there has been a noticeable emphasis on professional scepticism after the scandals in the auditing industry in the early 2000’s. It is unfortunate, however that audit failures are blamed on the accounting profession as a whole, whereas it takes a few auditors with poor ethical values to create such hysteria in the accounting field. The financial crisis that have affected the global markets and corporate scandals have eroded the public image and confidence of the audit profession (Espinosa-Pike & Barrainkua, 2011) and much criticism in terms of this challenge relates not to the auditor’s lack of knowledge, but rather to their ethical conduct. The aftermath of the corporate
scandals led to much debate about other issues in auditing such as auditor independence, the role of corporate governance, management’s responsibilities, professional obligations and whether consulting services are appropriate. (Accountancy SA, 2009). Exercising professional scepticism, together with other strategies that may be applied can help auditors avoid similar or comparable failures (Coppage & Shastri, 2014)

2.25 The role of Continuing Professional Development (CPD) on professional scepticism

Auditors are encouraged to update their skills levels on a continuous basis in order to adapt to the ever changing regulatory, economic and technological environments (Coppage & Shastri, 2014). AICPA (2003) as cited in Carpenter, Durtschi & Gaynor (2011) indicates that professional scepticism levels could dull or diminish over time. The role of Continuing Professional Development (CPD) becomes crucial in this regard, in ensuring that such professional scepticism levels are maintained at optimum levels. CPD assist auditors to maintain professional scepticism levels (Murray, 2012). The contribution of CPD is undeniable in the audit profession, as challenges rise, so does the need for CPD. “Given the rigour of the education and training process, the rigour of the qualification process, the technical competence of auditors, their multi-disciplinary knowledge and experience and a process of continuous learning and development, there is no doubt the auditor will be able to rise to the challenge and succeed” Accountancy SA (2009:7).

2.26 Challenges relating to professional scepticism

It is not clear what has led to a deficiency in professional scepticism levels. Previous research studies have explored possible challenges around the acquisition and application of professional scepticism by auditors. The inherent limitations of an audit may have a negative effect on the application of professional scepticism as well. In a financial audit setting, there is dependence on management to provide the necessary information required for audit processes. Lack of training has been cited by previous research in this area as a challenge. In some instances, management
may withhold information required, yet auditors are required to detect material misstatements that may be due to fraud or error in the financial statements where such important information may be withheld. The withholding of information by management may negatively impact on the exercise of professional scepticism. It becomes obvious that it is impossible for auditors to uncover all material misstatements which may be caused by fraud or error. Toba (2011:92) identified three issues that create a challenge in dealing with professional scepticism in auditing. The three issues identified were:

- Fear of increase in professional responsibilities
- Increase in complexity in external auditing environment
- The evidential positiveness under which auditors behave

“Improving professional scepticism is not easy because the degree of scepticism to be exercised is positively or negatively influenced by a variety of factors” Toba (2011:85). Murray (2012) highlights that the reason why professional scepticism challenges are not easy to overcome is because the barriers to it are very high. Another challenge in terms professional scepticism is that because an audit is performed in a sequential process, judgements are being made piecemeal as evidence is collected, an auditor may believe that sufficient evidence has been collected at these stages, on the other hand, when the regulators conduct inspections the audit with all the evidence at their disposal, months or years later could be of the opinion that the auditor did not display sufficient scepticism as they had failed to obtain sufficient and appropriate level of evidence (Rasso, 2015). The underlying factors that cause insufficient professional scepticism should be thoroughly understood in order to be able to identify how it may be increased (Brazel, 2013). The following discussion focuses on the factors that may potentially influence professional scepticism indicated in previous research studies.

### 2.26.1 The tone at the top

The tone for the proper application of professional scepticism levels should be set by those in the leadership positions in the various accounting firms. AICPA defines the
‘tone at the top’ as the “ethical atmosphere or organisational culture created by the head of the organisation in the workplace, which ultimately affects subordinates’ task performance” AICPA (2002:2). Synthesis of research studies indicate that auditors who work under a strict tone at the top behave more sceptically that those who do not. If the leadership promotes effectiveness (which is likely to lead to audit quality) as opposed to efficiency (which is likely to lead to lower audit costs) such a tone will filter down to the other members of the audit team. The actions of the engagement partner must emphasise to the engagement team that quality is essential and should be maintained in all processes of the audit, this could be achieved through a discussion with audit team members (IFAC, 2012). When auditors make professional judgments they tend to make decisions that their superiors prefer (Endrawes & Monroe, 2012). Gramling (1999) as cited in Kopp, Lemon & Rennie (2003) undertook a study that studied the influence of partner preferences on the manner in which audit evidence was collected by their junior members of staff, the results of that study revealed that partners can influence planned work efforts of their members of staff. The proper tone should be set by those in governance in promoting efficiency and in applying appropriate levels of professional scepticism (Curtis, 2014). “The culture within the accounting firm should also be promoting a culture of asking questions and questioning audit evidence provided by clients. This is to be perceived as healthy and appropriate” Curtis (2014:10).

2.26.2 General consensus about the nature and definition

The concept of professional scepticism is not explained with precision which may cause possible confusion to auditors (Nickell, 2012). There have been challenges indicated by prior research around the subject of professional scepticism in auditing. One of such challenges is that it debatable how an auditor acquires an acceptable level of professional scepticism and no agreement has been reached on the factors that may possibly impact on one’s level of professional scepticism. What contributes to this challenge is that it is not clear whether professional scepticism is a personality trait, a skill, a mindset, a mood state or behaviour. Nelson (2009) stated that although professional scepticism is a concept frequently referred to in the auditing standards, its’ reference is done with little precision. “Academics and practitioners
cannot develop better methods of teaching, training, or inducing scepticism until we have a better understanding of what it is and how it is formed” Velina (2012:152). Toba (2011) indicated that the absence of knowledge about what constitutes professional scepticism and a commonly accepted definition is challenging academic researchers to solve this problem. There is much confusion in practitioners and regulators as to what constitutes sceptical behaviour as a result of a lack of precision in the concept itself (Nickell, 2012). The underlying concepts relating to professional scepticism are straightforward, however there is a lack of common understanding or practical guidance on what it is and on how it can be demonstrated and documented (Glover & Prawitt, 2013). Research studies have indicated that most auditors believe there is a need for additional guidance on how to demonstrate professional scepticism in a manner that will be perceived as acceptable by regulators. Other researchers believe it is challenging for regulators to provide specific guidance and claim that “Auditors are well aware that professional scepticism is not a technical procedure that can be included in a template working paper” Penning (2014:2)

“Academic research can contribute to the profession’s efforts by exploring factors that potentially affect professional scepticism” Chung, Cohen & Monroe (2006:2). This view is echoed by Toba (2011) and further identifies three issues that create a challenge in terms of professional scepticism.

- “Fear of increased in professional responsibility
- Increase in complexity in external auditing environment
- The evidential positiveness under which auditors behave”

Toba (2011: 92)

2.26.3 High audit costs

The application of appropriate levels of professional scepticism may have a negative impact on audit costs. Highly sceptical auditors may be beneficial in terms of decreasing the risk of undetected misstatement but the negative is that this may lead to additional enquiries and procedures causing budget overruns, which is an unfavourable situation for both client and auditor as clients might be required to
respond to unanticipated inquiries (Brazel, 2013). Nelson (2009) indicates that as much as professional scepticism may come with its benefits in terms of detecting material misstatements due to either fraud or error but may lead to costly and inefficient audits because more work will be undertaken by auditors to obtain sufficient and appropriate audit evidence to support the assertions made by management.

Irrespective of the costs associated with the application of professional scepticism, Curtis (2014:24) states: “the accounting profession definitely needs to continue to promote and emphasize this crucial approach to auditing”. Hussin & Iskandar (2013) suggest that the audit fee structure should be reviewed in taking into cognisant the maintenance of high levels of professional scepticism. With the kind of competition and client pressure on auditors in terms of audit fee reduction, audit effort is discouraged (Nelson 2009).

2.26.4 Absence of a widely recognised measurement tools

Past research has also indicated that it is difficult to determine the nature, existence, level of professional scepticism and what affects its’ development. The measures applied in an attempt to measure the appropriate level of professional scepticism are perceived by some researchers to be unfair and discouraging to auditors (Brazil et al 2013).

2.26.5 Staff workloads and pressure-driven environments

Heavy workloads and time pressure have a negative impact on employee performance and well-being in many organisations. When pressure levels are elevated, employees face challenges in terms of performing to the best of their abilities. Coppage & Shastri (2014) state that heavy workloads on partner and professional staff could result in professional scepticism not being sufficiently maintained.
2.27 Theories Relevant To Professional Scepticism

There are two theories that provide guidance on matters relating to professional scepticism. The two theories are discussed below:

2.27.1 Mindset Theory

There are two types of mindsets identified by the Mindset Theory, a deliberate mindset and an implemental mindset. Deliberate mindsets are characterised by objectivity and impartiality whilst in the implemental mindset are characterised by bias and partiality, this makes individuals who have deliberate mindsets to remain receptive to information coming from various sources irrespective of its content on the other hand auditors in implemental mindsets are motivated to complete tasks at hand quickly and value information supporting a particular goal (Rasso, 2013). Interventions to improve deliberate mindsets in auditors are believed to the improving their ability to identify unreasonable estimates made by management in financial reports by improving their ability to identify and analyse information that could be contradictory, their critical thinking abilities are also improved by the interventions (Griffith et al, 2015).

2.27.2 Social Contracts Theory

The social contracts theory's view supports the International Standards on Auditing in that both require the auditor to be sceptical when viewing management’s assertions and also to explicitly consider management’s incentives to commit fraud (Peytcheva, 2013)

2.28 Models And Scales Relevant To Professional Scepticism

There are two models that were developed by Nelson (2009) and Hurtt et al (2013) as well as a scale to measure trait scepticism that was developed by Hurtt (2010). A discussion on the models and the scale follows:
2.28.1 Model of Professional Scepticism – Nelson (2009)

Nelson (2009) developed a model (Figure 2.6) of professional scepticism in auditing, which he drew from previous research in psychology and accounting. This model indicates that sceptical action and sceptical judgment are affected by incentives, traits, knowledge and audit experience and training. This model indicates the critical role of professional experience on the development and application of professional scepticism. The model indicates that knowledge and professional experience may have both negative and positive effects on professional scepticism in the sense that more experienced auditors are more likely to detect error conditions but at the same time more likely to assume that non-error explanations are correct.

Personality traits are also indicated to have an impact on professional scepticism, particularly self-confidence, problem solving abilities, ethical disposition and the tendency to doubt. Auditing firms are encouraged to enhance professional scepticism by hiring auditors who meet a particular level of professional scepticism and providing training on fraud indicators and negotiation techniques. For auditors with limitations in terms of cognitive reasoning, interventions may be introduced by the firms for improvement purposes. Nelson (2009) further indicates that incentives could be used to reduce judgment mistakes which may be as a result of a lack of effort on the part of auditors and incentives could be introduced to increase auditor effort.
Figure 2.6: Nelson (2009) Model


2.28.2 Hurtt’s Scale (2010) (HPSS)

Hurtt (2010) developed a scale to measure trait scepticism. This model focuses on pursuing doubt than following a particular direction of doubt thus favouring the neutrality perspective. The six trait characteristics that are measured by the scale are: a questioning mind, search for knowledge, suspension of judgment, interpersonal understanding, autonomy and self-esteem. There is limited evidence however that links higher HPSS scores with sceptical behaviour (Quadackers, Groot & Wright, 2014). The scale was reviewed by experts in both academic and professional auditing fields and piloted on professional auditors of a particular
accounting firm. The results indicated that the instrument was a valid tool that may be used to measure trait professional scepticism levels. Sayed and Takiah (2013) however, tested Hurtt’s professional scepticism scale in a Malaysian context and found that it still required further validity testing. The tests they conducted revealed that there could be variances as conditions and situations differ in other countries. Five out of the six trait characteristics were found to be relevant in the Malaysian context, the suspension of judgment trait was not considered to be a relevant attribute to professional scepticism.

2.28.3 Hurtts’ Model (2013)

Hurtt et al (2013) developed a model (Figure 1.11) that describes the factors that influence the professional scepticism and the exercise thereof. Hurtt’s model focuses on “auditor characteristics, evidential characteristics, client characteristics and external environment characteristics”. Hurtt et al (2013) indicates that the auditors’ individual characteristics, the client’s characteristics and environmental characteristics such as regulations, control environment and auditing standards influence the auditor’s professional scepticism. Auditor characteristics identified by the model as antecedents that influence professional scepticism are: moral courage, independence and knowledge. Evidential characteristics affecting professional scepticism indicated in the model are auditing standards, as they serve as authoritative standards, corporate governance through the audit committee as it plays a significant role in auditor selection and retention. Risk characteristics were amongst those identified as client characteristics affecting appropriate responses to the level of increased risk and factors that would assist auditors in moving from recognising the increased risk to a point where they take appropriate action, based on the risk assessment. Legal liability as a result of audit failures may also, according to the model, lead to auditors taking more sceptical actions when dealing with audit evidence, other factors also identified include auditor rotation, incentives and independence (Hurtt, 2013). A comparison of the Hurtt et al (2013) Model and the Nelson (2009) Model is shown in Table 2.5
Figure 2.7  Hurtt Model (2013)


Table 2.5:  Comparison of the Nelson (2009) and Hurtt et al (2013) Models
2.29 Summary

The literature review chapter provided a theoretical framework that guided the research study. It has also discussed different viewpoints on the acquisition and application of professional scepticism by trainee accountants, it is not however conclusive, based on the literature at this stage whether the factors affecting professional scepticism indicated in the study are the only factors affecting professional scepticism. The next chapter will discuss the research methodology adopted for the study.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The literature relevant to the study was reviewed in the previous chapter. This chapter entails a discussion on the research methodology applied to undertake this quantitative study. Research methodology is a coherent group of methods applied in research that complement or supplement one another with the aim of satisfying the needs of the study (Henning, 2004). The justification for the use of a quantitative positivist research will be provided in this chapter. A discussion will thereafter focus on the use of the survey methodology using online questionnaires as a data collection instrument. The sampling method applied will be discussed and details on data analysis are also covered in this chapter. As a final item, ethical matters considered in this study are discussed.

3.2 Research objectives

The objectives of the study were:

1. Determine if education and training provided to trainee accountants at Higher Education affect their level of professional scepticism.
2. Investigate whether the professional experience of trainee accountants, obtained through serving TIPP articles affect their level of professional scepticism.
3. Determine if culture has an impact on the professional scepticism of trainee accountants.
4. Investigate if professional scepticism levels of trainee accountants affect their professional judgment.
3.3 Research design

The aspects of the research design as covered in Chapter 1 will be explored to a greater detail in this chapter. Research design is “a plan or blueprint of how you intend conducting the research” Babbie & Mouton (2001:55). Huysamen (1997:10) also defines it “as a blueprint according to which data is to be collected in order to investigate the research hypothesis or question in the most economical manner possible”. All the considerations that the researcher makes in ensuring that the study is appropriately conducted are included in the research design. A research design is similar to a chosen pathway chosen to reach a destination point. According to Hart (2009), the purpose of research is to contribute to the understanding of the world around us. The research design should assist the researcher obtain more understanding about the topic under study. Koshy (2005) states that research methodology and design relates to all the planning that precedes the action in terms of research. Wayhuni (2005) states that careful consideration on paradigms; methods and methodologies must be made by the researcher at the conception of the research project in order to achieve a good scientific study.

3.3.1 Nature of research

There are two types of scholarly research that may be conducted, basic research as well as applied research. Neuman (2000) describes basic research as research that is aimed at supporting or rejecting theories by explaining and interpreting changes in different communities and is undertaken to enhance scientific knowledge about the world. Basic research aims to examine the validity of general statements made about relationships that involve social processes, applied research on the other hand aim to solve real and specific problems and geared towards the generation of new knowledge (Knoke, Bohnstedt & Mee, 2002). Social science research involves the study of people, beliefs, behaviour, social interaction, institutions etc. and its purpose may be exploratory, where a new topic is explored, it can also be explanatory, when it explains why things happen and may also be descriptive, where such studies aim to describe a social phenomenon (Neuman, 2000).
3.3.2 Research Approaches
Social research studies are dominated by two methodological paradigms, the qualitative research approach and the quantitative approach. Quantitative studies are linked to the positivism paradigm whereas qualitative studies are linked to interpretivism and phenomenology. The mixed methods approach is a combination of the two approaches and is also used in many research studies.

3.3.3 Paradigm/Tradition
Selecting a paradigm is necessary in research as it guides the researcher in determining how to study the phenomena. According to du Plooy-Cilliers, Davis & Bezuidenhout (2014), adopting a paradigm assists the researcher in deciding what is worth investigating for its perceived importance and also assists the researcher in deciding on the best possible process to undertake the research. Dirsmith et al (1985) argue that epistemological assumptions are affected by the way we understand things. Du Plooy-Cilliers, Davis & Bezuidenhout (2014) state that in the social sciences, “paradigm” could be replaced with ‘research traditions’. Since research is a rigorous investigation, it becomes necessary for it to be performed following a systematic process. The term ‘paradigm’ originates from linguistics and it means the various forms a word can take in some languages (de Vos, 2005). The word paradigm could also mean “an example or pattern” according to widely available dictionaries.

All scientific research is conducted under a certain paradigm. Scientific research, according to de Vos (2005) is systematic, controlled and empirical. This study is an empirical investigation of the phenomenon. Du Plooy-Cilliers, Davis & Bezuidenhout (2014:23) define an empirical investigation as “concerned with phenomena that are confirmable through observation and experience, as opposed to the application of theory or logic”. Du Plooy-Cilliers, Davis & Bezuidenhout (2014) further indicate that such research is concerned with what causes certain things to happen and what affects certain things.

There are three distinct traditions in research, namely, interpretivism, positivism and critical realism. (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014). The research
tradition that is adopted in this study is Positivism.

3.3.4 Positivism
This research study has its epistemological roots in positivism. Positivism is “the approach of the natural science and believe that humans could improve their own world and become better people through educating themselves” du Plooy-Cilliers, Davis & Bezuidenhout (2014:24). De Vos (2005) states that the positivist tradition is widely used in quantitative studies. Du Plooy-Cilliers, Davis & Bezuidenhout (2014) argue that positivists are of the opinion that knowledge is as a result of empirical observation and that they obtain knowledge through careful observation and testing of assumptions against the real world.

The evidence that is collected by positivists when conducting research is used to support or to reject their assumptions initially made. The belief of positivists is based on the assumption that “there is a single, objective and stable social and physical external reality that is governed by laws, such reality may be known, observed and measured” du Plooy-Cilliers, Davis & Bezuidenhout (2014:25). Studies based on positivism aim to generalize findings on causal relationships between variables.

3.3.5 Quantitative research
Quantitative research is “an enquiry into a social or human problem, based on the testing of a theory composed of variables, measured with numbers and analyzed with statistical procedures in order to determine whether the predictive generalizations of the theory hold true” de Vos (2005:74). Methods used in quantitative studies apply deductive logic. Deductive logic, moves from the general to the specific which means that researchers, in applying this reasoning start by generalizations and conduct studies to prove these.

The intentions of quantitative research are to measure the social world objectively, to test hypotheses as well as to predict and control the behaviour of humans (Creswell (2003). De Vos (2005) states that some of the characteristics of quantitative research are that the researcher acts as an observer and his/her participation is limited to what is required to obtain the required data and that data collection methods are applied in a standardized manner, and all participants are required to
answer the same questionnaire. Fox & Bayat (2007) state that quantitative research is concerned with systematic measurement and systematic analysis.

The characteristics of quantitative studies include that they focus on specific questions that remain constant throughout the research and the measurement used is generally based on specific variables that are quantified through rating scales, frequency counts and other means (de Vos, 2005). A variable is “a characteristic of persons (or objects) or a condition which they are exposed to, that is not the same for all persons (or objects)” Huysamen (1997:1). It can also be explained as a characteristic or attribute of objects, persons or events that may take on different numerical values (Knoke, Bohrnstedt & Mee, 2002). There are two categories of variables, latent and manifest variables. Latent variables are only measured indirectly and are not observable whereas manifest variables may be observed. Variables may also be classified according to the role they play in a hypothesis. The two classifications are independent and dependent variables. An independent variable has a causal role and generally appears first. The dependent variable is the one being affected in relation to the independent variable (Knoke, Bohrnstedt & Mee, 2002).

The researcher adopted a quantitative approach to conduct the study. This approach was selected on the basis that it is best suited to address the research questions of the study. This approach is believed to be relevant as the study seeks to determine the relationship between distinct variables and is deductive in nature. The study is non-experimental as no intervention is introduced by the researcher.

3.3.6 Survey research
A survey research method was applied in the study to collect data. McIntyre (2005) states that a survey is a series of questions that are asked of a specific set of people. There are four types of surveys, self-administered questionnaires, online questionnaires, face to face interviews and telephone surveys. The benefit of using self-administered questionnaires is the achievement of high response rates but may be time consuming and expensive. The advantages associated with web-based surveys include low cost and the availability of various designs (Monroe & Adams, 2012). Online questionnaires however, have a tendency of lower response rates but
are a practical method when it is impractical to collect data from many locations. Surveys may also be categorized as longitudinal surveys, cross-sectional studies and trend/prediction studies. Some of the properties of data collected using surveys that make survey data preferable over data collected through other sources are indicated by Fowler Jr. (2009:3) as:

- Probability sampling increases confidence that the sample was not a biased one
- Standardized measurement that is consistent across all respondents ensures that information collected is comparable and described
- Special-purpose surveys may be the only way to ensure that all the data needed for a given analysis are available and can be related.

3.3.7 Descriptive Research
The nature of this study is Descriptive. The aim of descriptive research is to describe events and situations with the view of describing and analyzing developing trends or for analyzing current situations. Descriptive studies apply various data collection methods such as document analysis, case studies, surveys etc. According to Fox & Bayat (2007), descriptive research is best suited in situations where the researcher is aiming at casting light on current issues through the process of data collection thus allowing for the situation to be described better. Different survey could be undertaken in descriptive research i.e. comparative, evaluative and descriptive surveys. Descriptive surveys could take various forms; they can be correlation surveys, case study surveys, mass surveys and retrospective surveys.

3.3.8 The Research Site
The location of the research is the Durban and Midlands regions of KwaZulu-Natal. There are 137 accredited SAICA training offices in the Durban region and 47 Accredited Training Offices in the Midlands regions, 58 of which offer TIPP training. The research site was chosen based on access and cost.

3.3.9 Profile of Participants
The participants selected for the study were similar in terms of the nature of exposure to education; all had undergone formal education and had similar levels of
professional experience as most were serving TIPP articles. In terms of demographics, most racial groups were represented in the study. Gender representation was considered as both genders were represented. The qualification level of the sample varied from those possessing National Senior Certificates – Grade 12, to those in possession of Bachelor’s Degrees, Honours and Honours (CTA). None of the participants were in possession of a Masters or Doctoral degree. The participants were geographically spread and serving TIPP articles across Durban and Midlands.

3.3.10 Data collection

Sekaran & Bougie (2009) indicate that there are two types of sources from which data may be obtained; these are primary and secondary sources. Primary sources provide ‘first-hand’ information and secondary sources provide information from other existing sources. The aim of all methods is “to obtain valid and reliable data – true answers to questions, not distorted by the methods of collection or prone to chance fluctuations” Sapsford & Jupp (2006:97). There are various methods of collecting data, each with its unique set of advantages and disadvantages. Data collection methods examples include interviews, observations, experiments and questionnaires. Fox & Bayat (2007) believe that careful consideration of the data collection instrument should be made by the researcher; the research instrument should be reliable and valid. An instrument is reliable if it produces analogous results in the same or similar context and in similar or same research populations. Validity in terms of the instrument is achieved when the instrument measures what it is supposed to measure. Online questionnaires sent via a URL link were sent to the Human Resources Departments of the various audit firms to be forwarded to sampled respondents from their firms.

3.3.11 Participant selection

When conducting a research study, it is necessary to clearly define the group from which data is to be collected and conclusions drawn. The selection of participants was influenced by the geographical location of the researcher and access. Participants are of mixed nationalities. I selected participants who met the following criteria:
1. Trainee accountants who are in possession of a National Senior Certificate (Grade 12) as a minimum qualification
2. Trainee accountants who are in their 1st, 2nd or 3rd year of SAICA training articles.
3. Trainee accountants who are serving TIPP articles in 2015 in the Durban and Midlands regions of KwaZulu-Natal.

The decision to study trainee accountants who are serving their SAICA articles was guided by the fact that the researcher felt that these participants were better suited to answer the research questions as they have been exposed to both training and experience in the auditing field and their roles in audit engagements is significant. Permission to conduct research on trainee accountants was obtained from the SAICA National Office through a signed gatekeeper letter. SAICA is a professional body that serves the interest of Chartered Accountants and trainee accountants. The signed gatekeeper letter was attached to the email containing the URL link to the online questionnaire that was sent to the various HR departments of the audit firms.

3.3.12 Sampling technique

A sample is any subset of the elements of the population that is obtained (by some process) for the purpose of being studied. A population, on the other hand may be defined as “the totality of all respondents who meet the criteria set out for a particular research project” Fox & Bayat (2007:18). The process by which elements are drawn from the population is known as sampling (Fox & Bayat, 2007). Sampling is the process of selecting a sufficient number of the right elements from the population so that a study of the sample makes it possible for one to generalize to the population elements, including those not selected in the sample (Sekaran & Bougie, 2010). Huysamen (1997) describes a sample as a small subgroup taken from a population. The aim of sampling is to “save time and effort, but also to obtain consistent and unbiased estimates of the population status in terms of whatever is being researched” (Sapsford & Jupp, 2006:26). Another sampling objective is to obtain a sample that is representative of the entire population (McIntyre, 2005). There are two categories within which sampling techniques fall, probability and non-probability
sampling. Probability sampling is a method that ensures that each element in the population has a known and non-zero probability chance of being selected in the research sample (Fox & Bayat, 2007). Non-probability sampling does not afford the elements of a population an equal opportunity to being chosen as sample participants (Sekaran & Bougie, 2010). A representative sample was drawn from the population using probability sampling. One of the benefits of probability sampling is that it produces valid deductions about the population because of the use of no particular pattern. Another advantage highlighted by Welman, Kruger & Mitchell (2005) is that it enables researchers to indicate the probability with which the results of the sample deviate in differing degrees from the corresponding population values (for example population means). Probability sampling includes stratified random sampling, systematic, simple random sampling and cluster sampling (Sapsford & Jupp, 2006). The sampling method that was used is Multi-stage cluster sampling.

3.3.13 Probability sampling

It is appropriate in studies that involve large population sizes to select participants through probability sampling. Probability sampling was chosen with a view of ensuring that each participant within the population has an equal chance to be selected as part of the sample. Babbie (2007) states that the fundamental idea behind the use of probability sampling is that a sample of individuals from the target population must essentially contain the same variations that exist in the total population and that the sample must be representative of the entire population.

3.3.14 Multi-stage cluster sampling

According to Babbie (2007), cluster sampling is appropriate when it is either impossible or impractical to compile a complete list of the elements that compose the target population. In this particular study, practicality was the major factor in deciding on the sampling method. The type of sampling method used was Multi-stage cluster sampling. Because of the fact that training contracts may be entered into, cancelled and end at no specific period, it was impractical to determine the exact number of the population, as a result, the population size was estimated. Du
Plooy-Cilliers, Davis & Bezuidenhout (2014) state that multi-stage cluster sampling is appropriate in studies where the population is widespread and the population size is high. According to Welman, Kruger & Mitchell (2005) in cluster sampling, the first step is to draw (or stratify randomly); pre-existing, heterogeneous groups called clusters and then random samples selected from the clusters will be the study sample. Random sampling provides every member of a population with an equal chance to be selected for participation (Maree, 2007). This sampling method was selected with a view of achieving a manageable sample size. The advantages of random sampling include that it is free of systematic bias and that it facilitates the estimation of the probability of findings that may occur solely by chance. Babbie (2007) believes that the use of cluster sampling results in studies that would seem impossible, possible. Sapsford & Jupp (2006) claim that cluster sampling is cheaper than other methods as data collection costs can be reduced greatly. There were 58 clusters determined in the study.

Sapsford & Jupp (2006) argue that the choice of method to be applied in research studies is a question of balancing accuracy against cost and feasibility. The sample size was determined using a similar method as indicated in Figure 3.1 and 3.2 below.

Figure 3.1 Multi-stage cluster sampling: Durban
3.3.15 The determination of the sample

The research population was made up of all trainee accountants who were currently serving SAICA TIPP training articles in 2015 in the 58 accredited training offices, registered with the South African Institute of Chartered Accountants (SAICA) in the Durban and Midlands region currently offering TIPP (Training Inside Public Practice) contracts, four out of the 58 Training Offices did not participate. Due to the nature of the training programme, it was impossible to determine the exact number of trainee accountants serving TIPP articles in these two regions at the time the study was
conducted because such training may begin at any time which implies that admissions take place throughout the year, trainees have different end dates in terms of their training contracts and training contracts may be terminated at any time.

The average population of trainee accountants in Durban and Midlands was challenging to determine. Working with the SAICA statistics indicated in the CA Charter (2014), a total number of trainees in South Africa were 7952 in 2014. Judging by the figures, the number of trainees declines every year. The number of trainees have declined by 22% from 2006 (10206) 2014 (7952). Based on the statistics, the researcher expects that in 2015 there were fewer trainee accountants than in 2014. Of the 7952 trainees, the Fasset SSP Draft (2015) indicates that 53% are employed in the Gauteng Province, KZN only employs 8%. Using this data, the researcher estimated a total population as follows: 7952x8%=636 x 60% = 381. The reason behind not regarding 636 as the population is because the researcher focused the study on just two regions of KZN, the Durban region, which is expected to employ more trainees and the Midlands region. The limitation in terms of obtaining up to date data resulted in an estimated population size. From the fifty training offices willing to participate, the sampling was done in the following manner: 12 participants were requested from the big to medium training offices (10 x 12 = 120). From the smaller training offices, 2 participants were requested (40 x 2 = 80). A total of 200 questionnaires were sent online, an additional 14 questionnaires were sent to the Human Resource Departments of the firms that opted to email the trainees from their Human Resource Departments, resulting in 214 questionnaires seen. 73 questionnaires were completed out of 109 that were started by survey participants. A representative sample was then determined.

Trainee accountants in TOPP (Training Outside Public Practice) contracts were excluded from the study. A sampling frame was determined. Fowler Jr. (2009) states that a sample frame is a set of individuals who have a chance of being selected as a sample given the sampling approach selected by the researcher. In order to determine the sample frame, Fowler Jr. (2009) suggests the following are evaluated, the comprehensiveness of the sample frame, probability of selection and efficiency, where you consider the rate at which members of the target population can be found amongst those in the sample frame. Since the population is
homogenous in characteristic, the researcher was confident that the sample size was representative of the total population. No incentives were offered to induce or reward participation.

3.3.16 Questionnaires
Babbie (2007) describes a questionnaire as a document that contains questions and other types of items that is designed to solicit information appropriate for analysis. Questionnaires are used primarily in survey research but may also be used in experiments, field research and other modes of observation. Questionnaires are used as a data collection method in this study. Data collected using questionnaires is easy to compare and analyze and is helpful when collecting data from many people (Mertens & McLaughlin, 2004). This method of data collection is aligned with the purpose of the study as well as the research questions. Fox & Bayat (2007) highlight that the advantages associated with questionnaires are that questionnaires are familiar to most people, they reduce bias, generally easy to analyze, less intrusive and are cost-effective. In designing the questionnaire, considerations about the variables to be measured, sequencing of the questions, measurement and the literature review should be made.

The questions in the questionnaire were forty nine closed questions requiring a single response from the participant. The questions included demographic questions and questions that addressed each of the research questions. Fox & Bayat (2007) describe a closed question as a question that contains specific, mutually exclusive response categories from which respondents must select a category that best fits their answers, respondents are requested to choose an answer from given alternatives (Bayat, 2007). The questions were unambiguous, precise and fairly easy to read. The use of closed-ended questions in a questionnaire is appropriate when the number of respondents is high and when a list of alternatives is available to which a researcher wants people’s reactions. Open-ended questions are mostly used in exploratory research when the researcher does not know what answers to expect from research participants (McIntyre, 2005). Careful consideration has been made to ensure that the questions are relevant in terms of the objectives of the study and research questions. Care and skill has been exercised by the researcher in
ensuring that the questions are not confusing and that the design of the questionnaire is well-presented.

The QuestionPro software was made available to the researcher through the UKZN license and was used to send questionnaires to the participants via a URL link. The benefits associated with the use of online questionnaires include economic and methodological benefits. With the use of technology, a much larger group of participants can be reached. The questionnaire was sent indirectly via the Human Resources Departments of the various audit firms, only 2% of the questionnaires were sent directly to respondents as such a firm had provided the email addresses. An online survey link was sent to all sampled respondents, included in the document was a participant consent letter that all those who participated had to provide their consent through, it also had an introductory page that detailed all the details of the study, the objectives and what the results of the study was to be used for. It also explained that participants were free to withdraw from the study at any time without any negative consequences and that participating was voluntary. A copy of the questionnaire is included in the annexure section of the document.

Two follow-up email reminders were sent to the trainees through their respective HR departments in order to improve the response rate. The response rate indicated a 5% increase after the two reminders. Fowler Jr. (2009:49) explains the reasons for non-responses as follows “those whom the data collection procedures do not reach, thereby not giving them a chance to answer questions, those asked to provide data but who refuse to do so and those who were asked to provide the data but were unable to perform the task required e.g. those on leave, or those who may have been sick at the time. From the 58 Training Offices, four did not participate, one of such firms indicated that they had no trainees in 2015 while the other three indicated that the trainees were too busy to participate in the research study. The response rate was 37% and a completion rate of 67% was achieved. The researcher had anticipated the low response rate due to the data collection method used and due to the timing of the survey that co-incised with a busy period for trainee accountants. The following are reasons that resulted in a response rate of 37% and completion rate of 67%:

- Some HR personnel representing in the various audit firms indicated that the
trainees were busy finalizing audits and thus too busy to participate

- The period of data collection coincided with a year-end when most audits are being finalized, time pressure on trainee accountants was observed.
- Data collection also coincided with APC exams, some trainees were preparing for this important assessment necessary for their professional career progression.
- Due to the nature of audit assignments allocated to trainee accountants that require them to travel to clients all over the country, some trainees were at various locations (client premises) where some did not have access to resources, so access to the online questionnaire was restricted to those who had access at the time of the study.
- Emails were not sent directly but indirectly through the various HR departments or contact person, most audit firm preferred this method as it safeguarded the anonymity of their trainees.

3.3.17 Likert scale
The Likert scale was invented by R. Likert (1903 -1981). Fox & Bayat (2007) indicate that Likert scales are popular in social science research and consist of a collection of statements and respondents are required to indicate their level of agreement or disagreement with such statements on a graded scale, the Likert scale. In this study a Likert scale was used, the responses that a participant could choose from were graded by the researcher into five mutually exclusive categories. The possible answers ranged from strongly disagree to strongly agree.

3.3.18 Pilot study
Sapsford & Jupp (2006) describe a pilot investigation as a small-scale trial before the actual research which is intended to assess the adequacy of the research design and instruments to be used for data collection. One of the benefits of piloting a research instrument before it is administered on the actual sample is that it’s deficiencies may be detected and improved upon prior timeously. Welman, Kruger & Mitchell (2005) also highlight that pilot studies detect possible flaws in the measurement procedures and identify unclear or ambiguously formulated items thus
allowing researchers an opportunity to improve on such before the actual research starts. The research design and instrument was piloted and administered to ten trainee accountants who did not form part of the sample. The pilot group was from the Southern region of KwaZulu-Natal, this pilot group was selected on the basis of them having similar characteristics and conditions as the target population. This will allowed the research tool to be pre-tested with the view of identifying problems before the tool was administered to the study sample and will was a trial-run of the research.

The results of the pilot study detected some weaknesses in the design that were subsequently improved upon. One of the advantages of piloting the design and instrument is to test check the different types of possible responses and limitations of the research design before the actual research is undertaken, in that way, it allows for corrective action to be effected prior to the actual research. The researcher was able to determine if the language used was appropriate and understandable, and if the questionnaire would take the participants a shorter or longer time than anticipated. The results obtained through a pilot investigation were informative and treated with due care and consideration.

3.4 Data analysis

Data collection produces new information or data about the world that requires further processing. (Babbie & Mouton, 2011). Data collected from individual trainee accountants were the units of analysis in this study. Data analysis is a process of transforming ‘raw data’ into variables that can be analyzed to produce the information found in the results section of the study and it entails constructions of meanings from data collected. Data obtained from trainee accountants was analyzed and synthesized following a quantitative approach through statistical analysis using the QuestionPro software. Statistics involves the use of mathematical techniques to analyze data (du Plooy-Cilliers, Davis & Bezuidenhout, 2014).

Koshy (2005) suggests that researchers should revisit the aims of the study before
unpacking the data collected. Computer software was used for data entry and data transformation. The use of computer software, QuestionPro was selected because of the speed and efficiency of computerized processing as opposed to manual analysis and because the tool for analysis is available and accessible in the software. Descriptive statistics were indicated to provide a summary of the data. Huysamen (1997) states that the purpose of descriptive statistics is to facilitate the process of drawing conclusions about the data obtained. Charts and graphs were used to present the results of the study. Displaying the data in this manner is conducive to better interpretation and to the drawing of conclusions by the readers of the research.

3.5 Validity

According to du Plooy-Cilliers, Davis & Bezuidenhout (2014:256), the intention of assessing the validity of the research is to determine whether the research measured what it was supposed to measure. To test for the internal consistency reliability, Cranach’s Alpha can be used. According to Sekaran & Bougie (2010:324), Cronbach’s Alpha is applied in terms of the average intercorrelations among the items that measure the concept. It is further stated that higher internal reliability is achieved if the Cronbach’s Alpha is as close as possible to 1. Consistency was achieved through the use of one data collection instrument for all research participants.

3.6 Ethical considerations

Observing ethics is important in research studies. Sekaran & Bougie (2010) indicate that ethical conduct must be observed by all who play a role in the research project, the researcher, the sponsors, the participants, those who analyse the data and all who assist in any way. All research participants as well their respective identities will remain anonymous to the readers of this research. All participants were informed of the confidentiality of their identity and responses. The responses of participants were treated with the strictest care. The researcher informed all participants in the introductory page of the online questionnaire about how the results of the research
will be used. Truthfulness and respect is maintained in all the research stages. The research did not involve minors and abused women. No offensive language in the data collection tool and in all other correspondence with the participants was used. All participants participated at their free will and consent was obtained. All participants were informed that they may withdraw their participation in the research at anytime without prejudice.

3.7 Summary

The research methodology chapter indicated the research design adopted in the study as guidance. The data collected was aimed at finding solutions to the research problem and to achieve the objectives of the study. The next chapter will focus on the presentation and analysis of data collected in the study.
4.1 Introduction

The previous chapter provided a description of the research methodology employed in the study. It also provided justifications for research methods used for gathering research data. This chapter will provide a presentation of the results of the study.

4.2 Purpose of the study

The purpose of the study was to establish whether training/education, professional experience and culture affected the development or exercise appropriate levels of professional scepticism by trainee accountants from the Durban and Midlands regions of KwaZulu-Natal.

4.3 Demographic profile of participants

The research sample was composed of 73 trainee accountants currently serving TIPP articles in SAICA Accredited Training Offices in the Durban and Midlands regions of KwaZulu-Natal. Both genders were represented; females were the majority, with a 59% representation. The majority of the participants were from the Durban region. The majority were between the ages of 23 – 28, with English being the home language of most participants. 95% of participants were South African. The results indicated that the majority of participants were in possession of an Honours CTA qualification. In terms of professional experience, obtained through serving articles, 35% of participants had experience of less than one year.
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4.4 PRESENTATION OF FINDINGS

Figure 4.1  *Trainee accountants could be trained to think sceptically.*

Findings shown in Figure 4.1 indicate that most participants are of the opinion that sceptical thinking may be taught. This highlights the significant role played by education and training on the development of sceptical thoughts.
Trainee accountants could be trained to act sceptically.

The results shown in Figure 4.2 indicate that most participants (48.61%) believe that sceptical action may be triggered by education and training.

The knowledge I acquired through an auditing course at University enabled me to develop a sceptical mindset.
The results show that 43.06% of participants believe that their sceptical mindsets were developed somewhat by the knowledge they acquired through an auditing course at University. Only 6.94% were in strong disagreement with the statement.

**Figure 4.4** The education I received at University prepared me for my career requirements as a trainee accountant.

The Figure, 4.4 summarises the results obtained from participants and indicates that 41.67% of them somewhat agreed that the nature and extent of education they received whilst at University played a role in preparing them for the career demands of the profession. Only 4.1% felt that education received as a student at University did not prepare them sufficiently for the profession.
Figure 4.5  Exposure to fraud-related case studies at University may promote sceptical thinking.

The findings in relation to this statement, as indicated by Figure 4.5 shows mixed perceptions about the use of fraud-related case studies in an attempt to induce sceptical thinking. Only 38.5% somewhat agreed, whilst 35.71% strongly agreed.

Figure 4.6  Education is the most effective tool for developing professional scepticism
The results shown in Figure 4.6 illustrate that most participants (43.66%) were of the opinion that education was somewhat the most important tool that may be applied in developing professional scepticism.

Figure 4.7  I attribute my level of professional scepticism to the education I received at University.

Mixed responses were received as responses to this statement, as shown by Figure 4.7. 40% of participants somewhat believe that their professional scepticism level is attributable to the education received as an accounting student at University.
Figure 4.8   Education relating to professional scepticism could be improved at University.

The majority of participants (50%), as shown in Figure 4.8 were of the opinion that the provision of education and training on professional scepticism may be improved at Higher Education. These results will have to be considered by academics in the Accounting/Auditing discipline when developing learning materials.
Figure 4.9  I am always sceptical about trusting audit evidence provided by a client because I was trained to be like this.

The findings shown in Figure 4.9 show that (42.86%) of trainee accountants are able to sceptical in terms of trusting audit evidence until obtaining satisfaction about it because they have been trained to display such behaviour.

Figure 4.10  No amount of education and training can make me develop professional scepticism.

Findings, as shown in Figure 4.10 show that most participants disagreed (66.66%) that education has no role in developing one’s level of professional scepticism.
I am aware of the International Standards on Auditing that indicate requirements in terms of professional scepticism.

A vast majority, 69.44% (as indicated in Figure 4.11) indicated that they were aware of the International Standards on Auditing that prescribe their responsibilities in terms of professional scepticism.

I am aware of what is required of me as a trainee accountant in terms of professional scepticism.
A significant majority (74.29%) of participants indicated that they were aware what is expected of them in terms of exercising appropriate levels of professional scepticism, this is indicated by Figure 4.12.

![Figure 4.13 Exercising inappropriate levels of professional scepticism may cause audit failure.](image)

The results shown in Figure 4.13 indicate that almost half of the participants (47.83%) were in support of the statement that indicates that audit failures may be caused by inappropriate levels of professional scepticism exercised by audit professionals.
Figure 4.14 Training on professional scepticism may improve professional judgment.

The findings revealed that 44.93% of trainee accountants, as indicated by Figure 4.14 believe that there is a relationship between professional scepticism and professional judgment. 42.83% of trainee accountants strongly believed that such a relationship exists.
Figure 4.15  Sceptical behaviour is more important to me as a trainee accountant than pleasing a client.

The Figure 4.15, demonstrate how the participants thought about professional scepticism and pleasing the client. The majority of them agreed that pleasing a client was not as important to them as exercising professional scepticism.

Figure 4.16 Forensic auditing courses may enhance sceptical thinking.

Results in Figure 4.16 indicate that most participants were in favour of the introduction of forensic auditing courses at University with a view of enhancing sceptical thinking in students.
Research findings revealed that 30.43% of participants somewhat agreed that their sceptical mindsets were developed through professional experience whilst serving TIPP articles, 21.74% strongly agreed as well.

Figure 4.18 The coaching and mentoring by experienced auditors has helped me develop a sceptical mindset.
The findings shown in Figure 4.18 indicate that coaching and mentoring by experienced auditors is believed to have a positive effect on the development of professional scepticism by trainee accountants, 43.48% strongly agreed, whilst 39.13 somewhat agreed.

Figure 4.19 I attribute my current level of professional scepticism to the work experience (articles).

The results revealed by Figure 4.19 show that most participants attributed their professional scepticism levels to professional experience obtained through serving articles.
Figure 4.20 Informal dialogue amongst experienced auditors and trainee accountants about fraud may enhance the development of professional scepticism by trainee accountants. Most participants (44.78%+37.31%) agreed that informal dialogue between experienced auditors and trainee accountants may have a favourable effect on the development of professional scepticism by the trainee accountants. Figure 4.20 suggests such.

Figure 4.21 It is only through professional experience that trainee accountants may develop professional scepticism.
Mixed responses, as indicated by Figure 4.21 were obtained in terms of this statement. Almost 50% of participants somewhat agreed that it is only through professional experience that trainee accountants may develop professional scepticism.

Figure 4.22 I believe that we learn more by doing, which is why I attribute my professional scepticism level to the professional work experience (training articles)

The results indicated in Figure 4.22 indicate that the majority of participants somewhat agreed that learning by doing was effective, and thus have developed their scepticism through professional experience.
Figure 4.23  Professional scepticism could develop over time.

The findings as indicated in Figure 4.23 suggest that most trainees, almost 50% suggest that professional scepticism could develop over time.

Figure 4.24  Continuing Professional Development is necessary for maintaining professional scepticism levels.
The results shown in Figure 4.24 reveal that almost half of the participants strongly believe that CPD has a favourable effect on the maintenance of professional scepticism levels.

![Bar graph showing distribution of responses to the statement about serving training articles as the only way to develop professional scepticism for prospective auditors.]

**Figure 4.25** Serving training articles is the only way to develop professional scepticism for prospective auditors.

The findings in Figure 4.25 indicate that the views of participants were divided in terms of this statement. With 32.84% somewhat in agreement and 22.39 somewhat in disagreement with the statement suggesting that it is only through professional scepticism that one may develop professional scepticism.
Findings revealed in Figure 4.26 indicate that the majority of participants (61.76%) strongly agreed that exposure to different audit enhances a sceptical judgement.

Figure 4.27 Professional scepticism develops within a socio-cultural environment.
The results indicated in Figure 4.27 suggest that research participants acknowledge that professional scepticism develop within a socio-cultural environment. 44.12% of participants somewhat agreed that socio-cultural influences may affect the development and exercise of professional scepticism.

Figure 4.28 Culture has a role to play in the development of professional scepticism.

Culture (as indicated in Figure 4.28) was indicated by just 38.81% of participants as a factor that may play a role in the development of professional scepticism.
Figure 4.29 Cultural diversity may hinder audit judgments made by audit team members.

The views of the participants as shown in Figure 4.29 were widespread, 11.94% strongly agreeing that cultural diversity may hinder audit judgments and the same percentage, 11.94% strongly disagreeing with the statement.

Figure 4.30 I prefer working with team members of the same cultural background as mine; it makes our professional judgment as a team better.
The Figure 4.30 shows that the highest number of participants (46.97) were in favour of culturally diverse audit teams, as they disagreed with the statement suggesting preference in working with team members who shared a similar cultural background as themselves.

![Bar chart showing distribution of opinions]

**Figure 4.31** Cultural differences may lead to different audit judgments taken by team members based on the same evidence.

The views of the participants varied across the options available in terms of the statement made. Figure 4.31 shows that only 8.96% strongly agreed whilst 25.37% strongly disagreed. 13.43% were not sure if cultural differences could lead to different audit judgments, based on the same audit evidence obtained.
Figure 4.32  My cultural background has contributed to my professional ethical values.

The results in Figure 4.32 show that the views were widespread but with the majority of participants somewhat and strongly in agreement with the statement that suggest that their cultural background has shaped their professional values.

Figure 4.33  Gender roles as determined by different cultures may affect one’s level of professional scepticism.
As illustrated in Figure 4.33, the responses to the effect of gender roles on professional scepticism is debatable, no consensus is arrived at on this statement, only 4.62% agreed that gender roles have an effect on one’s exercise of professional scepticism.

Figure 4.34  Culture has a powerful influence in shaping behaviour in a professional setting.

Results obtained as indicated in Figure 4.34 shows that 33.33% of participants somewhat agreed that culture is a powerful factor in shaping behaviour in a professional setting.
Figure 4.35  My cultural background has shaped the kind of trainee accountant I am.

The results, as indicated by Figure 4.35 indicate that only 38.24% of participants are of the opinion that their cultural backgrounds have shaped the kind of trainee accountants they had become.

Figure 4.36  Culture is the most important contributor to the development of professional scepticism by trainee accountants.
The results depicted above (Figure 4.36) indicate a difference in opinion in terms of the participants. 27.54% were not sure if culture contributed the most to the development of professional scepticism by trainee accountants. Only 8.70% strongly agreed that culture contributed significantly to the development of professional scepticism by trainee accountants.

![Bar chart showing opinions on culture contributing to professional scepticism]

Figure 4.37  Professional scepticism does not affect professional judgment

The results indicated on Figure 4.37 shows that only 2.9% of participants strongly agreed that professional scepticism does not affect professional judgment, the majority of participants somewhat and strongly agreed that a professional scepticism does affect professional judgment.
Figure 4.38 A high level of professional scepticism results in better professional judgment.

As illustrated in figure 4.35 above, 36.23% strongly agreed that high levels of professional scepticism exercised by audit professionals lead to better audit judgments. Only 4.35% strongly disagreed with the statement.

Figure 4.39 Developing an appropriate level of professional is necessary to ensuring good professional judgment.
The results indicated in figure 4.39 above illustrate that participants agreed, strongly and somewhat (38.24% + 41.18%) that developing appropriate levels of professional scepticism is necessary for ensuring good professional judgment.

Figure 4.40  Professional judgments may be enhanced by exercising appropriate levels of professional scepticism.

The findings indicated in Figure 4.40 shows that most participants agreed somewhat and strongly (47.06% + 36.76%) with the statement that suggests that professional judgments could be enhanced by exercising appropriate levels of professional scepticism.
Figure 4.41  Policies and procedures designed to promote professional scepticism are necessary.

Results shown in Figure 4.41 reveal that the majority of participants, combining those who agreed somewhat (47.83%) and those who strongly agreed (39.13%), agree that having policies procedures in place to address professional scepticism may promote professional scepticism.

The Spearman's’ rho Correlation Analysis

The Spearman’s’ rho correlation was performed using the QuestionPro software, this software was also used to collect data online through questionnaires. The Spearman’s Co-efficient explains statistically whether a relationship exist between two sets of data and also indicates the strength of the relationship. A positive (+) score, indicates a positive relationship between the data sets, a negative (-) score indicates a negative relationship and a zero (0) indicates no relationship. Generally, the following guide may be used to determine the strength of a relationship:

- 0.00 – 0.19  “a very weak relationship”
- 0.20 – 0.39  “a weak relationship”
The following table indicates the scores obtained for the various questions that tested the relationship between the variables.

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Spearman’s correlation</th>
<th>PROFESSIONAL SCEPTICISM</th>
<th>EDUCATION/TRAINING</th>
</tr>
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<td>11</td>
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<td>0,13</td>
</tr>
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<td></td>
<td>Education/training</td>
<td>0,13</td>
<td>1</td>
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<tr>
<td>12</td>
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<td>1</td>
</tr>
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<td>Professional experience</td>
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<tr>
<td></td>
<td>Culture</td>
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<tr>
<td>40</td>
<td>Professional scepticism</td>
<td>1</td>
<td>0,16</td>
</tr>
</tbody>
</table>
### 4.5 Summary

This chapter presented the results obtained in the study. The next chapter will provide a discussion on the findings of the research.
CHAPTER FIVE

DISCUSSION

5.1 Introduction

The previous chapter provided a presentation of the research results. This chapter provides a discussion of the research findings obtained. The discussion will be guided by the research questions, research objectives and the literature review.

5.2 Objectives of the study

The objective of this study was to determine whether professional scepticism is influenced by education and training, professional experience and culture. Another objective was to determine whether professional scepticism influences professional judgment.

The study had four objectives:

- Determine if education and training provided to trainee accountants at Higher Education affect their level of professional scepticism.
- Investigate whether the professional experience of trainee accountants, obtained through serving TIPP articles affect their level of professional scepticism.
- Determine if culture has an impact on the professional scepticism of trainee accountants.
- Investigate if professional scepticism levels of trainee accountants affect their professional judgment.
5.3 Discussion

Research objective 1: To determine if education and training provided to trainee accountants at Higher Education affect their level of professional scepticism.

The following are statements indicated in the survey questionnaire in relation to the research objective indicated above. The trainee accountants had to respond using a Likert Scale whether they strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree or strongly disagree with the statements made. Their responses are captured in a discussion that follows thereafter:

| Question 11: Trainee accountants could be trained to think sceptically. |
| Question 12: Trainee accountants could be trained to act sceptically |
| Question 13: The knowledge I acquired through an auditing course at University enabled me to develop a sceptical mindset. |
| Question 14: The education I received at University prepared me for my career requirements as a trainee accountant. |
| Question 15: Exposure to fraud-related case studies at University may promote sceptical thinking. |
| Question 16: Education is the most effective tool for developing professional scepticism |
| Question 17: I attribute my level of professional scepticism to the education I received at University. |
| Question 18: Education relating to professional scepticism could be improved at University. |
| Question 19: I am always sceptical about trusting audit evidence provided by a client because I was trained to be like this. |
Question 20: No amount of education and training can make me develop professional scepticism.

Question 21: I am aware of the International Standards on Auditing that indicate requirements in terms of professional scepticism.

Question 22: I am aware of what is required of me as a trainee accountant in terms of professional scepticism.

Question 23: Training on professional scepticism may improve professional judgment.

Question 26: Forensic auditing courses may enhance sceptical thinking.

The results of the study received for Question 11 indicate that 87.32% of trainee accountants believe that auditing professionals could be trained to think sceptically. These findings are consistent with the findings of Plumlee, Rixon & Rosman (2012) indicated in their study that evaluated whether providing auditors with the cognitive reasoning abilities would improve their abilities in terms of sceptical thinking. The auditors were given guidance on sceptical thinking, based on the expectation of the auditing standards. Their study revealed that training increased the knowledge and comprehension of convergent and divergent thinking skills. Divergent thinking in auditing is linked to the generation of explanations for unusual evidence whilst convergent thinking guides the auditor on evaluations that may lead to the elimination of explanations that are not feasible. Murray (2012) also found findings that are consistent with those in this study and concluded that critical thinking and professional judgment may be as a result of the contribution of education.

In relation to the possibility of auditing professionals being possibly trained to act sceptically in Question 12, the findings from the study indicated that trainee accountants were of the opinion that sceptical action may be triggered by training. 81.94% of trainees agreed that sceptical action may be taught or trained. The findings were found to be consistent with those of the IFAC (2012) that acknowledge the contribution that training makes in improving sceptical actions and behaviours of
auditing professionals. A strong foundation is perceived as fundamental to both professional scepticism and judgment.

In relation to Question 13, the results indicated that trainee accountants were of the opinion that their professional scepticism started developing while still studying at University. Penning (2014) shares the same views that training and education have a role to play further suggesting that junior members (trainee accountants) are more sceptical than their experienced counterparts as a result of their recent training. Rittenburg (2012) discovered the same results in his study, suggesting that professional scepticism changes over time, in his study professional scepticism were found to be high at student level and found to have decreased with time. This highlights the importance of CPD in maintaining acceptable levels of professional scepticism.

The results showed, in terms of Question 14, that most trainee accountants (74%) believe that the skills, competencies and ethical training that they obtained as students enrolled for accounting related qualifications prepared them for the careers in the auditing field. This suggests that most curricula offered by the various HEI in South Africa are of the required standards and that they respond to industry requirements. These findings emphasize the importance of stakeholder involvement in the development and review of curricula offered in auditing and accounting qualifications at Higher Education. Advisory Boards that are well constituted may play a significant role in communicating industry requirements in terms of graduate attributes.

Question 15 and 26 revealed that most trainee accountants – 74.28% believed that the use of fraud-related case-studies may promote sceptical thinking. These findings are consistent with the findings of Carpenter & Gaynor (2012) in a study that evaluated the impact that a forensic accounting course had on professional scepticism, the findings revealed that the forensic accounting course raised the level of professional scepticism of those who had been through the course in comparison.
with those who had not. The results suggest that if training and education with regards to professional scepticism is provided in relation to professional scepticism, professional scepticism will develop or be enhanced. The results suggest that forensic auditing/accounting courses may enhance sceptical thinking which assist auditing professionals when dealing with misstatements detected that may be as a result of fraudulent financial reporting. The ability to identify fraud risk factors such as incentives/pressures to commit fraud, opportunities to commit fraud and attitudes and rationalisation of fraud those charged with governance may be enhanced by the introduction of forensic auditing/accounting courses. The same views are shared by Rebele (2003) and Carpenter, Durtschi & Gaynor (2012).

All these studies revealed the same results except those of Ashari & Zahro (2013) in a study that evaluated the extent to which corruption awareness affected professional scepticism, the study did not support the proposition that if auditors perceive that fraud exists, and their professional scepticism will be higher.

With respect to Question 16, 17 and 19, the findings revealed that education and training was perceived by trainee accountants to be an effective tool for the development of professional scepticism. Keller (2008) echoed the same and argued that young professionals learn faster through training on the job or through the provision of education. The findings are also consistent with those of Srivastava (2005) that indicated that audit failures are caused by inappropriate levels of professional scepticism exercised by auditing professionals and suggested that academics in the auditing discipline involved in researchers must explore the issue, review available alternatives and reconsider current practices as education plays a significant role in the development of professional scepticism. Most trainees attributed their levels of professional scepticism to the education they had received at University. The possible reason for that could be that most trainee accountants that participated in the study had less than one year of professional experience, such trainees have recently graduated and still remember what they were taught at University. The findings were also consistent with those of Rebele (2003) who echoed the significant role played by education and training on professional scepticism.
Almost 50% of trainee accountants suggested that professional scepticism education may be improved at the different HEIs. This indicates a challenge to academics in this discipline to explore various methodologies that may be applied in teaching professional scepticism to students. The regulators and standard-setters also put the same challenge to academics through research studies to explore various options that may address the challenge.

Results received in terms of Question 19 revealed that trainee accountants could be trained to suspend their trust of audit clients and evidence until satisfaction has been obtained about the various assertions. This suggests that not only is education necessary for sceptical thinking but may also be effective in enhancing sceptical behaviour. Trust is a complex issue in auditing; research studies have been conducted on how to achieve a balance between complete distrust and acceptable scepticism. Kopp, Lemon & Rennie (2003) suggested that a balance between scepticism and trust must be aimed at in order to achieve audit efficiency and effectiveness. Curtis (2014) echoed the same and suggested that the nature of trainee’s educational experiences may also enhance their sceptical behaviours. Velina (2012) obtained the same results in her study and also suggested a balance between trust and scepticism.

The trainee accountants somewhat disagreed that interventions by training and education in resolving the challenge relating to professional scepticism are not effective thus echoing the significant role of training and education on the development of professional scepticism.

In terms of Question 21 and 22, the majority of trainee accountants (69.44%) agreed that they are aware of the requirements as set out by the International Standards on Auditing. Various auditing standards are covered as part of the Auditing (subject) syllabi covered in the various Higher Education Institutions in South Africa, included in the standards is ISA 200 that indicates the responsibilities of auditors in relation to audits. Access to the standards are also obtainable from various publications and students are encouraged to familiarise themselves with such standards as they are
critical in achieving audit quality. Awareness is a first step towards addressing the challenge relating to professional scepticism. It is positive to discover that most trainees are aware of what the requirements are in terms of the ISAs. Results relating to Question 23 indicated that most trainee accountants agree that training/education on the may yield a positive result to professional judgment as well.

**Summary for Research Objective 1**

The results obtained suggest a strong relationship between education/training provided to trainee accountants and their professional scepticism.

Research objective 2: *To investigate whether the professional experience of trainee accountants, obtained through serving TIPP articles affect their level of professional scepticism.*

The following are statements indicated in the survey questionnaire in relation to the research objective indicated above. The trainee accountants had to respond using a Likert Scale whether they strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree or strongly disagree. Their responses are captured in a discussion that follows thereafter:

<table>
<thead>
<tr>
<th>Question 27: I only developed a sceptical mindset whilst serving my TIPP articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 28: The coaching and mentoring by experienced auditors has helped me develop a sceptical mindset.</td>
</tr>
<tr>
<td>Question 29: I attribute my current level of professional scepticism to the work experience (articles).</td>
</tr>
<tr>
<td>Question 30: Informal dialogue amongst experienced auditors and trainee accountants about fraud may enhance the development of professional scepticism by trainee accountants.</td>
</tr>
<tr>
<td>Question 31: It is only through professional experience that trainee accountants may develop professional scepticism.</td>
</tr>
</tbody>
</table>
**Question 32:** I believe that we learn more by doing, which is why I attribute my professional scepticism level to the professional work experience (training articles)

**Question 33:** Professional scepticism could develop over time.

The results obtained in terms of Question 27, 29, 31, 32 and 35 suggest that professional experience obtained through serving TIPP articles may enhance professional scepticism. Whilst serving articles, trainee accountants are encouraged to trust their instincts especially when they believe that the client’s assertions and evidence provided does not seem right. An enquiring mindset should be promoted at this stage, where the foundation is being laid for a successful career in auditing. Educational courses that are sponsored by the firms are suggested by Keller (2008) to improve on the skills and competence of trainee accountants. The results suggest that audit partners have a responsibility in terms of the development of professional scepticism of the trainees. The tone set at the top should be one that promotes sceptical thinking and behaviour. During discussion sessions, partners are encouraged to address professional scepticism issues and the susceptibility of audit clients to fraud and misstatements, with the view of awakening sceptical thoughts. Partners are encouraged to set expectations in relation to scepticism (IFAC, 2012). The results received are consistent with those by AICPA (2002) that indicated that audit professionals who work under a strict tone at the top are likely to display more scepticism than those who do not. Most trainees attest to the ‘power of doing’ and suggest that as they undertake audits, they learn in the process. Amongst the skills and competencies they learn in the process, professional scepticism is one. This suggests that the more audit assignments trainee accountants undertake, the more their professional scepticism is enhanced. Some audit firms reward sceptical behaviour through an incentive system, Brazel et.al (2013) believe, however that evaluation systems used by some audit firms in judging one’s scepticism could discourage auditors from applying it. Trainee accountants had varying opinions about professional experience being the only factor that may influence professional scepticism suggesting that professional scepticism could be influenced by multiple factors in addition to professional experience.
Results obtained from Question 33, indicate that almost 50% of participants strongly agree with the statement suggesting that professional scepticism could develop over time thus suggesting that professional scepticism could be a skill because a skill may be developed over time as opposed to traits that one has or doesn’t and don’t seem to develop over time. This is supported by academic literature from different scholars including Hurtt (2010). These findings may also suggest that there are other situational factors that may influence professional scepticism (Chung, 2006).

Research findings from Question 28 and 30 show that trainee accountants acknowledge the role and input of coaching and mentoring by more experienced auditors. A positive contribution to professional scepticism could be made by coaching and mentoring. The findings are consistent with those found by Keller (2008) that suggested that firms with well-communicated mentoring programs have a better chance of surviving then those without. Theeboom, Beersnaard and Vianen (2013) concur that the influence of coaching on individual behaviour is positive and claim that coaching is a tool that be applied in improving individual functioning and goal-directed self-regulation. Iskandar et.al (2014) also supports the findings and claim that coaching and mentoring have a critical role to play in developing professional scepticism.

While serving articles, trainee accountants engage in informal dialogues with colleagues from within the firm, both experienced and less experienced. The results obtained from Question 30 indicated the contribution that may be made by senior/experienced auditors to the development of critical skills in trainee accountants through informal dialogue. The trainee accountants indicated that they benefit from lessons and experiences shared by their experienced colleagues in an informal setting. Because informal dialogue is not controlled, junior members are provided with a platform to share their experiences and to ask questions they may be uncomfortable to ask in a formal setting. Motivation by senior colleagues could also take place indirectly through such a platform. The views shared by the trainees are also shared by Noviyanti & Winata (2015) as they indicate that individuals who are highly motivated are likely to develop consistently positive attitudes towards tasks
performed. Espinosa-Pike & Barrainkua (2011) shared the same findings and point out that experienced auditors are better than trainees in terms of ethical judgment abilities, suggesting that trainee accountants may benefit from engaging with their experienced counterparts.

Question 34 revealed that trainee accountants perceive CPD as a mechanism that may enhance scepticism and improve audit quality. The role of CPD is crucial in many areas of the audit especially in maintaining skills, competencies and values at optimum levels.

Exposure to different audit situations during training articles is indicated by trainee accountants as a possible intervention to solving the challenge of inappropriate levels of professional scepticism exercised by auditing professionals. This suggests that trainees should be exposed to a variety of audit clients with varying fraud risk factors and systems. This statement also favours serving articles through the TIPP training programme as trainees are exposed to different audit situations as opposed to serving articles through TOPP contracts as the exposure is limited to just one audit setting.

**Summary of research objective 2**

The results obtained from the study suggest a close relationship between professional experience and professional scepticism. Professional experience is indicated as beneficial in improving many other skills and competencies required in the auditing profession. The platform created by professional experience for coaching and mentoring is also suggested to have a positive role to play in enhancing professional scepticism levels. Informal dialogue that takes place amongst colleagues in the workplace was also suggested as an intervention with a positive influence to professional scepticism.
Research Objective 3: To determine if culture has an impact on the professional scepticism of trainee accountants.

The following are statements indicated in the survey questionnaire in relation to the research objective indicated above. The trainee accountants had to respond using a Likert Scale whether they strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree or strongly disagree. Their responses are captured in a discussion that follows thereafter:

| Question 37: Professional scepticism develops within a socio-cultural environment. |
| Question 38: Culture has a role to play in the development of professional scepticism. |
| Question 39: Cultural diversity may hinder audit judgments made by audit team members. |
| Question 40: I prefer working with team members of the same cultural background as mine; it makes our professional judgment as a team better. |
| Question 41: Cultural differences may lead to different audit judgments taken by team members based on the same evidence. |
| Question 42: My cultural background has contributed to my professional ethical values. |
| Question 43: Gender roles as determined by different cultures may affect one’s level of professional scepticism. |
| Question 44: Culture has a powerful influence in shaping behaviour in a professional setting. |
| Question 45: My cultural background has shaped the kind of trainee accountant I am. |
| Question 46: Culture is the most important contributor to the development of professional scepticism by trainee accountants |
In relation to Question 37, 38, 39, 40 and 42, the findings indicate that trainee accountants had mixed perceptions about the influence of culture on professional scepticism and professional behaviour. The majority of trainee accountants agreed that professional scepticism develops within a socio-cultural context. The results also indicated a less significant relationship between culture and professional scepticism. 59% of trainee accountants agreed that there could be some influence. The statement that suggested that cultural diversity may hinder audit judgments made by audit team members was rejected by the trainee accountants, an insignificant percentage, 11.94% strongly agreed. This suggests that there is no consensus on the negative impact of cultural diversity on audit judgments. Previous research studies had indicated that religious backgrounds, gender roles, power-distance, masculinity and feminity all influence the development and application of professional scepticism (Sanders et.al, 2009) (Endrawes & Monroe, 2012) (Cowperthwaite, 2010). Bik (2010) also concurs with the findings of the mentioned research studies and further argued that auditor behaviour differs cross-nationally as a result of different national and cultural determinants. The findings of this study are not consistent with the results indicated in the research studies mentioned.

These findings were unexpected by the researcher because South Africa is culturally diverse and a presumption was made that such diversity may have an influence on how different auditing professionals conduct various audit processes. Glover & Prawitt (2013) had different findings than those of this research study as he concluded that cultural differences may through cultural personality traits or cultural norms have a potential of undermining the application of professional scepticism. Hurtt et.al (2013) also suggested that professional scepticism may be affected by cultural inclinations. In terms of audit team composition, most trainee accountants showed preference for culturally diverse team composition. This finding suggests that having culturally diverse audit teams is likely to counterbalance any negative effects that may be introduced by culture on audit work. Keeping the teams diverse allow trainees to interact and to learn from others with different cultural backgrounds as themselves. The contribution of culture in the ethical values of trainee accountants was not clear as mixed responses were received. The findings were also inconsistent with those of Cowperthwaite (2009) that suggested that auditors
are affected by their intelligence, education, approach to ethics and cultural values when undertaking audit assignments.

In terms of responses obtained for question 41, with regards to audit decisions that may possibly differ based on the same evidence as a result of cultural inclinations, the views were spread out as well, resulting in a lack of conclusion. Findings by Cowperthwaite (2009) were contrary to the findings of this study suggesting that culture affects the way we adopt, interpret and apply global auditing standards which explains the inconsistencies that lead to some audit failures; he further claimed that culture affects the standard-setting process undertaken by the various standard-setting bodies. Endrawes & Monroe (2012) also suggested different views, indicating that culture affects one’s decision making process and how evidence is viewed by auditing professionals from various cultural backgrounds.

Responses obtained from Question 43 indicated that only 4.62% of trainee accountants believed strongly that gender roles as determined by different cultural beliefs may have an effect on professional scepticism. These findings were again inconsistent with those of Sanders et.al (2009) that indicates that masculinity and feminity may influence professional scepticism and audit work performed. Endrawes & Monroe (2012) and Pierce & Sweeney (2010) support the suggestions made by Sanders et.al (2009). The reasons for the inconsistent findings are unknown to the researcher but different research contexts could be one of the reasons as most of these studies are conducted in other continents, and none of the studies mentioned have an African context. As it appears, there is no finding that suggests that gender roles affect audit processes.

Research findings from Question 44, 45 and 46 suggest that an average of 33% of trainee accountants are of the opinion that professional behaviour may be influenced by cultural forces and socialisation. The dynamics of culture were not considered by trainee accountants to have a significant influence on audit processes. These results were inconsistent with those of Cowperthwaite (2010) that indicate that one’s culture may influence many areas of an audit including the interpretation of the ISAs.
and the application of the standards. Bik (2010) concurs with Cowperthwaite (2010) suggesting that people from less assertive cultures may be less confrontational and more concerned with maintaining harmony and will not be comfortable with asking probing and tough questions from clients. Hofstede (1980) supports these scholars and claims that culture affects professional values which in turn affect professional judgment. Only 38.24% of trainee accountants somewhat agreed that their cultural backgrounds has shaped the kind of trainee accountant they had become. 14.71% strongly disagreed with the suggestion. These findings are also somewhat different from those indicated by Seyedhossein, Saudah & Maisarah (2014) that suggest that culture is a powerful environmental factor that affects every facet of the auditing professional’s personal and professional life.

Summary of Research Objective 3

From the results obtained from the study, it is evident that trainee accountants do not believe that culture has a significant role in the development and application of professional scepticism but may be influenced by multiple factors, the most significant of which is not culture. The role of culture in an audit setting is thus still debatable. No conclusive evidence was obtained that suggest a significant influence of culture on professional scepticism and judgment.

**Research objective 4:** To investigate if professional scepticism levels of trainee accountants affect their professional judgment.

The following are statements indicated in the survey questionnaire in relation to the research objective indicated above. The trainee accountants had to respond using a Likert Scale whether they strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree or strongly disagree. Their responses are captured in a discussion that follows thereafter:

**Question 23:** Exercising inappropriate levels of professional scepticism may cause audit failure.
In terms of Question 23, the trainee accountants indicated that they agreed somewhat (36.23%) and strongly (47.83%) that exercising inappropriate levels of professional scepticism may lead to audit failures. The same view is shared by the IFAC (2012:1) in its statement “A high quality audit features the exercise of professional judgment by the auditor, and importantly, a mindset that includes professional scepticism throughout the planning and performance of the audit”. This suggest that if professional scepticism is not exercised properly by the engagement team, inappropriate conclusions may be reached, resulting in audit risk which in turn leads to audit failures. The results of this study are consistent with those of Toba (2011) and Penning (2014). Hurtt et.al (2013) concurs and argues that threats to professional scepticism must be identified and only once these threats are mitigated will audit quality be achieved. Velina (2012)’s findings are also consistent with those obtained in this study.

Auditor-client relationships are complex. An auditor is expected to put the interest of the public and other stakeholders before that of a client company. The findings of this study indicated that most trainee accountants believe that pleasing an audit client is not as important to them as exercising professional scepticism. The findings
are consistent with those of Kopp, Lemon & Rennie (2003), their study also claimed that auditing professionals aimed to maintain public confidence and trust and will not allow pleasing clients to jeopardise that. Shaub & Lawrence (1996) shared the same views as those indicated in the research findings and further suggested that audit professionals who exercise suspicion are those with public interest as their aim and such professionals display behaviour that prevent management from displaying behaviour that suggest ‘self-interest’. Rasso (2013) concurs with the findings and claims that professional scepticism could be reduced or eliminated when audit professionals aim at pleasing their clients and thereby entering into an implemental mindset.

Research results from Question 47, 48, 49 and 50 revealed that trainee accountants agree that there is a relationship between professional scepticism and audit judgment. Various scholars have argued about this relationship, its nature and extent. The regulators, through the IFAC (2012) indicate that the two are interrelated and essential inputs for audit quality and claim that professional scepticism facilitates proper professional judgment. Wedermeyer (2010) concurs and suggests that professional scepticism may be positively influenced by professional judgment, Glover & Prawitt (2013) indicated the same.

Formulating audit judgments is complex and challenging and usually involves some form of compromise or trade-off. Optimal scepticism is aimed at facilitating good judgment. Hurtt et.al (2013) indicated the same viewpoint and claimed that good judgment is affected by professional scepticism and a lack thereof results in audit failure. Professional scepticism is indicated to cause an effect on problem-recognition and failure to act on a problem recognised (sceptical action). Quadackers, Groot & Wright (2013) and Nelson (2009) conducted studies that resulted in similar results and point out that there are two types of scepticism, scepticism related to one’s self and that related to the client, these two types are claimed to produce different results. Parlee, Rose & Thibodeau (2014) concurred with their findings.

The majority of trainee accountants agreed that policies and procedures that address professional scepticism are necessary for guiding auditor behaviour. The IFAC
(2012) also emphasizes that policies and procedures that address professional scepticism must be developed and implemented. An internal culture that recognises the significance of professional scepticism should also be cultivated by all stakeholders. These policies and guidelines could be formulated at regulatory level, at firm level and at engagement team level.

**Summary of Research Objective 4**

The findings of the research study reveal that there is a close relationship between professional scepticism and audit judgment, and that if professional scepticism is appropriately applied it enhances the quality of audit judgments.

5.4. **Summary**

The discussion of the research findings was provided in this chapter. In terms of how the findings link with the research question indicated, it was concluded that training/education and professional experience have an influence on the professional scepticism of trainee accountants. The results did not indicate that culture influences professional scepticism. The findings were found to be consistent with previous research studies in relation to the effect of professional scepticism on professional judgment. The next chapter will provide a summary and conclusions.
CHAPTER SIX

RECOMMENDATIONS AND CONCLUSION

6.1 Introduction

A discussion of the findings of the research was provided in the previous chapter. This chapter will provide a summary of the study, recommendations to the various stakeholders who may benefit from the results of the study, and will also highlight the limitations of the study. Future research areas will thereafter be provided. This study aimed to determine if education and training, professional experience and culture had an effect on the development and application of acceptable levels of professional scepticism. The literature review conducted which provided a theoretical background and data collected using surveys was used to formulate conclusions drawn and recommendations are based on the findings of the research.

6.2 Summary of findings

Today’s challenging economic conditions have led to complex financial reporting involving a high degree of subjective estimates, creating a challenge for the auditing profession. The heightened demand for reliable financial reporting, raised interest on public accountability and the principles-based accounting environment have also resulted in an increased interest in evaluating how auditing professionals perform audits with due care and skill, demonstrating professional scepticism as required by the ISAs. As suggested by Rittenburg (2012) audit professionals must still meet public expectation despite changing business environments bringing complexity and challenges. The exercise of appropriate levels of professional scepticism cannot be overly emphasized, various research studies have emphasized the vital role it plays in achieving audit quality and in evaluating significant risks such related-party transactions, the use of fair values and in dealing with transactions with fraud elements but still no consensus has been reached about its definition, its nature and what influences its development and application. The auditing profession should
strive towards a common understanding of the concept. The researcher concurs with the views shared by Hurtt et al. (2013) that the topic relating to professional scepticism is a topic that attracts more questions than answers. Although many possible factors may affect the development of professional scepticism, this study focused on training/education, professional experience and culture. The study also sought to determine if a relationship between professional scepticism and professional judgement exists. A descriptive research study was conducted using a survey research method for data collection. 50 closed-ended statements were suggested and responses were ranked using a Likert-Scale with five possible answers ranging from strongly agree to strongly disagree. Data was collected from 73 trainee accountants currently serving SAICA TIPP articles in the Durban and Midlands regions of KwaZulu-Natal. The findings confirmed three out of four predictions made. The three predictions confirmed were as follows:

- Education and training provided to trainee accountants at Higher Education level affect their professional scepticism levels.
- The professional experience of trainee accountants obtained through serving SAICA TIPP articles affect their professional scepticism levels.
- The level of professional scepticism of trainee accountants affect their professional judgment.

The prediction that was not confirmed by the research findings was:

- Culture may influence the development and application of professional scepticism.

The findings confirmed the results of previous research studies in terms of training and education, professional experience and professional judgment and their relationship to professional scepticism. These results suggested that training and education plays a significant role in the professional scepticism of trainee accountants and also prepares them for the demands of the profession. It has also suggested that education and training prompts sceptical behaviour. Trainee accountants also suggested that the nature of auditing courses offered at Higher Education level could be improved by the inclusion of forensic auditing courses/modules and fraud-related case studies. The findings suggest that
professional scepticism is a skill that may be taught to audit professionals; such a skill is influenced by various situational factors within and beyond the professional's control is indicated in previous studies that training auditors in cognitive reasoning and enhancing their convergent and divergent thinking has a positive effect. Professional experience was determined as beneficial in prompting sceptical thinking and action, with coaching and mentoring by senior colleagues and informal dialogue amongst staff being acknowledged as favourable contributors to the development of professional scepticism. The exercising of professional scepticism lowers the audit risk and decrease detection risk as auditors select procedures that address the level of risk perceived and results in auditors not misinterpreting the results obtained in an audit.

6.3 Recommendations

6.3.1 General

The following recommendations relate to all the stakeholders in the auditing profession.

All the various stakeholders in the auditing profession should hold discussions with the view of adopting a single definition of professional scepticism. Discussions must be held at national and international level with a view of finding consensus on the nature of professional scepticism, whether it is a skill, a mindset, and a trait or mood state. Various research studies should be synthesized to find common findings by various scholars in an attempt to find workable solutions. Factors that have been found to have insignificant influence on the development and application of professional scepticism must be eliminated when considering solutions to the challenge.

6.3.2 Recommendations: Regulators and Standard-Setters

As much as no direct responsibility is placed on regulators in ensuring that professional scepticism is exercised by those in the profession but may challenge
auditors to maintain scepticism through all stages of the audit (IFAC, 2012). The following recommendations are applicable to the regulators and standard setters:

The SAICA Competency Framework should include professional scepticism as one of the exit-level outcomes after a three-year training programme (articles). Regulators may facilitate dialogue on the issue where the views of all stakeholders will be documented and reviewed, included in the stakeholders should be academics in this discipline as they lay the foundation for a solid career in auditing. A Professional Scepticism Guidance Framework may be drafted with its primary objective being the provision of specific and demonstratable procedures on how professional scepticism may be exercised in a manner that is demonstratable. The International Standards on Auditing should provide clear guidelines in terms of the application of professional scepticism, providing examples on cases where professional scepticism was perceived to be acceptable. A widely accepted Professional Judgment Framework should be developed and adopted globally.

6.3.3 Recommendations: Employers: Audit Firms

The following recommendations are made to the management (partners) of the audit firms who are responsible for offering SAICA accredited training contracts to trainee accountants.

Policies and procedures at firm level should be established to detail the requirements of all audit professionals in the firm relating to the application of appropriate levels of professional scepticism. A professional scepticism framework may be developed at firm level that will ensure that professional scepticism is applied without creating audit inefficiencies and budget overruns. Audit assignments given to trainee accountants should vary, as routine and boredom have been found to have a negative effect on professional scepticism whereas exposure to varying audit situations is beneficial to the development of professional scepticism. Incentives may be used to induce sceptical behaviour by audit professionals. This could be done through a reward system that would suit each firm uniquely. Trainee accountants should be adequately socialised into the audit profession, shadowing of
experienced staff may be one way of ensuring such socialisation. Particular attention should be devoted to skills, competencies, ethical values and knowledge required in the socialisation process. Campus visits may be done by representatives of the various firms to the various HEIs to communicate the specific requirements of the profession, particularly values and skills required, emphasizing the need for professional scepticism. Formalised mentoring programmes may be established, affording the trainees an opportunity to learn from their experienced colleagues. Social events may be organised at firm level providing a platform for trainee accountants to interact, share audit experiences and to learn from their senior counterparts. Informal dialogue was found by this study to be beneficial in the development of professional scepticism. The firm culture should emphasize the significance of professional scepticism and should promote sceptical behaviour. A tone at the top must be set with regards to professional scepticism that would serve as an example for trainee accountants to follow. A proper tone set will create consciousness about the significance of applying appropriate scepticism to all employees. An environment that is conducive should be created for trainee accountants to ask questions or seek clarity anonymously, e.g. via a questions/comments box left at an accessible location or through anonymous emails. This will provide them an opportunity to ask questions that may be difficult for them to ask in a group setting. Peer reviews should also focus on the application of professional scepticism by audit professionals. Another initiative that may be helpful is for audit firm representatives to play a significant role in the curriculum development or re-curriculation initiatives in the various HEIs in South Africa. Such involvement may be facilitated by representation in the Advisory Boards of all Departments offering Accounting/Auditing qualifications. This will provide valuable insight as to the specific requirements they look for in an accounting/auditing graduate. The auditing profession undergoes regulatory and standards changes regularly, such changes may be communicated to the relevant academic departments efficiently if the various audit firms avail themselves to represent industry in the Advisory Boards. This will ensure that the curricula taught at various HEIs are relevant and is in line with the latest developments in the profession. Work scheduling of trainees should be carefully considered, as one of the factors identified as a barrier to professional scepticism was heavy workloads and tight deadlines. Effective supervision of trainee accountants when undertaking audit work where the
risk of fraud is perceived to be high. The supervision will benefit both the trainees and the audit firm. Cultural diversity in audit teams should be maintained in order to counter-balance the effects of culture on audit actions and decisions.

6.3.4 Recommendations: Human Resource Departments (Attracting and retaining trainee accountants with skills required)

The recommendations that follow are addressed to the Human Resource Departments of the various firms as this function is responsible for attracting, training and retaining employees with the necessary skills and competencies required by the organisation. The need for attracting trainee accountants with the relevant skills, competencies and ethical values has been highlighted in the literature chapter. The Human Resource Departments may find the following recommendations useful.

Effective recruitment strategies should be applied when employing audit professionals. Proper screening for traits that are aligned to professional scepticism should be undertaken. Professional scepticism education may also be included in induction programmes. A reward system that rewards audit professionals for good quality of work produced and visible scepticism demonstrated should be considered as incentives have been indicated as an intervention strategy that may be favourable to the application of appropriate levels of professional scepticism. In terms of the recruitment process, psychometric tests may be conducted at the start of the training programme on the trainees to determine the level of professional scepticism at entry level so that intervention strategies could be tailor-made to address the specific weaknesses identified per trainee. Training programmes must be designed to include issues relating to the development and application of professional scepticism.
6.3.5 Recommendations: Academics in the Accounting & Auditing discipline

The following are recommendations for academics in the accounting and auditing disciplines. The researcher recommends that academics acknowledge and appreciate the critical role they play in shaping the professional behaviour of their graduates and as a result ethical values and conduct must be embedded in the various curricula offered. Academics must work closely with the representatives of the audit firms when undertaking curriculum development in order to ensure that curricula respond to requirements of the profession in relation to professional scepticism. The graduate attributes must be drawn up in close consultation with the various stakeholders in the auditing profession. Workshops/Seminars designed to facilitate discussions on professional scepticism matters should be planned/attended by academics. The introduction of forensic accounting/auditing courses must be considered by the academics as the research findings suggested that they may be used effectively to stimulate sceptical thought and actions. Case-studies with fraud-related scenarios must be included in the tutorials given to students for practice; such cases may provoke sceptical mindsets in students. Various teaching methods in the teaching of professional scepticism should be explored by academics in this profession.

6.3.6 Recommendations: Trainee Accountants

The following recommendations are made by the researcher to the trainee accountants currently in training contracts with the various Accredited Training Offices. Trainees are encouraged to utilise the skills and competencies obtained through education and training to develop sceptical behaviours and mindsets. Professional experience obtained through serving TIPP articles should be embraced by trainee accountants, taking advantage of the coaching and mentoring by experienced auditors because much may be gained from such. Trainee accountants are encouraged to seek clarity and guidance on audit matters during brainstorming meetings. It is also recommended that trainee accountants act in close consultation with engagement team leaders on issues relating to suspected fraud or misstatements. Another recommendation would be for trainees to follow good
judgment processes that are likely to overcome the challenges presented by complex financial reporting.

6.4 Recommendations for future studies

Future research studies may focus on the following areas that have been identified through this research study as gaps in literature. The literature studied in relation to the current study also attracted various questions in the researcher. Future research studies could focus on the following areas/questions:

A study may be conducted to determine whether scepticism as a skill could be measured just as trait scepticism may be able to be measured using the HPSS. Another study may focus on determining which factor, from all those indicated in the literature review and in this study contributes the most to the development of professional scepticism, the factors may be ranked from the one indicated to have the most influence to the least. The results would assist in channelling efforts to the factor identified as having the most influence. Narrowing the factors to a few that have the most influence may allow for intervention strategies to be developed around them.

Another research area worth investigating is the effect of culture on audit processes particularly in the South African context. The researcher recommends that all audit professionals be represented from audit partners, audit managers, audit seniors, trainee accountants and some regulators. The reason behind this suggestion is to aim for a richer picture in terms of responses. Results may also be analysed per ethnicity and per positions.

The research findings obtained from this study also sparked an interest to the researcher to investigate the extent to which audit professionals may demonstrate visible scepticism that would be acceptable to regulators and the public. The literature review and research results suggest that audit professionals are not clear as to how they may demonstrate visible scepticism, practical actions may be determined that are perceived as actions encompassing scepticism, such may be
used for guidance and be recognised as cases from which some challenging audit decisions may be drawn from. The identification of these cases would assist just as much as they assist in Taxation and Legal studies (Case Law).

Another research area would be to investigate the extent to which audit judgments and opinions are affected by the personality traits of audit partners and those of the engagement team. To further investigate this proposed area, an investigation may also be undertaken on how audit teams are assembled, whether they are assembled based on staff availability, competence, skills, personality traits and cultural identity (race, ethnicity, religion and nationality).

As many research studies are conducted by academics in this profession all around the world, it would be interesting to conduct a study that investigates the role played by auditing academics in providing solutions to audit related challenges, including audit failures. This proposed study may indicate whether the efforts of academics in this field are being recognised and whether the results and conclusions of such research studies are being considered by regulators and standard-setters when seeking solutions to practical audit challenges. The recommended sample would have to include representatives of the various standard-setters within the profession as well as the regulators.

With regards to education and training, further research could be undertaken to determine what topics may be included and excluded from the auditing curricula in order to prepare trainee accountants for the demands of a career in auditing.

Judging from the results of the study relating to the guidance provided by the ISAs, a study can be undertaken to obtain the perceptions of audit professionals as to the extent to which they feel the ISAs provide guidance on professional scepticism and professional judgment.
6.5 Limitations of the study

There were various limitations of this study, which impact on the generalisability of the findings. The study focused on a sample drawn from one out of nine provinces, and was further narrowed to just two regions in KwaZulu-Natal, the Durban and Midlands regions. A bigger sample size would have been favourable in terms of generalisability. A distinction was also not made in relation to the different experience levels of trainee accountants. The results obtained could have been affected by the different professional experience levels. The use of an online survey tool using QuestionPro could have excluded trainees who had no internet access at the time from participating.

6.6 Summary

Complex accounting systems, excessive use of estimates and fair values all necessitate for the maintenance of optimal scepticism levels by audit professionals. A joint approach to dealing with the challenge resulting from inappropriate levels of professional scepticism exercised is recommended. There could be other factors other than those indicated in this study and other previous research studies that may affect the development and application of professional scepticism by trainee accountants. As various models, theories, training programmes are developed; the researcher feels that there is still a long way to go in terms of finding widely accepted solutions for this challenge.
REFERENCES


ACCA. 2010. Restating the value of audit. *Accounting Futures* [Online].

Accountancy SA Issue 1 March 2009. *Challenges facing modern day auditing profession*.


Available at: [http://www.aicpa.org/research/standards/auditattest/pages/sas.aspx](http://www.aicpa.org/research/standards/auditattest/pages/sas.aspx)
(Accessed 28 August 2015).


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Available at: [http://www.ncrel.org/sdrs/areas/issues/educatrs/leadshp/le0bow.htm](http://www.ncrel.org/sdrs/areas/issues/educatrs/leadshp/le0bow.htm) (Accessed: 10 December 2014)


The Chartered Accountancy Professional Sector Code


Glover, S.M. & Prawitt, D. 2014. Enhancing auditor professional scepticism: the


Ittonen, K. 2010. A theoretical examination of the role of auditing and relevance of audit reports. *VAASAN YLIOPISTO JULKAI SUJA*


Keller, R. 2008. Make most of mentoring – Executive Summary. *Journal of*
Accountancy.


McCann, D. 2015. Auditor rotation may actually inhibit scepticism. CFO.com


SAICA Training Programme Prescribed Competencies 2010. [Online].

Available at: https://www.saica.co.za/Portals/0/Trainees/documents/CA%20Training%20Programme%20Competencies%20August%202012.pdf (Accessed 10 August 2015).


Toba, Y. 2011. Toward a conceptual framework of professional scepticism in Auditing. Waseda Business & Economic Studies No 47.


Appendix 1  Ethical clearance

21 October 2015

Mrs Favourite Mhlongo (954066246)
Graduate School of Business & Leadership
Westville Campus

Dear Mrs Mhlongo,

Protocol reference number: HSS/1387/13/S 1
Project Title: Professional Skepticism and its effect on the professional judgments of trainee accountants from the Durban and Midlands regions of Kwazulu-Natal

Full Approval – Expedited Application

In response to your application received on 19 August 2013, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully,

Dr Shenuka Singh (Chair)
Appendix 2  Gatekeepers Letter

Letter to assist students in obtaining Gatekeepers Letters

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI
Graduate School of Business and Leadership

July 28, 2015

In W sharp in May Contend

PERMISSION TO CONDUCT RESEARCH AS PART OF THE MASTER OF COMMERCE QUALIFICATION

Name: Thembekile Mhlungu
Student No: 0546002076
Dissertation Topic: Professional Acumen and its effect on the professional judgment of sales personnel, in the Durban and Midlands regions of KwaZulu-Natal.

We confirm that the above-student is registered at the University of KZN for the Master of Commerce programme. It is a requirement of this Programme that the student undertakes a practical research project in their final year of study.

Typically this project will be a “practical problem solving” exercise and necessitates some involving through questionnaires or personal interviews.

Your assistance in permitting access to your organization for purposes of conducting the research is much appreciated. Please be assured that all information gained from the research will be treated with the utmost confidentiality. Furthermore, should you wish to retain any resulting or findings from the research “in the confidential” for an agreed period of time, this can be arranged. The confidentiality of information and anonymity of personnel will be strictly adhered to by the student.

If permission is granted, kindly confirm this by signing off on the following.

“I am aware of the nature and extent of the document and I am satisfied with all the obligations imposed therein.”

Please note that additional information or conditions can be supplied by you.

Name: Adri Kleinholds
Designation: Project Director, Youning
Company Name and Stamps: SAICCA

Thank you for your assistance in this regard.

Yours sincerely,

Adri Kleinholds

[Signature]

Date: 2015-07-28

Mz. Shoho, Steven Mngomeli (Supervisor)

[Signature]

Date: [213015]
Appendix 3  Participants’ consent letter (Online)

Dear Respondent,

Master of Commerce Research Project
Researcher: Mrs. Favourita Minnnon (071 8779645)
Supervisor: Mr. Steven Moare (060 994 4857)
Research office: Ms. P. Ximba (081–250 6587)

You are invited to participate in our survey entitled "Professional scepticism and its effect on the professional judgment of trainee accountants in the Durban and Midlands regions of KwaZulu-Natal." In this survey, approximately 100 trainee accountants currently serving SAIKA TWP articles with Accredited Training Providers in the Durban and Midlands regions of KwaZulu-Natal will be asked to complete a survey that asks questions about factors that influence how trainee accountants acquire an acceptable level of professional scepticism and how the level of professional scepticism affects their audit judgement. The aim of the study is to obtain understanding on the influences of training/education, professional culture on the professional scepticism level of trainee accountants and how it affect their audit judgment. It will take 20 minutes to complete the questionnaire.

Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. If you feel uncomfortable answering any questions, you can withdraw from the survey at any point with no negative consequences for us to learn your opinions.

Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. Information will be coded and will remain confidential. If you have questions at any time about the survey or the procedures contact me or my supervisor at the numbers provided above.

Should you accept the conditions of the study and are willing to participate, please tick the box next to ‘I AGREE’ and proceed with the questionnaire.

I hope you will take the time to complete this survey.

Thank you very much for your time and support.

Please start with the survey now by clicking on the Continue button below.

☐ I Agree
QUESTIONNAIRE

Kindly read and complete the information and questionnaire as provided below. Please indicate your choice with a cross (X) on the 5-point scale ranging from a score of 1 indicating that you strongly disagree to a score of 5 indicating that you strongly agree.

SECTION A: DEMOGRAPHICS

Please indicate your region

| Durban | Midlands |

Please indicate your gender

| Male | Female |

Please select your race

| Black African | White | Indian | Coloured | Other |

Please indicate your age category

| 17 – 22 years | 23 – 28 yrs | 29 – 34 years | 35 and older |

Please indicate your nationality

| South African | Non-South African |
Please indicate your **home language**

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Please select a level that indicates your highest level of **education**

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Please select an option that indicates your **professional experience** in terms of number of years (articles)

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<td>2. Trainee accountants could be trained to act sceptically.</td>
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<td>3. The knowledge I</td>
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4. The education I received at University prepared me for my career requirements as a trainee accountant.

5. Exposure to fraud-related case studies may enhance sceptical thinking.

6. I attribute my level of professional scepticism to the education I received at University.

7. Education relating to professional scepticism could be improved at University.

8. I am aware of what is required of
9. I am aware of the International Standards on Auditing that indicate requirements in terms of professional scepticism.

10. The training I have received has prepared me to detect financial statement fraud and misstatement.

11. No amount of education and training can make me develop professional scepticism.

12. Education is an effective tool for developing sceptical thinking.

13. I am always sceptical about trusting audit
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<td>evidence provided by a client because I was trained to be like this.</td>
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<td>14. Training seminars on professional scepticism may improve the development of professional scepticism.</td>
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<td>15. Exercising inappropriate levels of professional scepticism may cause audit failure.</td>
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<td>16. Training on professional scepticism may improve risk assessment.</td>
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<td>17. Sceptical behavior is more important to an auditor than pleasing a client.</td>
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<td>18. Forensic auditing courses may enhance sceptical thinking.</td>
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<td>19. Education is the</td>
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The most important contributor to professional scepticism is the impact of culture on audit processes, which is obvious. I attribute my professional scepticism level to my cultural background. Coaching and mentoring by practicing auditors has helped me develop a sceptical mindset. I only developed a sceptical mindset whilst serving my TIPP articles. I attribute my professional scepticism to the training I receive from my employer. Informal dialogue is also important.

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amongst experienced auditors and trainee accountants about fraud may affect professional scepticism development.

<p>| 26. | It is through professional experience that trainee accountants may develop their appropriate levels of professional scepticism | 1 | 2 | 3 | 4 | 5 |
|  | I believe that we learn more by doing, which is I attribute my professional scepticism to professional experience. | 1 | 2 | 3 | 4 | 5 |
|  | I have developed my current level of professional scepticism through my experience as a trainee | 1 | 2 | 3 | 4 | 5 |</p>
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<td>Professional scepticism levels could develop over time.</td>
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<td>Continuing Professional Development is necessary for maintaining professional scepticism levels.</td>
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<td>Professional scepticism levels could diminish over time through the lack of Continuing Professional Development.</td>
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<td>Serving training articles is the only way to develop professional scepticism.</td>
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<td>33.</td>
<td>Gaining experience through being exposed to different audit situations promotes a sceptical mindset.</td>
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</tr>
</thead>
<tbody>
<tr>
<td>34.</td>
<td>Professional scepticism develops within a socio-cultural environment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35.</td>
<td>Cultural diversity may hinder audit judgments made by audit team members.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>36.</td>
<td>I prefer working with team members of the same cultural background as mine; it makes our professional judgment as a team easier.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37.</td>
<td>Cultural diversity in audit teams is necessary to maintain.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38.</td>
<td>Cultural differences lead to different audit decisions taken by team members.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
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</tr>
<tr>
<td>39.</td>
<td>My cultural background has contributed to my values and skills as a trainee accountant</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40.</td>
<td>Gender roles as determined by different cultures may affect one’s level of professional scepticism.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41.</td>
<td>Culture has a powerful influence in shaping behavior in a professional setting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42.</td>
<td>My cultural background has shaped the kind of trainee accountant I am.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>43.</td>
<td>Culture is the most important contributor to professional scepticism.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44.</td>
<td>I consider what is acceptable behavior in terms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
of my culture when considering my professional behaviour.

| 45. Professional scepticism does not affect professional judgment. | 1 | 2 | 3 | 4 | 5 |

**SECTION E**

| 46. A high level of professional scepticism results in better professional judgment. | 1 | 2 | 3 | 4 | 5 |

| 47. Developing an appropriate level of professional is necessary for ensuring good professional judgment. | 1 | 2 | 3 | 4 | 5 |

| 48. Professional scepticism affects professional judgment. | 1 | 2 | 3 | 4 | 5 |

| 49. Policies and procedures designed to promote | 1 | 2 | 3 | 4 | 5 |
| 50. Professional scepticism is critical in achieving audit quality. | 1 | 2 | 3 | 4 | 5 |