Emotional Intelligence Skills in Accountancy Students and Graduates

By

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Abstract

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PURPOSE: The ever-changing role of the accountant has enhanced the importance of being emotionally intelligent. Therefore, this study evaluates the perceptions of warrant holders and graduates on the extent they consider emotional intelligence important for graduates working in big-four or mid-tier firms, the extent graduates have developed certain skills and the degree to which they should be developed during the University of Malta accountancy programme. Additionally, this study measures accountancy students' emotional intelligence levels and evaluates whether it increases during course progression.

DESIGN: A quantitative approach was implemented, where online questionnaires were distributed to big-four and mid-tier firm warrant holders (n=222), together with recent University of Malta accountancy graduates (n=96), to gain insight into their perceptions on emotional intelligence and graduates' skills. Another questionnaire was distributed to University of Malta accountancy students (n=302) to measure their emotional intelligence levels.

FINDINGS: The majority of respondents agreed that future accountants should possess emotional intelligence skills and perceived such skills as important for graduates employed with big-four and mid-tier firms. Overall, respondents perceived graduates have good development of the skills provided, suggesting that the University of Malta is in a good position in relation to developing certain skills. Respondents considered particular skills to require good development during university. Fifth-year students obtained a greater mean emotional intelligence score than first-year students, possibly indicating that the programme assists in improving students' emotional intelligence.

CONCLUSION: Although it was perceived that graduates have adequately developed certain skills and that such skills require good development at university, strategic maps derived from the Extent and Where Indices indicated that there is still room for improvement in relation to the development of certain skills, given their level of importance in big-four and mid-tier firms.

VALUE: This study contributes to local literature by providing UoM accountancy curriculum preparers insight regarding perceived skill development in graduates and accountancy students' emotional intelligence levels. In this regard, several recommendations were provided.

KEY WORDS: *Emotional Intelligence*, *Accountancy graduates' skills, Accountancy education, Accountancy students' emotional intelligence levels.*

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To my family

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List of Abbreviations

AB	Accountancy Board
ACCA	The Association of Chartered Certified Accountants
AES	Assessing Emotions Scale
EC	European Commission
EI	Emotional Intelligence
HR	Human Resources
PWC	PricewaterhouseCoopers
SD	Standard Deviation
SHRM	The Society for Human Resource Management
SPSS	Statistical Package for the Social Sciences
UoM	University of Malta
US	United States
WH	Warrant Holders

Chapter 1

Introduction

1.1 Preamble

Locally, accountancy is deemed the largest and fastest growing profession (Abela, Mallia Bonavia 2016). The Maltese Companies Act and Accountancy Profession Act regulate the local accountancy profession. As per the Accountancy Profession Act, part requirement for certification as a warranted public accountant is completion of the University of Malta (UoM) course or equivalent, recognised by the Accountancy Board (AB). The quality of newly qualified accountants is considerably dependent on the UoM and Association of Chartered Certified Accountants (ACCA) programmes. Kastberg (2020) contended that universities play a fundamental role in developing students' Emotional Intelligence (EI) skills. In today's dynamic environment, the skills essential for accountants have evolved, including EI (Jones, Abraham 2009). Accountants with EI skills are considered to perform better in leadership positions, decision-making and clientele relationships (Cook et al. 2011).

1.2 History and definition of EI

Landy (2005) noted that multiple researchers credited Thorndike as the first individual to utilise the term social intelligence. Thorndike (1920) defined social intelligence as the capability of understanding and managing individuals. Wechsler (1943) stated that for development of one's intelligence, non-intellective elements including personality are crucial. The term EI was first used by Beldoch (1964). Furthermore, Gardner (1983) argued that individuals possess various types of intelligences. Additionally, Payne (1985) utilised the term emotional intelligence within a doctoral dissertation. Subsequently, Beasley (1987) used the term emotional quotient. EI theory combines concepts emerging from the areas of emotions and intelligence. Santos et al. (2018) suggested that several EI definitions exist. By making reference to the work of Thorndike, Wechsler, and

Gardner, Salovey and Mayer (1990, p. 189) initially proposed a formal definition of EI as:

> "... the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action."

Mayer and Salovey (1997) proposed that EI may be sub-divided into a four-branch model, including accurate perception of emotions; utilisation of emotions to enable one to facilitate thoughts accurately; understanding of emotions; and management of one's emotions and those of others. More recently Mayer et al. (2016, p. 296) defined EI as:

> "the ability to reason validly with emotions and with emotion-related information, and to use emotions to enhance thought."

The EI concept gained popularity from Goleman's 1995 book entitled 'Emotional Intelligence: Why It Can Matter More Than IQ'. Goleman (1998, p. 317) defined EI as:

> "the capacity for recognising our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships."

Goleman (1998) was the first researcher to integrate the EI concept with the business world, claiming that successful leaders have a high EI level. Furthermore, Goleman et al. (2002) highlighted the importance of accountants' EI skill development, since partners possessing stronger EI skills generated greater profits; implying that cognitive capabilities are advantageous, but EI competencies are more.

1.3 Goleman's EI Competencies Model

Goleman et al. (2002 p. 38) proposed four main EI domains; "self-awareness, self-management, social awareness, and relationship management". As depicted in Table 1.1, these domains focus on recognition of one's own emotions, recognition of others' emotions, regulation of one's own emotions and regulation of emotions in relationships. Furthermore, Table 1.1 identifies competencies for each domain (Goleman et al. 2002).

	Self PERSONAL COMPETENCE		Other SOCIAL COMPETENCE	
RECOGNITION	**Self-Awareness**		**Social Awareness**	
	EI Skill	**Definition**	**EI Skill**	**Definition**
	Emotional self-awareness	Recognising one's emotions and their effects	**Empathy**	Sensing others' feelings and perspectives
	Accurate self-assessment	Knowing one's strengths and limits	**Service**	Anticipating, recognising and meeting clients' needs
	Self-confidence	Sureness about one's self-worth and capabilities	**Organisational awareness**	The ability to read social and political networks in an organisation
REGULATION	**Self-Management**		**Relationship Management**	
	EI Skill	**Definition**	**EI Skill**	**Definition**
	Self-Control	Keeping disruptive emotions and impulses under control	**Influence**	Using effective tactics of persuasion
	Adaptability	Flexibility in adapting to changing situations or overcoming obstacles	**Developing others**	Encouraging others' abilities through feedback and guidance
	Achievement	Striving to improve or meet a standard of excellence	**Change catalyst**	Initiating or managing change
	Initiative	Readiness to act and seize opportunities	**Conflict management**	Negotiating and resolving disagreements
	Optimism	Persistence in pursuing goals despite obstacles and set-backs	**Teamwork and collaboration**	Cooperatively working with others towards a shared goal
	Transparency	Displaying honesty, integrity, and trustworthiness	**Building bonds**	Cultivating and maintaining relationships
			Inspiration	Inspiring and guiding people

Table 1.1: EI Domains and associated competencies as per Goleman et al. (2002, p. 39) and as defined by Coady (2014, pp. 90-91)

The self-awareness domain refers to one possessing strong comprehension of their “emotions”, “strengths”, “limitations”, “values” and “motives”, whereby one is conscious of where they want to go and can justify why (Goleman et al. 2002, p. 40). Goleman et al. (2002) stated that those competent in skills associated with this domain as depicted in Table 1.1, tend to be realistic; not excessively self-critical nor credulously optimistic. When sufficient understanding of one’s emotions is acquired, the self-management domain leads, which focuses on skills, as conveyed in Table 1.1, necessary to focus and achieve “mental clarity”, reach goals and objectives (Goleman et al. 2002, p. 46).

Subsequently, the social awareness domain focuses on skills required to empathise and read another individual’s voice or face (Goleman et al. 2002). Individuals lacking empathy would invoke negative reactions in others (Goleman et al. 2002). The relationship management domain unites the three aforementioned domains, since it requires one to be conscious of their emotions, manage their emotions and be aware of others’ emotions (Goleman et al. 2002). The four domains are interlinked and effective leaders usually possess at least one skill from each domain (Goleman et al. 2002).

1.4 Defining ‘Non-EI skills’

For this study, non-EI skills refer to a wider range of skills not classified as EI skills. To facilitate comparison with EI skills this study refers to the non-EI skills illustrated in Table 1.2.

Non-EI Skills			
	Definition		**Definition**
Financial accounting	Interpretation and application of relevant accounting standards	**Finance**	Financial analysis and planning
Bookkeeping	Bank reconciliations, journal entry preparation and monthly accounting	**Strategy and governance**	Role of corporate governance within an organisation and strategy formulation
Management accounting	Budgeting, costing, and performance measurement	**Information technology**	Proficiency in latest information technology sources
Taxation	Personal and corporate tax preparation	**Analytical skills**	Articulating and solving problems
Audit and assurance	Financial statement auditing and other assurance services	**Integrative thinking**	Critical thinking when solving a problem
Oral Communication	Effective listening, understanding and speaking	**Written communication**	Writing with clarity and precision

Table 1.2: Non-EI skills as defined by Coady (2014, pp. 89-90)

1.5 Rationale for the study

According to Gawai (2016) the topic of emotions has always been an area of interest, however, recently has gained attention within the business world. EI skills are becoming increasingly important in the accountancy profession (Coady et al. 2018). Dolev and Leshem (2016) claimed that emotional aspects have been neglected in teaching. Local literature (Cutajar 2014) referred to the emotionally intelligent accountant and EI skills perceived as important by big-four firms. Cutajar (2014) identified that during the recruitment process, local big-four firms take EI into consideration. This emphasises the importance of students' EI skill development. However, no local literature focused on EI and non-EI skills important for accountancy graduates working in big-four or mid-tier firms, the extent graduates have developed such skills and the extent such skills should be developed during the UoM accountancy programme. Therefore, this study's findings could provide insight to UoM accountancy curriculum preparers regarding potential areas for improvement on skill development. Although,

Cutajar (2014) measured big-four accountants' EI level, no study has measured UoM accountancy students' EI level. Thus, it would be interesting to understand if students' EI level increases on course progression. Therefore, this study would fill an existing gap within local literature regarding EI.

1.6 Research objectives

The predominant objective of this study is to understand the perspectives of graduates and warrant holders (WH) regarding UoM accountancy graduates' EI and non-EI skills. In light of this, the following research objectives are addressed:

- **Objective 1:** To understand the perceptions of graduates, together with big-four and mid-tier firm WH on the importance of EI at the workplace and the EI and non-EI skills deemed fundamental for local accountancy graduates to possess within big-four or mid-tier firms.
- **Objective 2:** To investigate the degree to which UoM accountancy graduates together with big-four and mid-tier firm WH are of the opinion that graduates have developed certain EI and non EI-skills during the UoM accountancy programme.
- **Objective 3:** To understand the perceptions of UoM accountancy graduates together with big-four and mid-tier firm WH on the UoM accountancy programme and the degree to which they believe that accountancy graduates should develop particular EI and non-EI skills during the UoM accountancy programme.
- **Objective 4:** To measure the EI level of UoM accountancy students within different years.

1.7 Scope and limitations of the study

- This study focuses on UoM accountancy graduates. Therefore, results are not necessarily applicable for ACCA graduates.
- The perspective of WH is restricted to big-four and mid-tier firm WH. Thus, this study concentrates on practice-based accountants, as opposed to industry-based practitioners.
- The UoM accountancy graduates' perspective is limited to graduates who qualified during the past 3 years.
- The skillset is limited to 19 EI and 12 non-EI skills considered important according to Coady et al. (2018), which cannot be considered an exhaustive list. However, if more skills were included, questionnaires would have been time-consuming for participants to complete.
- Addressing the fourth objective, as the study is cross-sectional rather than longitudinal, limitations arise in relation to making causal inferences regarding differences in students' EI in different years.

1.8 Structure of the study

Chapter 1 introduces the research area, whereby background information, key concepts, rationale, objectives and limitations and scope of the study are discussed. **Chapter 2** extensively evaluates local and international literature. **Chapter 3** describes the research methodology adopted to address the objectives. Furthermore, **Chapters 4, 5, 6 and 7** delve into the findings and discussions relevant to the first, second, third and fourth research objectives respectively. **Chapter 8** concludes the study, wherein, the fundamental findings are summarised; potential recommendations are stated; and areas for further research are highlighted. Figure 1.1 illustrates the dissertation overview.

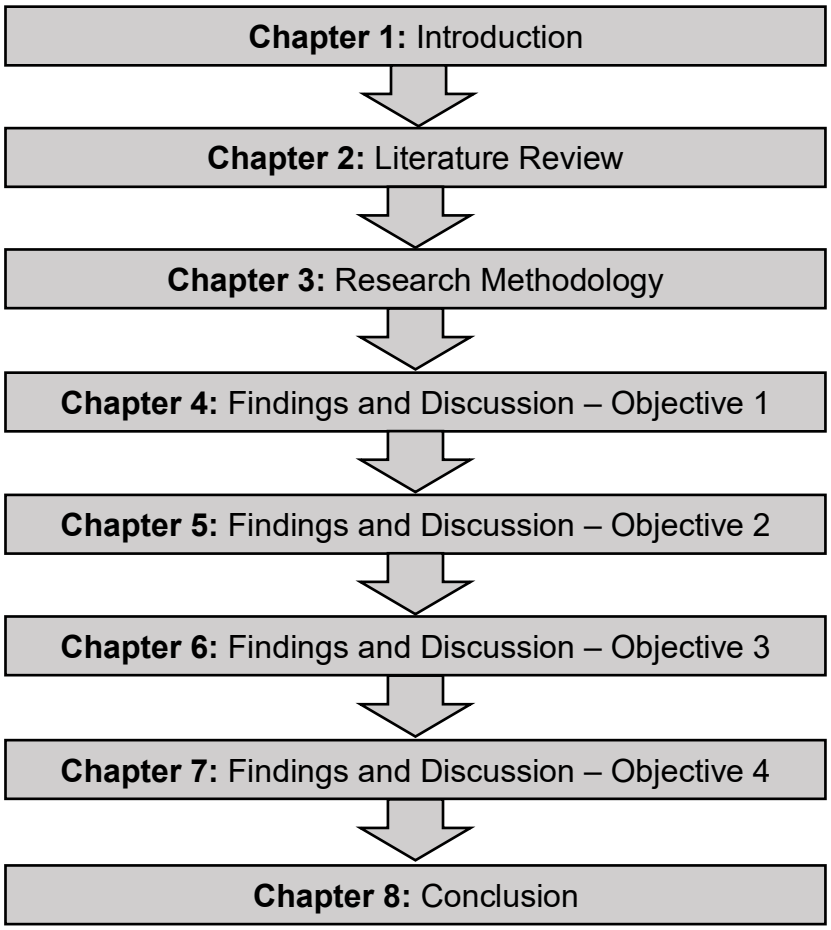

Figure 1.1: Dissertation overview

Chapter 2

Literature Review

2.1 Introduction

This chapter reviews literature relevant to this study's objectives as referred to in Chapter 1, Section 1.6. Sections 2.2, 2.3, 2.4 and 2.5 probe into international literature relevant to this study's first, second, third and fourth research objectives respectively. Lastly, Section 2.6 concludes this chapter. Figure 2.1 outlines the chapter.

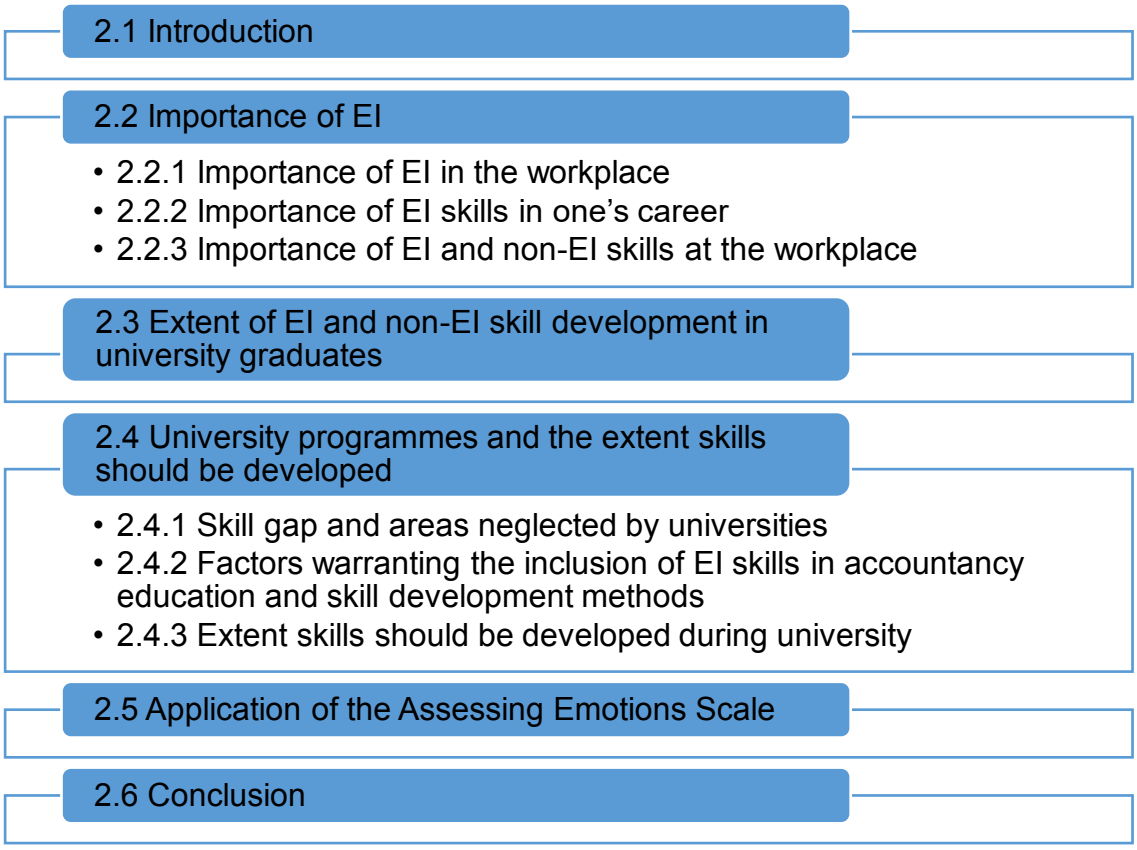

Figure 2.1: Chapter outline

2.2 Importance of EI

The ensuing section addresses literature relevant to this study's first objective regarding importance of EI at the workplace and in one's career; and EI and non-EI skills fundamental for graduates at the workplace.

2.2.1 Importance of EI in the workplace

Goleman et al. (2002) found that it is important for accountants to possess EI. Literature suggested that EI is a fundamental quality for success at the workplace (Rozell et al. 2002; Goleman 1998); personal satisfactory performance (Salovey, Grewal 2005); for the organisation to be successful (Kastberg et al. 2020; Serrat 2017; Sigmar et al. 2012; Abraham 2006; Salovey, Grewal 2005; Mayer et al. 2004; Goleman et al. 2002); and assisting accountants in decision-making situations (McPhail 2004). According to Freedman (2010), 89 percent of business leaders stated that EI is fundamental or extremely fundamental to fulfil uppermost organisational challenges.

According to Riaz et al. (2018) certain EI skills are fundamental for employee productivity. Druskat et al. (2017) revealed that emotionally intelligent teams contribute to team effectiveness. In fact, Makkar and Basu (2019) suggested that when personnel possess EI skills, as referred to in Chapter 1, Section 1.3, a more positive work environment is created, leading to better service provision. Ceballos et al. (2017) found that persons possessing a high EI level tend to have greater job satisfaction. Additionally, literature (Teles et al. 2020; Membrive-Jiménez et al. 2020) revealed that EI may lower negative implications relating to workload, stress and job dissatisfaction. This leads to better teamwork, relationships and performance (Molero Jurado et al. 2018).

2.2.2 Importance of EI skills in one's career

According to Cutajar (2014) big-four firm employees perceived not all EI skills fundamental for performance, particularly for lower rank employees, however, their importance increases throughout career progression. Therefore, the EI skills required depend on one's role (Abraham 2006). Contradictorily, Wells et al. (2009) stated that when compared to professional skills, including individuals encompassing a considerable degree of technical knowledge, EI skills were more important for accountancy graduates in the early stages of their career.

The significance of EI skills in performance improvement has been identified in various professions. For instance, to be a satisfactory lawyer (Douglas 2015), software engineer (Kosti et al. 2014), nurse (Raghubir 2018) and in higher education (Parrish 2015) one requires an adequate level of the EI skillset as referred to in Chapter 1, Section 1.3. Akers and Porter (2003, p. 65) suggested that "emotional intelligence skills are critical for the success of the accounting profession". Tsiligiris and Bowyer (2021) argued that future accountants require EI skills. Additionally, the World Economic Forum (2020) suggested that EI is an important skill for one to possess in their job by 2025. ACCA (2020) included EI as a must-have capability for accountants to keep up with the dynamic environment. Furthermore, Lambert and Morales (2017, p. 12) suggested that accountants can no longer work in solitude within an "ivory tower". Furthermore, Goleman (2020) highlighted that one would be able to have effective disagreements when necessary if skilled in the four EI domains outlined in Chapter 1, Section 1.3. However, Chamorro-Premuzic and Yearsley (2017) argued that individuals may be good at establishing relationships if they are empathetic and caring, but unable to deliver or receive criticism.

Drigas and Papoutsi (2018) argued that an emotionally intelligent individual would better understand others' feelings. Furthermore, Watkins et al. (2017) suggested that EI is fundamental to be a successful leader. Additionally, Hopkins and Yonker (2015) claimed that a relationship exists between an individual's EI level and conflict management style.

2.2.3 Importance of EI and non-EI skills at the workplace

In a study conducted by Coady et al. (2018) in Eastern Canada it was found that employers considered non-EI skills as more important than EI skills at the workplace. Table 2.1 depicts skills perceived as most and least relevant, as revealed by Coady (2014, pp. 90-93).

Skills most important at the workplace				
	Employers		Graduates	
		Mean		Mean
Non-EI skills	Financial accounting	4.74	Analytical skills	4.61
EI skills	Transparency	4.60	Service	4.46
Skills least important at the workplace				
	Employers		Graduates	
		Mean		Mean
Non-EI skills	Strategy and governance	3.72	Finance	3.71
EI skills	Change catalyst	3.68	Influence	3.75

Table 2.1: Skills most and least fundamental at the workplace (Coady 2014, pp. 90-93)

An overall mean score of 4.22 was obtained by employers and graduates in relation to the importance of 31 EI and non-EI skills at the workplace, meaning all skills were considered relevant (Coady et al. 2018). Dolce et al. (2020) revealed that demand for accountancy graduates to possess adequate communication skills is increasing.

2.3 Extent of EI and non-EI skill development in university graduates

This part of the literature review builds the foundation to address this study's second objective, to understand the degree to which WH and graduates believe EI and non-EI skills have been developed during the accountancy programme.

Pan and Perera (2012) stipulated that in certain instances current accountancy programmes do not always fulfil market expectations. According to Van Mourik and Wilkin (2019) professional accounting bodies are concerned on graduates' knowledge application capabilities. Literature (The Society for Human Resource Management [SHRM] 2019; Moore, Morton 2017) suggested that university students lack critical thinking and communication skills. Additionally, Wolcott and Sargent (2021) revealed that critical thinking skills are limited in US accountancy graduates.

Schoenberger-Orgad and Spiller (2014) noted that development of critical thinking is hindered by overcrowded programmes. Lang (2009) identified that university business programmes neglect conflict management skills. Table 2.2 depicts skills perceived as most and least developed in accountancy graduates, as revealed by Coady (2014, pp. 91-94).

Skills most developed in accountancy graduates				
	Employers		Graduates	
		Mean		Mean
Non-EI skills	Financial accounting	3.36	Financial accounting	3.68
EI skills	Teamwork and collaboration	3.60	Teamwork and collaboration	3.57
Skills least developed in accountancy graduates				
	Employers		Graduates	
		Mean		Mean
Non-EI skills	Strategy and governance	2.28	Information technology	2.41
EI skills	Change catalyst and Conflict management	2.34	Emotional self-awareness	2.24

Table 2.2: Skills most and least developed in graduates (Coady 2014, pp. 91-94)

Coady et al. (2018, p. 103) found that for the mean extent of skill development in graduates, means of 2.78 and 2.92 out of 5 for employers and graduates respectively were obtained. Employers ranked graduates as having less than good development in 22 of 31 skills; whereas graduates ranked that they have lower than good development in 17 skills, implying both did not believe graduates had better than good development from the skillset provided (Coady et al. 2018). Furthermore, an interview conducted by Cutajar (2014) with a big-four WH revealed that ACCA students are perceived as more emotionally intelligent than UoM graduates, since the former are exposed to the work environment whilst studying.

Coady et al. (2018) utilised the Extent Index calculation, described in Chapter 3, Section 3.7.2, to comprehend the extent skills have been developed in graduates, given their importance at the workplace. Table 2.3 presents the highest and lowest Extent Index scores as revealed by Coady et al. (2018, p. 106).

	Non-EI skills	Employers Index	EI skills	Employers Index
Highest Extent Index	Bookkeeping	4.81	Service	5.03
Lowest Extent Index	Information technology	3.66	Teamwork and collaboration	3.44
	Non-EI skills	Graduates Index	EI skills	Graduates Index
Highest Extent Index	Audit and assurance	4.66	Service	5.31
Lowest Extent Index	Management accounting	3.24	Teamwork and collaboration	3.59

Table 2.3: Extent Index scores (Coady et al. 2018, p. 106)

2.4 University programmes and the extent skills should be developed

This section evaluates literature on university programmes and the extent EI and non-EI skills should be developed during university accountancy programmes or in other locations, addressing this study's third objective.

2.4.1 Skill gap and areas neglected by universities

Bui and Porter (2010) claimed that an expectation-performance gap amongst recent New Zealand university accountancy graduates exists. Literature (Webb, Chaffer 2016; Jones 2014; Kavanagh, Drennan 2008) suggested that university accountancy programmes are not adequately developing fundamental skills in students causing a skill gap. Daff et al. (2012) highlighted that present accountancy programmes focus on technical skills, neglecting aspects including EI, resulting in a skill gap. Locally, Farrugia (2019) discovered that a skill gap of personal, interpersonal, and technical skills is present.

Chia (2005) suggested that universities should attempt to equip graduates with an adequate combination of skills to perform efficiently. In fact, Abayadeera and Watty (2014) suggested that university programmes should be designed to generate highly skilled accountancy graduates. However, SHRM (2019) revealed that more than half of surveyed Human Resources (HR) professionals claimed educational systems have done very little or nothing to bridge the EI and non-EI skill deficit.

In the US a gap was recognised within the profession by Siegel et al. (2010), whereby, market expectations were not satisfied by accountancy programmes, since they were not adapted to market requirements. According to Myers and Tucker (2005) courses should be updated with the professions' everchanging requirements. Furthermore, Marx et al. (2020) suggested that practical experience should be included in the accountancy curriculum to narrow the skill gap.

Different studies (Gammie et al. 2002; Barbera 1996) concluded that universities focus on the financial and regulatory aspects, neglecting other areas required by accountants. Jackling and De Lange (2009) suggested that accountancy courses in Australian universities focus on technical skills, neglecting other areas perceived as important for the profession. Accountancy education tends to focus on content knowledge, rather than the wide-ranging competencies necessary for the profession, such as the practical side (Yap et al. 2014; Fouché 2013). In fact, Yap et al. (2014) stated that accountancy education tends to greatly rely on textbooks. Literature (Stanley, Xu 2019; Flood, Wilson 2008) suggested that university accountancy programmes should focus on concepts supporting practice, rather than technical comprehension. Jackson and Meek (2021) claimed

that pressure is being placed on university programmes to include practical components, to adequately prepare accountancy students for their career. Consequently, some universities in the United Kingdom have included a placement year to the accountancy programme.

2.4.2 Factors warranting the inclusion of EI skills in accountancy education and skill development methods

Since the 1990s, due to the digital age, the accountant's role evolved and impacted the work requirements (ACCA 2018). Thus, accountants are required to be team players, communicating with different people to achieve goals (Jones, Abraham 2009). Therefore, accountants could be repositioned as "knowledge professionals" instead of "accounting technicians" (Jones, Abraham 2009, p. 48). This change has made accountancy education more complex because when the role concentrated on supplying financial information, education was only required on accounting and auditing (Jones, Abraham 2009). In the new digital world EI is crucial (PricewaterhouseCoopers [PWC] 2021).

Furthermore, EI skills are crucial for employees to possess to be successful post-COVID-19 (European Commission [EC] 2021). Additionally, Sangster et al. (2020) argued that due to COVID-19, educational programmes should be revised to include the development of EI competencies. Moreover, with technological advancement specific jobs risk becoming automated, meaning that individuals require to accumulate skillsets that automated technology are unable to duplicate (Kastberg et al. 2020). Additionally, Beck and Libert (2017) advocated that development in artificial intelligence is making EI more important.

Due to the aforementioned factors the importance of EI inclusion in prospective accountants' education is amplified. In view of this, various authors (Tsiligiris, Bowyer 2021; Coady et al. 2018; Chia 2005) have proposed for educators to integrate development of these skills into university programmes. In fact, certain institutions focusing on business study units have recognised the importance of EI and included EI skill development within their programmes (Sigmar et al. 2012; Myers, Tucker 2005).

Kastberg et al. (2020, p. 66) claimed that EI is "multi-faceted", implying that EI skills are not developed concurrently, but in stages. Thus, students' EI can improve through training sessions focusing on skill enhancement of each EI component (Kastberg et al. 2020; Dacre Pool, Qualter 2012). In fact, Esmond-Kiger and Kirch (2003, p. 53) revealed that certain EI skills were incorporated within accounting courses, by implementing the "business activity model", constructed at the University of Virginia, United States (US). This model permits students to obtain skills required by the profession and sets out a problem-based framework; whereby, students are provided certain cases and required:

> "to work in groups, research accounting issues, role play communicating with a client, write memos, and complete the statements of a hypothetical company for the first seven years of its existence."
>
> (Esmond-Kiger, Kirch 2003, p. 54)

2.4.3 Extent skills should be developed during university

Table 2.4 depicts skills perceived as most and least expected to be developed during university accountancy programmes as revealed by Coady (2014, pp. 92-95).

Skills most expected to be developed during university				
	Employers		Graduates	
		Mean		Mean
Non-EI skills	Written communication	4.30	Financial accounting	4.45
EI skills	Teamwork and collaboration	4.16	Teamwork and collaboration	3.99
Skills least expected to be developed during university				
	Employers		Graduates	
		Mean		Mean
Non-EI skills	Strategy and governance	3.18	Strategy and governance	3.59
EI skills	Change catalyst	2.88	Emotional self-awareness and empathy	3.28

Table 2.4: Skills most and least expected to be developed during university (Coady 2014, pp. 92-95)

The Where Index described in Chapter 3, Section 3.7.2, was utilised by Coady et al. (2018) to understand the extent skills are expected to be developed during university, given their respective importance at the workplace. Table 2.5 conveys the highest and lowest Where Index scores as revealed by Coady et al. (2018, p. 105).

	Non-EI skills	Employers Index	EI skills	Employers Index
Highest Where Index	Financial accounting	5.50	Teamwork and collaboration	5.04
Lowest Where Index	Strategy and governance	3.36	Change catalyst	3.21
	Non-EI skills	Graduates Index	EI skills	Graduates Index
Highest Where Index	Financial accounting	5.42	Teamwork and collaboration	4.84
Lowest Where Index	Strategy and governance	3.63	Influence	3.29

Table 2.5: Where Index scores (Coady et al. 2018, p. 105)

For both employers and graduates, Coady et al. (2018) integrated the Where and Extent Indices into a strategic map, split into four quadrants, as depicted in Table 2.6 where 58% of EI skills were positioned in Quadrant 4.

Quadrant 1: Skills being developed well in graduates by universities			**Quadrant 2: Skills requiring attention by university accountancy curriculum preparers**		
Employers		**Graduates**	**Employers**		**Graduates**
Financial accounting	↔	Financial accounting	Analytical skills	↔	Analytical skills
Teamwork and collaboration	↔	Teamwork and collaboration	Integrative thinking	↔	Integrative thinking
Building bonds	↔	Building bonds	Service	↔	Service
Achievement	↔	Achievement	Initiative		Transparency
Adaptability	↔	Adaptability	Oral communication		Taxation
Transparency		Oral communication	Written communication		Audit and assurance
Audit and assurance		Written communication	Bookkeeping		
Quadrant 3: Skills adequately developed in graduates requiring no further emphasis			**Quadrant 4: Skills least developed requiring no further emphasis**		
Employers		**Graduates**	**Employers**		**Graduates**
Management accounting	↔	Management accounting	Accurate self-assessment	↔	Accurate self-assessment
Inspiration	↔	Inspiration	Organisational awareness	↔	Organisational awareness
Emotional self-awareness		Conflict management	Change catalyst	↔	Change catalyst
Optimism		Initiative	Developing others	↔	Developing others
Self-confidence		Finance	Empathy	↔	Empathy
Information technology		Strategy and governance	Influence	↔	Influence
			Self-control	↔	Self-control
			Conflict management		Optimism
			Finance		Self-confidence
			Taxation		Emotional self-awareness
			Strategy and governance		Information technology

Table 2.6: Four quadrants representing perspectives of employers and graduates on skills (Coady et al. 2018, pp. 108-109)

Wells et al. (2009) advocated that universities tend to provide accountancy students with sufficient technical skills. Neo-correspondence theory states that higher educational institutions should develop programmes whilst considering employers' expectations (Saunders, Machell 2000; Gintis 1971). Furthermore, reverse correspondence theory suggests that universities are not required to incorporate skills perceived as unimportant at the workplace into their curriculum (Coady et al. 2018).

Literature (Bui, Porter 2010; Wells et al. 2009) suggested that universities need to improve students' teamwork skills. Additionally, other studies (Weaver, Kulesza 2014; Crawford et al. 2011; Kavanagh, Drennan 2008; Hassall et al. 2005) highlighted the importance of analytical skills and integrative thinking. Hassall et al. (2005) suggested that development of information technology skills was considered less necessary for accountancy graduates progressing into the workplace. In agreement, Howieson (2003) stated that although information technology is considered relevant, it is perceived less important than analytical and communication skills. Conversely, Pan and Seow (2016) emphasised the need for accountants to understand information technology to be productive.

2.5 Application of the Assessing Emotions Scale

Reviewing the existing literature provides an understanding of EI levels obtained by students at various universities and employees within different areas. Furthermore, this sets the basis for addressing this study's fourth objective. Different scales exist to measure EI, but for reasons stated in Chapter 3, Section 3.3.3 the Assessing Emotions Scale (AES) designed by Schutte et al. (2009) is going to be utilised. Therefore, literature in this section includes scores derived from the AES.

Cook et al. (2011) found that accountancy students' EI level across Canadian, US and South African universities was low, implying that such students were not perceived as competent in the EI skillset. Furthermore, it was suggested that accountancy programmes are not fulfilling market requirements regarding graduates' EI skillset levels and one's EI may improve as a result of the curriculum (Cook et al. 2011). In fact, Foster et al. (2017) revealed that as Australian university nursing students progressed their EI level increased. Additionally, Snowden et al. (2015) argued that EI increases by age.

Bastian et al. (2005) found that Australian university first-year students obtained a mean EI score of 123.80. Furthermore, Depape et al. (2006) revealed that psychology university students in Canada obtained a mean EI score of 127.78. Ravikumar et al. (2017) discovered that Delhi postgraduate medical students obtained a mean EI score of 124.4. Additionally, Table 2.7 depicts the mean EI scores of Delhi postgraduate medical students for each cluster (Ravikumar et al. 2017).

EI clusters	Mean EI score
Perception of emotions cluster	35.9
Managing own emotions cluster	35.34
Managing others' emotions cluster	29.52
Utilisation of emotions cluster	23.55

Table 2.7: Mean EI score of postgraduate medical students (Ravikumar et al. 2017, p. 5)

Cutajar (2014) revealed that employees within the accounting; audit/assurance; advisory; and taxation departments in local big-four firms obtained a mean EI score of 120, 124, 127 and 127 respectively.

2.6 Conclusion

This chapter reviewed the literature relevant to this study's research objectives, primarily focusing on EI and accountancy education. Different perspectives were identified between employers and graduates in various areas. The ensuing chapter outlines the research methodology adopted to undertake this study.

Chapter 3

Research Methodology

3.1 Introduction

This chapter outlines the research methodology adopted to address the objectives. Preliminary secondary research was undertaken to provide a foundation for the formulation of the objectives. After selecting the research method, a questionnaire was designed. Additionally, a pilot study was conducted to test the research instruments' adequacy. Subsequently, data was collected and analysed to collate the findings. Figure 3.1 outlines the chapter.

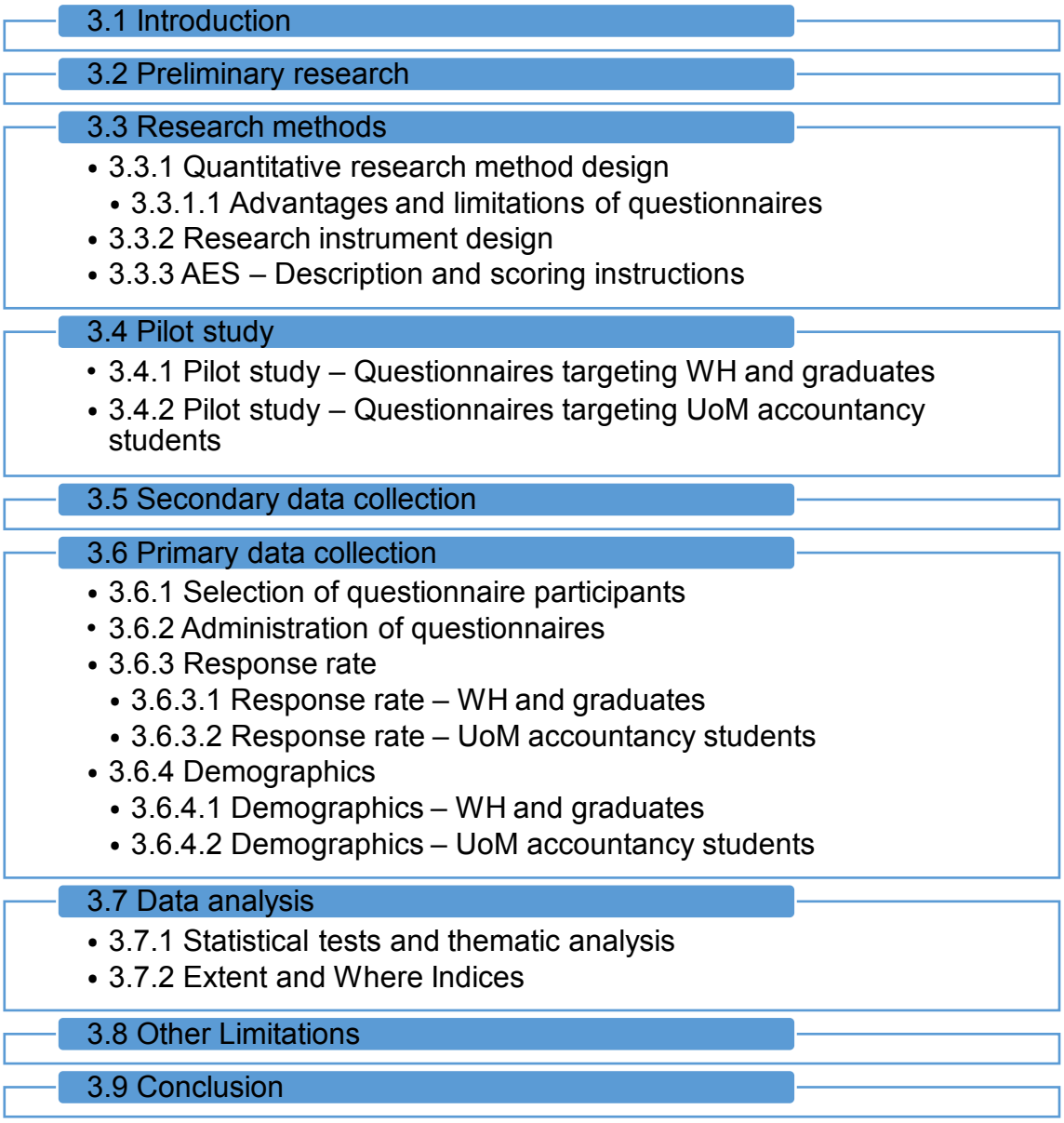

Figure 3.1: Chapter outline

3.2 Preliminary research

Extant literature was analysed during the initial stage to comprehend the research area. Subsequently, a discussion was undertaken with the dissertation supervisor. As this study's main objective was to analyse perspectives of WH and graduates, a preliminary short discussion was held with such parties. This procedure is referred to as "preliminary inquiry" (Saunders et al. 2019, p. 40). Preliminary research assisted in formulating the study's objectives, which were sub-divided into various hypotheses for statistical testing.

3.3 Research methods

Three main approaches were available; mixed methodology; quantitative; or qualitative (Saunders et al. 2019). These can be illustrated on a spectrum; quantitative on one side providing numeric data and qualitative on the other providing non-numeric data; with mixed methodology in the centre (Saunders et al. 2019; Creswell, Creswell 2018). Under a quantitative approach an instrument is designed to comprehend attitudes; then, statistical techniques are utilised to test pre-established hypotheses (Bloomfield, Fisher 2019; Creswell, Creswell 2018). Whereas, under a qualitative approach a different research instrument is designed and text or images are analysed (Creswell, Creswell 2018). Due to limitations of quantitative and qualitative methods, both methods may be utilised concurrently (Creswell, Creswell 2018; Hesse-Biber 2015). Under this approach, quantitative and qualitative methods are amalgamated, reaping the benefits of each method, resulting in a thorough comprehension of the research area (Saunders et al. 2019; Yeasmin, Rahman 2012; Östlund et al. 2011).

3.3.1 Quantitative research method design

When selecting research methods, different criteria must be considered including research objectives and intended audience (Creswell, Creswell 2018). Due to time constraints and since this study aimed to understand perceptions of WH together with graduates and measure accountancy students' EI level, a quantitative approach was undertaken, whereby, questionnaires were distributed to three target populations. Overall, due to the nature of this study's objectives, the quantitative approach was deemed most appropriate.

The researcher desired to replicate the study conducted by Coady et al. (2018) entitled "Positioning of emotional intelligence skills within the overall skillset of practice-based accountants: employer and graduate requirements", which utilised a quantitative approach. Therefore, to facilitate result comparison, the same approach was adopted. Furthermore, the quantitative approach was considered most appropriate for result generalisation by using statistical analysis (Groenland, Dana 2019).

3.3.1.1 Advantages and limitations of questionnaires

Advantages associated with questionnaires include:

1. Questionnaires eliminate the risk of bias arising from interviewer influence (Dalati, Marx Gómez 2018).
2. Questionnaires are an efficient data collection method since responses tend to be simple to tabulate and analyse (Patten 2014).
3. Questionnaires permit replication and generalisation of research findings (Yilmaz 2013).
4. A considerable amount of data can be collected and one is able to expeditiously evaluate it (Choy 2014).

Although several benefits are associated with questionnaires certain limitations exist, including:

1. Inability for instant clarification if a question is misunderstood by a respondent (Dalati, Marx Gómez 2018).
2. Self-selection bias, since only individuals interested in the research area would allocate time to complete it (Dewaele 2018).
3. The research instrument provides a glimpse, instead of an in-depth understanding of the research area (Patten 2014).
4. A low response rate is possible (Evans, Mathur 2018).
5. They are not appropriate for comprehension of participants' behaviour (Tewksbury 2009).

3.3.2 Research instrument design

During September 2021, permission (Vide Appendix A1.1) was obtained from Dr. Coady to utilise questions from her study. From the questionnaire distributed to WH and graduates, questions 15, 16, 17, 18, 24 and 25, were adapted from Coady (2014) to enable result comparison and address the first three objectives. Furthermore, to address the fourth objective, in October 2021 permission was acquired from Dr. Schutte (Vide Appendix A1.2) to utilise the AES. A document comprising of the AES, statistics and information on the scale was provided by Dr. Schutte.

The questionnaire distributed to WH and graduates comprised of twenty-eight open and closed-ended questions. Although open-ended questions are considered challenging in terms of coding (Scholz et al. 2022), when compared to open-ended questions, closed-ended questions possibly restrict and influence

responses (Creswell 2014). Thus, six open-ended questions were included to provide further insight (Baburajan et al. 2021).

Section A of the questionnaire dealt with demographics. The subsequent ten questions addressed the first objective. The following three questions within Section C, addressed the second objective. Section D included eight questions and tackled the third objective. Additionally, to address the fourth objective, a separate questionnaire was distributed to UoM accountancy students. Section A consisted of three demographic questions; whereas Section B included the AES designed by Schutte et al. (2009).

The respondents were informed beforehand on the questionnaire duration and nature of questions, to enable participation at their convenience. A safeguard implemented to prevent a low response rate, was that open-ended questions were set to optional rather than mandatory in 'Google Forms'. However, all closed-ended questions were set to mandatory, preventing respondents from omitting them. Furthermore, no questions included the option "I don't know" to prevent having an inadequate number of responses. Most closed-ended questions utilised a 5-point Likert scale (Vide Appendix A1.4) measuring the perceptions, on a linear scale increasing in increments of 1 and ranging from 1 to 5.

3.3.3 AES – Description and scoring instructions

Different scales measuring EI levels are used in literature. When selecting the scale, certain factors including length, reliability and cost were considered. According to Petrides (2018) the AES designed by Schutte et al. (2009) is considered as the most popular scale used in studies regarding EI, thus,

enhancing its reliability and validity. Hence, the AES was selected since it was short, reliable and free. Additionally, this scale permitted comparison of students' EI levels with local literature, since Cutajar (2014) utilised the AES to measure big-four accountants' EI levels. Nevertheless, since the AES is a self-reporting measure, bias could be present. If motivated, one may interpret questions and intentionally select options to acquire a greater score (Duckworth 2019). However, Duckworth (2019) noted that self-report questionnaires are advantageous since no one knows themself better than oneself. Table 3.1 depicts the EI domains outlined by Mayer and Salovey (1997) as referred to in Chapter 1, Section 1.2, and the corresponding question numbers in the AES (Vide Appendix A1.5).

EI Domain	Question Numbers
Perception of emotions	5, 9, 15, 18, 19, 22, 25, 29, 32, 33
Managing own emotions	2, 3, 10, 12, 14, 21, 23, 28, 31
Managing others' emotions	1, 4, 11, 13, 16, 24, 26 30
Utilisation of emotions	6, 7, 8, 17, 20, 27

Table 3.1: Classification of questions – Students' questionnaire

The AES consists of a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5). Furthermore, the 5th, 28th and 33rd questions are reverse coded. When completing the AES, one can obtain a score between 33 and 165. Schutte et al. (2009) did not provide any demarcation line for one to be considered emotionally intelligent. However, it was implied that the higher the score the greater is one's EI.

3.4 Pilot study

Prior to the full-scale study, questionnaires should be pilot tested with participants having similar characteristics as the intended respondents, to address any deficiencies and assess question validity (Evans, Mathur 2018). When problems are highlighted questions should be refined to limit issues (Saunders et al. 2019).

3.4.1 Pilot study – Questionnaires targeting WH and graduates

Table 3.2 conveys that ten individuals accepted to participate in the pilot study. Given that questionnaires were mainly intended to be distributed online, six participants were sent the questionnaire via email and four were provided a physical copy. The reason for this was to cover all eventualities, in case physical copies were requested.

	Pilot study participants
Big-Four WH	2
Mid-Tier WH	3
UoM accountancy graduates	5
Total	**10**

Table 3.2: Pilot study participants – WH and graduates

Most suggested that certain questions were lengthy, and thus were shortened. Participants provided positive feedback regarding the topic and emphasised that the profession tends to focus on numerical aspects; whilst forgetting emotions. Table 3.3 outlines the expected versus actual questionnaire completion time.

Participant	**Expected completion time (Minutes)**	**Actual completion time (Minutes)**	**Discrepancy (Minutes)**
1	30	40	+10
2	30	33	+3
3	30	26	-4
4	30	50	+20
5	30	29	-1
6	30	45	+15
7	30	28	-2
8	30	54	+24
9	30	38	+8
10	30	35	+5

Table 3.3: Expected and actual completion time – WH and graduates

Questionnaires need to be realistically designed to acquire information; however, length should not jeopardise response rate (Evans, Mathur 2018). A significant discrepancy in durations was noticed, resulting in elimination of less important questions, aiming to shorten response time. Data collected from the pilot study was used to carry out the Test-Retest reliability, whereby questions were statistically tested to ascertain their reliability. The Kendall Tau-b test was utilised for Likert scale questions; whilst the Kappa test was used for the remaining questions. For both tests, a p-value below the 0.05 significance level implied satisfactory reliability; whilst a p-value above 0.05 indicated poor reliability. Table 3.4 and 3.5 illustrates the Kappa test and Kendall Tau-b test results respectively. All p-values from the Kappa test and most p-values from the Kendall tau-b test were below the 0.05 significance level, implying satisfactory reliability for such questions. Certain questions obtained a p-value marginally above the 0.05 significance level, indicating that reliability may be poor. However, given that the p-value was marginally greater, the questions concerned were modified to render them straightforward.

	Question Number	Kappa Value	P-Value
Section A	1	1.000	0.002
	2	1.000	0.002
	3	1.000	0.002
	4	1.000	0.002
	5	1.000	0.002
	6	1.000	0.002
	7	1.000	<0.001
Section B	12.1	1.000	0.002
	14	0.783	0.011
Section D	20.1	1.000	0.002
	21.1	1.000	0.002

Table 3.4: Kappa test results

	Question Number	Kendall Tau Value	P-Value	Question Number	Kendall Tau Value	P-Value
Section B	**8.1**	0.802	0.002	**16.1**	0.858	<0.001
	8.2	1.000	<0.001	**16.2**	1.000	<0.001
	8.3	1.000	<0.001	**16.3**	0.816	<0.001
	8.4	1.000	<0.001	**16.4**	0.756	0.035
	9	1.000	<0.001	**16.5**	0.802	0.002
	13.1	0.583	0.034	**16.6**	1.000	0.003
	13.2	1.000	0.035	**16.7**	0.816	<0.001
	13.3	1.000	<0.001	**16.8**	0.770	<0.001
	15.1	0.843	0.006	**16.9**	1.000	<0.001
	15.2	0.746	<0.001	**16.10**	1.000	0.003
	15.3	0.535	0.020	**16.11**	0.600	0.018
	15.4	0.764	0.042	**16.12**	1.000	<0.001
	15.5	0.802	0.002	**16.13**	1.000	<0.001
	15.6	0.764	0.042	**16.14**	0.780	<0.001
	15.7	1.000	<0.001	**16.15**	0.816	<0.001
	15.8	0.764	0.042	**16.16**	1.000	<0.001
	15.9	0.816	<0.001	**16.17**	0.867	0.003
	15.10	0.816	<0.001	**16.18**	0.802	0.002
	15.11	0.816	<0.001	**16.19**	1.000	<0.001
	15.12	1.000	<0.001			
Section C	**17.1**	0.910	<0.001	**18.5**	0.764	0.042
	17.2	1.000	<0.001	**18.6**	0.956	<0.001
	17.3	1.000	<0.001	**18.7**	1.000	<0.001
	17.4	0.780	<0.001	**18.8**	0.956	<0.001
	17.5	0.764	0.042	**18.9**	0.612	0.053
	17.6	0.690	<0.001	**18.10**	1.000	0.035
	17.7	0.729	0.002	**18.11**	1.000	<0.001
	17.8	1.000	<0.001	**18.12**	1.000	<0.001
	17.9	0.816	<0.001	**18.13**	0.943	<0.001
	17.10	0.764	0.042	**18.14**	1.000	<0.001
	17.11	0.816	<0.001	**18.15**	0.629	0.002
	17.12	1.000	<0.001	**18.16**	0.866	<0.001
	18.1	1.000	<0.001	**18.17**	0.816	<0.001
	18.2	1.000	<0.001	**18.18**	1.000	<0.001
	18.3	1.000	0.035	**18.19**	1.000	0.003
	18.4	1.000	<0.001			

	Question Number	Kendall Tau Value	P-value	Question Number	Kendall Tau Value	P-value
Section D	**22.1**	0.583	0.034	**24.12**	1.000	<0.001
	22.2	0.764	0.042	**25.1**	0.816	<0.001
	22.3	0.843	0.006	**25.2**	0.882	<0.001
	22.4	1.000	<0.001	**25.3**	0.583	0.034
	23.1	0.800	<0.001	**25.4**	0.569	0.015
	23.2	0.802	0.002	**25.5**	1.000	<0.001
	23.3	0.816	<0.001	**25.6**	1.000	<0.001
	23.4	0.882	<0.001	**25.7**	0.910	<0.001
	23.5	1.000	<0.001	**25.8**	1.000	0.055
	24.1	1.000	<0.001	**25.9**	0.583	0.034
	24.2	1.000	<0.001	**25.10**	0.858	<0.001
	24.3	1.000	<0.001	**25.11**	0.816	<0.001
	24.4	1.000	<0.001	**25.12**	1.000	<0.001
	24.5	1.000	<0.001	**25.13**	1.000	<0.001
	24.6	0.834	0.035	**25.14**	1.000	<0.001
	24.7	0.764	0.042	**25.15**	0.655	0.006
	24.8	0.756	0.035	**25.16**	0.816	<0.001
	24.9	1.000	<0.001	**25.17**	0.674	0.042
	24.10	0.583	0.034	**25.18**	0.583	0.034
	24.11	0.796	<0.001	**25.19**	0.882	<0.001

Table 3.5: Kendall Tau-b results

3.4.2 Pilot study – Questionnaires targeting UoM accountancy students

As depicted in Table 3.6 ten students accepted to participate. To pilot test both distribution methods, five were sent the questionnaire via email and five received a physical copy.

	Pilot study participants
First year	2
Second year	2
Third Year	2
Fourth year	2
Fifth year	2
Total	**10**

Table 3.6: Pilot study participants – Students

Table 3.7 illustrates the expected versus actual questionnaire completion time. Most participants completed the questionnaire in less time; thus, no questions were eliminated. On questionnaire completion feedback was obtained. Some were uncertain of the term “confide”; hence, this was changed to “trust” to eliminate confusion. Although, Schutte et al. (2009) found that the internal consistency of the AES was 0.87 according to the Cronbach’s alpha, the pilot study results obtained a Cronbach’s alpha of 0.856 implying high reliability.

Participant	Expected completion time (Minutes)	Actual completion time (Minutes)	Discrepancy (Minutes)
1	10	9	-1
2	10	10	0
3	10	7	-3
4	10	8	-2
5	10	9	-1
6	10	8	-2
7	10	12	+2
8	10	9	-1
9	10	8	-2
10	10	6	-4

Table 3.7: Expected and actual completion time – Students

3.5 Secondary data collection

This study made use of both primary and secondary data. Secondary data refers to data already collected for alternative purposes (Saunders et al. 2019). Secondary data collection permitted analysis of existing research relating to this subject. Literature sources included relevant peer-reviewed academic journals, articles, books, reports published by internationally recognised institutions and dissertations. Local literature was limited in this area.

3.6 Primary data collection

Primary data refers to data collected exclusively for the study being conducted (Saunders et al. 2019). In this study primary data was obtained by distributing questionnaires to big-four and mid-tier WH together with recent UoM accountancy graduates. Furthermore, a different questionnaire was distributed to UoM accountancy students. The ensuing sub-sections present the primary data collection approach.

3.6.1 Selection of questionnaire participants

A process was undertaken to identify suitable firms for questionnaire distribution. The first three objectives focused on perceptions of WH employed within big-four and mid-tier firms. Mid-tier firms were taken as those having four or more principals as per the AB website as of November 2021. Questionnaires were sent by email to the HR of selected firms for distribution. Additionally, to address the fourth objective, permission to distribute questionnaires amongst accountancy students was sought from the Head of Department (Vide Appendix A1.3).

Following correspondence with the HR department of selected firms and perusal of the AB website, the target population of WH in big-four and mid-tier firms resulted in circa 1,050. Furthermore, the Faculty of Economics, Management and Accountancy confirmed that the total of UoM accountancy graduates in the past three years was 277. Additionally, the Faculty confirmed that the total population of accountancy students from first to fifth year was 514 students.

3.6.2 Administration of questionnaires

An online questionnaire was designed for distribution to WH and graduates utilising 'Google Forms'. The email sent to the HR department of selected firms comprised of a brief introduction to the subject matter and estimated timeframe for questionnaire completion. Furthermore, the email guaranteed data confidentiality and participant anonymity. The introduction letter signed by the dissertation supervisor was attached.

Additionally, a questionnaire was made available online for students. However, to ensure a high response rate, appointments with lecturers were set for questionnaire distribution prior to lecture commencement. To prevent duplication of responses, before physical questionnaire distribution, students were asked if they had filled up such questionnaire online; those who had were not provided a physical copy.

3.6.3 Response rate

For both sets of online questionnaires, all closed-ended questions were set to mandatory, thus, no participant could submit partially filled questionnaires. In the case of physical questionnaire distribution to students this setting was not possible.

3.6.3.1 Response rate – WH and graduates

Table 3.8 depicts the 222 valid WH and graduates responses, sub-divided into categories to enable comparison of perspectives. The response rate for big-four and mid-tier WH was 21.14% and for UoM accountancy graduates was 34.66%. As computed within Appendix A1.6, assuming a 95% degree of confidence, a maximum margin of error of 5.84% was guaranteed from a population size of

1,050 WH and a sample size of 222. In the case of UoM graduates, based on a population of 277 and a sample size of 96, a maximum margin of error of 8.1% was guaranteed assuming a 95% degree of confidence (Vide Appendix A1.7).

Respondent Categories		Count
Questionnaire distributed to WH and UoM graduates	Big-Four WH	127
	Mid-Tier WH	95
	Total valid responses from WH	**222**
	UoM accountancy graduates in Big-Four firms	43
	UoM accountancy graduates in Mid-Tier firms	34
	UoM accountancy graduates in firms other than the Big-Four or Mid-Tier	19
	Total valid responses from UoM accountancy graduates	**96**
	Total valid responses from WH and UoM accountancy graduates	**318**

Table 3.8: Classification of questionnaire responses – WH and graduates

3.6.3.2 Response rate – UoM accountancy students

Although 311 responses were collected from UoM accountancy students, since physical questionnaires were also distributed, 9 were partially filled. Table 3.9 illustrates the 302 valid responses, sub-divided into different years to compare students' EI levels. A response rate of 58.75% was obtained.

Respondent Categories		Count
Questionnaire distributed to UoM accountancy students	First year	66
	Second year	91
	Third year	61
	Fourth year	44
	Fifth year	40
	Total valid responses from UoM accountancy students	**302**

Table 3.9: Classification of questionnaire responses – Students

As computed within Appendix A1.8, a maximum margin of error of 3.63% was guaranteed at a 95% degree of confidence from a population of 514 and sample size of 302 accountancy students.

3.6.4 Demographics

Section 3.6.4.1 addresses the demographics of WH and graduates; whilst Section 3.6.4.2 discusses the demographics of UoM accountancy students.

3.6.4.1 Demographics – WH and graduates

As stated within Section 3.6.3.1, to satisfy the first three objectives, data was obtained from 318 participants classified into sub-categories:

(1) **Big-four WH** – WH employed within big-four firms.
(2) **Mid-tier WH** – WH employed within firms having four or more principals.
(3) **UoM accountancy graduates in the big-four firms** – UoM graduates employed within big-four firms.
(4) **UoM accountancy graduates in mid-tier firms** – UoM graduates employed within firms having four or more principals.
(5) **UoM graduates in firms not classified as big-four or mid-tier** – UoM graduates employed within firms other than big-four or mid-tier, such as in industry, public sector and the Malta Financial Services Authority.

Figure 3.2 depicts that the majority of responses by WH were from big-four firms, WH in mid-tier firms followed closely behind.

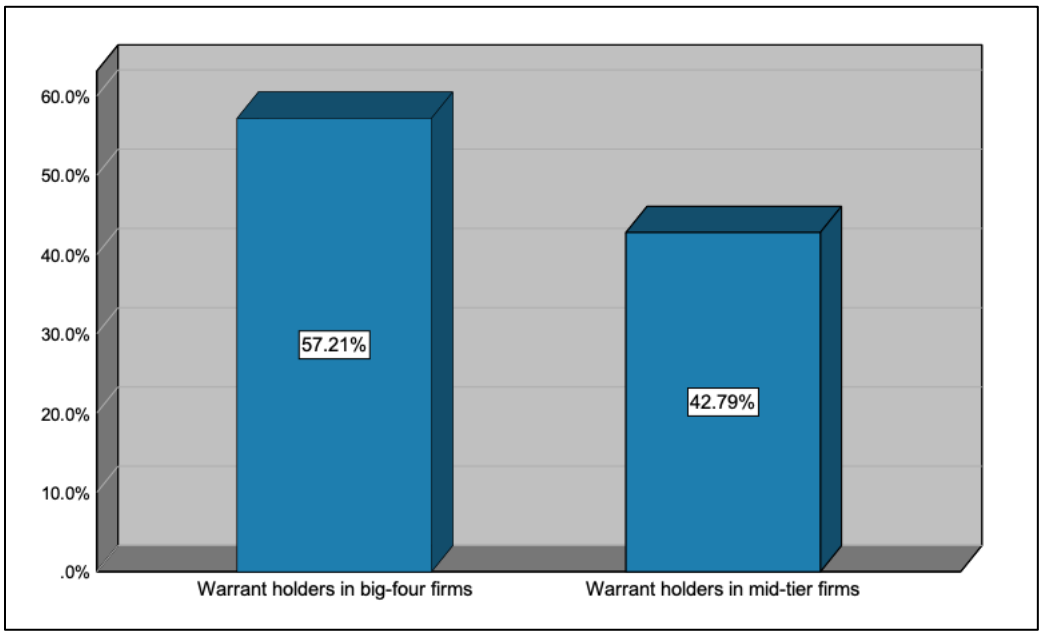

Figure 3.2: Classification – WH questionnaire responses

Figure 3.3 depicts that for UoM accountancy graduates, the majority of responses were from big-four firms, followed by graduates in mid-tier firms. Evidently, UoM responses from accountancy graduates employed in other firms fell slightly behind.

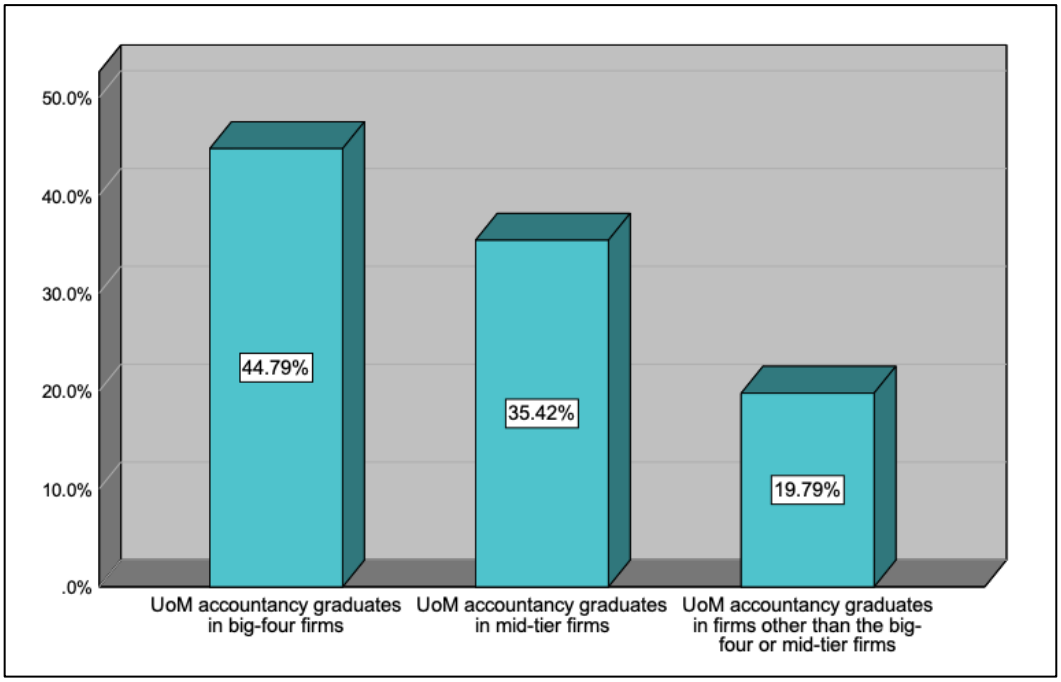

Figure 3.3: Classification – UoM accountancy graduates' questionnaire responses

Appendix A1.9, provides additional demographics regarding respondents' classification; relevant qualifications; areas of work specialisation; approximate number of graduates employed by the firm per year; and number of years since graduation.

3.6.4.2 Demographics – UoM accountancy students

As suggested within Section 3.6.3.2, to address the fourth objective, data was obtained from 302 participants, sub-divided into:

(1) **First year students** – Undergraduate UoM accountancy students in first year.
(2) **Second year students** – Undergraduate UoM accountancy students in second year.
(3) **Third year students** – Undergraduate UoM accountancy students in third year.
(4) **Fourth year students** – Postgraduate UoM accountancy students in fourth year.
(5) **Fifth year students** – Postgraduate UoM accountancy students in fifth year.

As conveyed in Figure 3.4, the greatest number of responses were obtained from second year, followed by first year, third year, fourth year and fifth year students. Appendix A1.10, comprises of additional demographics regarding respondents' classification.

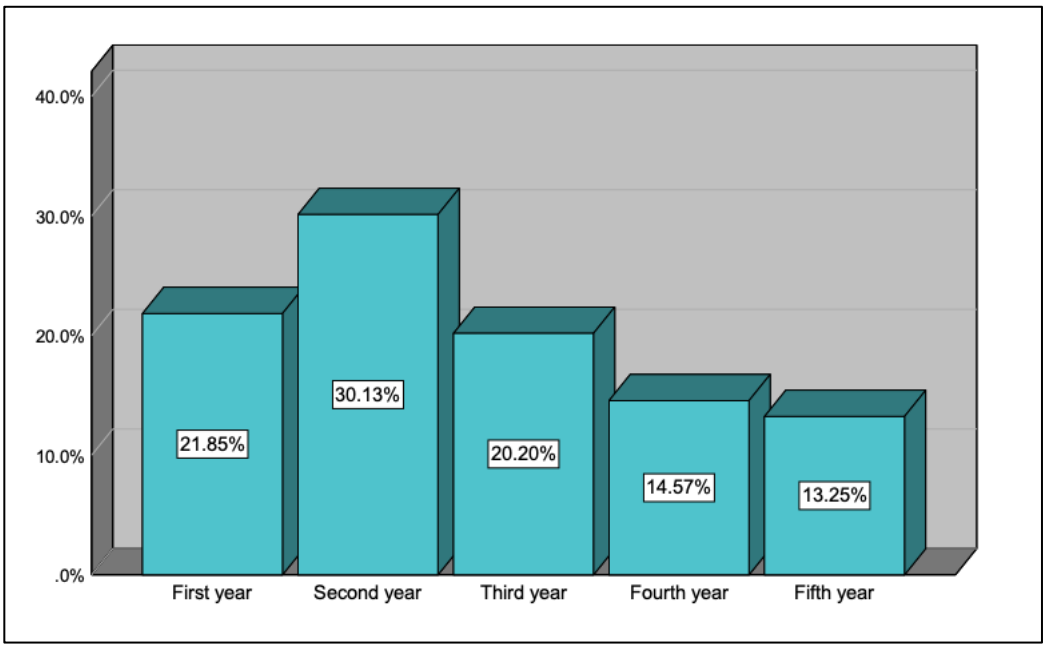

Figure 3.4: Classification – Students' questionnaire responses

3.7 Data analysis

Data analysis is an iterative process, whereby numbers are manipulated and interpreted to derive a meaning (Mertens et al. 2017). Statistical tests were used to analyse closed-ended questions; whilst thematic analysis was used to analyse open-ended questions.

3.7.1 Statistical tests and thematic analysis

The Statistical Package for the Social Sciences (SPSS) enabled conduction of statistical tests for closed-ended questions. For quantitative data analysis, a statistician was consulted and different statistical tests were used, including the:

- **Mann-Whitney test:** To test the hypotheses created for the first, second and third research objectives.
- **Kruskal-Wallis test and One-way ANOVA test**: To test the hypotheses created for the fourth research objective.

For all tests, the null hypothesis proposed no statistically significant difference between perceptions of WH and graduates. When the p-value was greater than the 0.05 significance level, the null hypothesis was accepted. Conversely, the alternative hypothesis stipulated that a statistically significant difference exists between perceptions of WH and graduates. Where the p-value was lower than the 0.05 significance level, the alternative hypothesis was accepted. A statistically significant difference signifies that the study's findings are a true depiction of the population's characteristics, rather than occurring due to sampling errors or by chance (Fay, Gerow 2013).

Due to the nature of open-ended questions analysis by SPSS was not possible. Therefore, thematic analysis was utilised. Thematic analysis consists of coding data for the identification of themes relating to the research question for further analysis (Saunders et al. 2019). According to Saunders et al. (2019) at analysis stage data familiarisation is crucial, hence, open-ended responses were re-read. Data coding entails labelling data and allocating it to different files (Seidman 2013). Subsequently, open-ended responses were further categorised into various themes.

3.7.2 Extent and Where Indices

The questionnaire for WH and graduates incorporated questions based on Coady et al. (2018, p. 104) to enable computation of the Extent and Where Indices. The Extent Index represents skills least developed in graduates depending on their level of importance. The greater the Extent Index score, the less developed is the skill in graduates, given its level of importance within big-four or mid-tier firms. The Where Index highlights the most important skills to be developed during the UoM accountancy programme, depending on their level of importance. The

greater the Where Index score, the more appropriate is the skill to be developed during the programme, given its level of importance within the workplace. The mean results were extracted from questions and inputted into the following formulae.

The formula utilised to compute the Extent Index was:

$$\text{Extent Index}_i = I_i \times \frac{\bar{E}}{E_i}$$

- I_i represents the mean of the importance of the skill
- E_i represents the mean of the extent to which such skill has been developed
- $\bar{E}$ represents the average of the mean extent to which the skill has been developed score for the entire range of 31 skills

Furthermore, the formula utilised to compute the Where Index was:

$$\text{Where Index}_i = I_i \times \frac{W_i}{\bar{W}}$$

- I_i represents the mean of the importance of the skill
- W_i represents the mean of the extent to which such skill should be developed during the UoM
- $\bar{W}$ represents the average of the mean extent to which such skills should be developed during the UoM for the entire range of 31 skills

Subsequently, the Extent and Where Indices results for WH and graduates were ranked from highest to lowest. Furthermore, Extent and Where Indices results were integrated and depicted on a strategic map to provide more in-depth information regarding the EI and non-EI skills.

3.8 Other Limitations

Not all companies agreed to distribute the questionnaires due to their policies and technological issues in distributing external links. This implies that the entire population (n=1050) was not accessible. Therefore, to mitigate this limitation WH and graduates employed in these companies were contacted through 'LinkedIn'.

Additionally, graduates were requested to assess their own ability in relation to the set of skills provided. Thus, possible bias may be present in relation to their perceived and actual level of skill development (Duckworth 2019).

For this study the AES scale was utilised to measure accountancy students' EI level, however, other scales exist and it is possible that these scales could give different results. Therefore, this must be considered before applying the findings of this study.

3.9 Conclusion

This chapter provided a comprehensive overview of this study's research methodology. Figure 3.5 depicts the order of the ensuing four chapters and how they link to the respective research objectives.

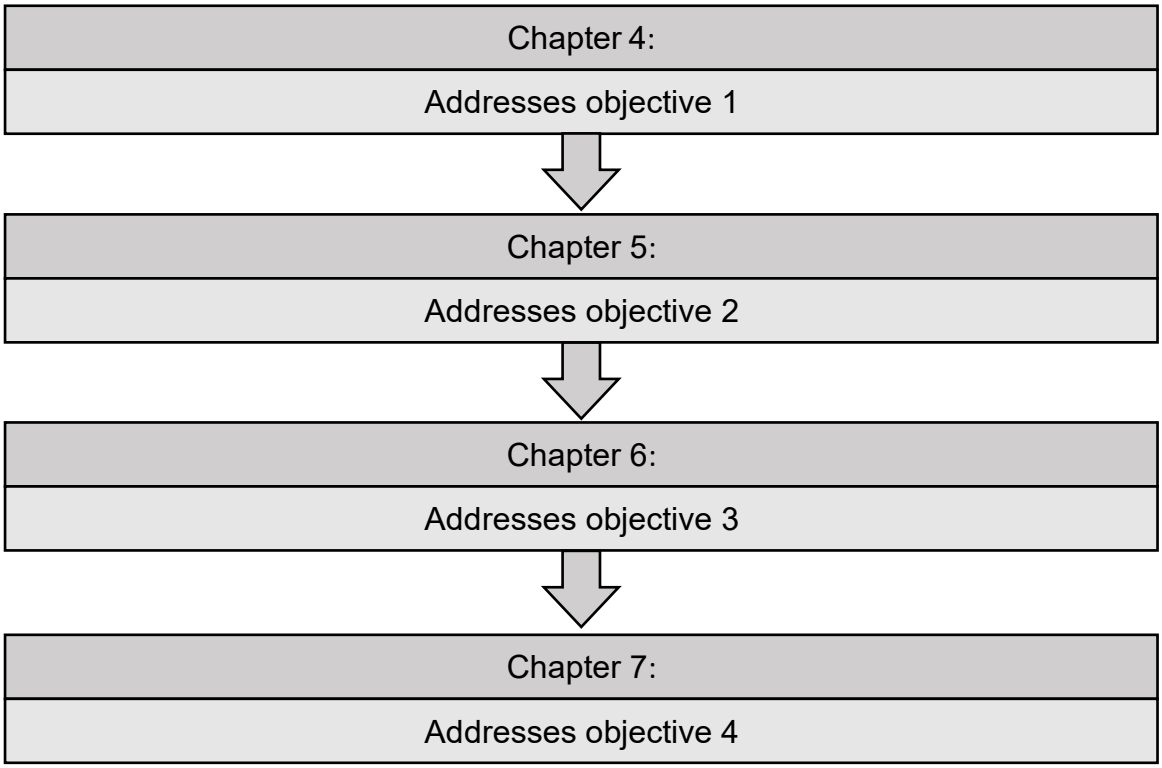

Figure 3.5: Findings and discussion chapters

Chapter 4

Findings and Discussion – Objective 1

4.1 Introduction

This chapter addresses the first objective with the aim of understanding the perceptions of WH together with graduates on EI and its importance at the workplace. Figure 4.1 illustrates the chapter outline.

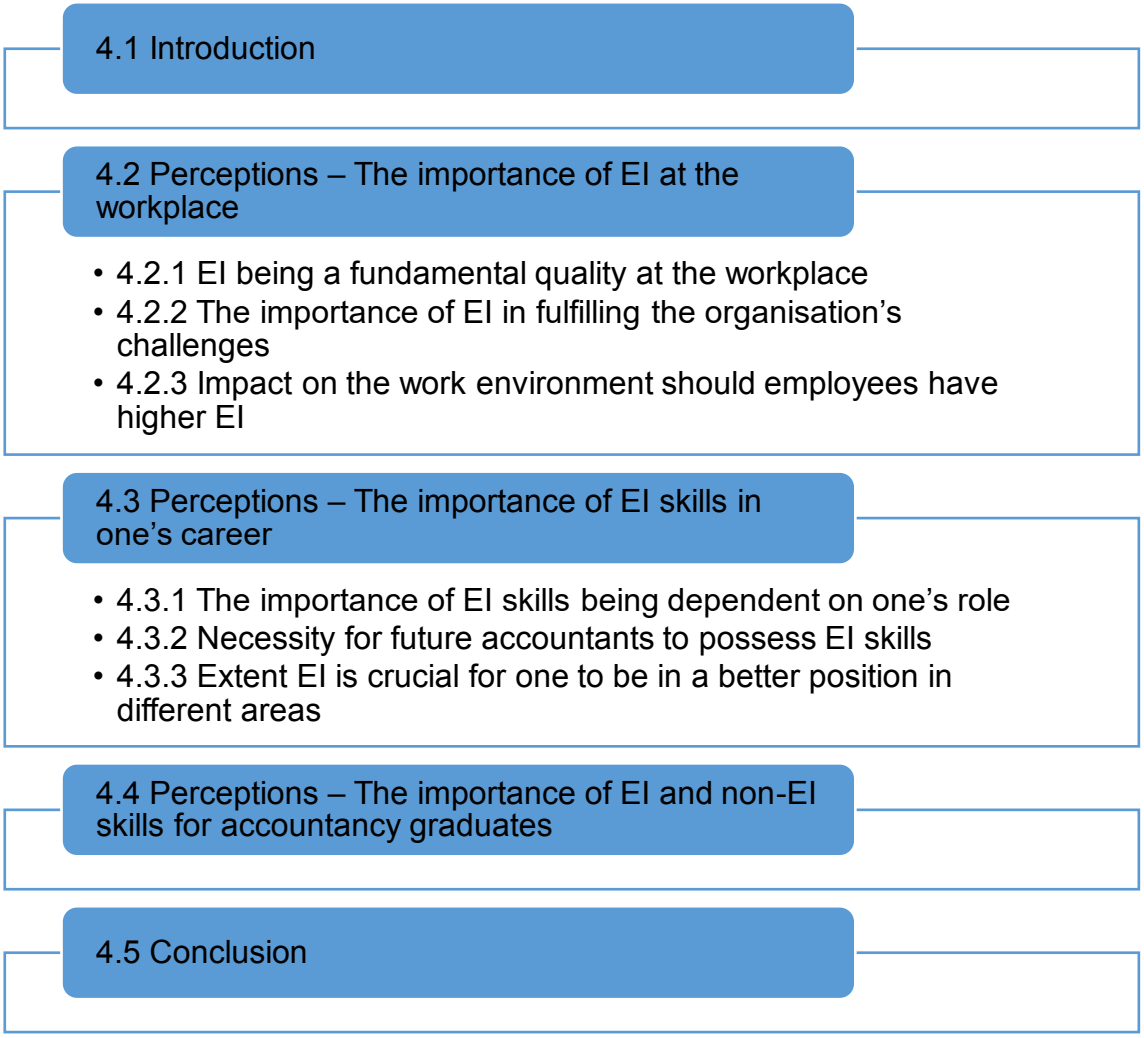

Figure 4.1: Chapter outline

4.2 Perceptions – The importance of EI at the workplace

Section 4.2.1 presents the perceptions on EI being a fundamental quality at the workplace, whilst Section 4.2.2 addresses the importance of EI in fulfilling organisational challenges. Section 4.2.3 discusses the impact on the work environment should employees have higher EI.

4.2.1 EI being a fundamental quality at the workplace

International literature highlighted that EI is crucial for one's success within the workplace (Rozell et al. 2002; Goleman 1998); for personal satisfactory performance (Salovey, Grewal 2005); for success of the firm (Kastberg et al. 2020; Serrat 2017; Sigmar et al. 2012; Abraham 2006; Salovey, Grewal 2005; Mayer et al. 2004; Goleman et al. 2002) and for assisting accountants in decision-making situations (McPhail 2004). Table 4.1 depicts that respondents agreed with international literature regarding EI being fundamental in the aforementioned areas.

The Mann-Whitney U test shows a statistically significant difference between perceptions on EI being fundamental to be successful at the workplace$_{(P=0.032)}$ and for the organisation to be successful$_{(P=0.002)}$. Thus, the alternative hypothesis is accepted, meaning that on average the perceptions of WH and graduates vary significantly on EI being fundamental to be successful at the workplace and for the organisation to be successful.

		To be successful at the workplace			For personal satisfactory performance		
		Mean	Standard Deviation (SD)	P-Value	Mean	SD	P-Value
Warrant Holders	Big-Four	4.535	0.732	*0.032	4.402	1.018	0.213
	Mid-Tier	4.337	0.963		4.305	0.935	
UoM Graduates	Big-Four	4.395	0.660		4.605	0.583	
	Mid-Tier	4.324	0.589		4.529	0.563	
	Other	4.368	0.684		4.632	0.597	
		For the organisation to be successful			**In decision-making situations**		
		Mean	SD	P-Value	Mean	SD	P-Value
Warrant Holders	Big-Four	4.362	0.94	*0.002	4.591	0.717	0.384
	Mid-Tier	4.295	0.944		4.516	0.898	
UoM Graduates	Big-Four	4.093	0.718		4.628	0.536	
	Mid-Tier	4.118	0.686		4.5	0.616	
	Other	4.316	0.749		4.579	0.607	

Scale from 1 (Completely disagree) to 5 (Completely agree)
** The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level*

Table 4.1: Perceptions – Extent of importance of EI

4.2.2 The importance of EI in fulfilling the organisation's challenges

Freedman (2010) discovered that approximately 89 percent of leaders within the business environment perceived EI as fundamental or extremely fundamental for fulfilment of the uppermost organisational challenges. Table 4.2 illustrates that respondents agreed with Freedman (2010), since they perceived EI as being important in fulfilling the organisation's top challenges.

		Importance of EI in fulfilling the organisation's top challenges		
		Mean	SD	P-Value
Warrant Holders	Big-Four	4.268	0.988	0.382
	Mid-Tier	4.316	0.789	
UoM Graduates	Big-Four	4.279	0.630	
	Mid-Tier	4.235	0.699	
	Other	4.421	0.769	

Scale from 1 (Very unimportant) to 5 (Very important)
** The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level*

Table 4.2: Perceptions – Importance of EI in fulfilling the organisation's top challenges

As presented in Table 4.2, the Mann-Whitney U test suggests no statistical significance$_{(P=0.382)}$ between the perceptions on the importance of EI in fulfilling the uppermost organisational challenges. Thus, the null hypothesis is accepted, meaning that on average the perceptions of WH and graduates in this regard vary marginally.

4.2.3 Impact on the work environment should employees have higher EI

Makkar and Basu (2019) argued that the work environment would be impacted should employees encompass greater EI. Thus, respondents were requested to provide their opinion on how the work environment would be impacted should employees encompass higher EI.

Themes	WH Count	%	UoM Graduates Count	%
Creation of holistic, more harmonised, better and positive work environment	36	25.4%	14	19.7%
Less conflict	16	11.3%	6	8.5%
Increased productivity levels, efficiency and performance	15	10.6%	9	12.7%
Better service provision	15	10.6%	8	11.3%
Less staff turnover	14	9.9%	3	4.2%
Less stress	12	8.5%	7	9.9%
Greater synergies leading to better professional relationships	11	7.7%	7	9.9%
More teamwork	9	6.3%	3	4.2%
Increased job satisfaction	8	5.6%	6	8.5%
Greater understanding of others' needs and more empathetic work culture	6	4.2%	8	11.3%
Total responses	**142**	**100.0%**	**71**	**100.0%**

Table 4.3: Themes – Impact on the work environment should employees have higher EI

Table 4.3 displays that a main theme which emerged is that a more positive and harmonised work environment would be created if employees have greater EI. This supports Makkar and Basu (2019) who contended that the more personnel are emotionally intelligent, the more positive the work environment. Another theme is that higher EI levels lead to increased productivity. This corroborates with Riaz et al. (2018) who argued that EI skills are important for employee productivity. Other comments suggested that increased EI levels would result in better service provision. This further substantiates Makkar and Basu (2019) who argued that emotionally intelligent employees provided better services. Corresponding with Ceballos et al. (2017), who argued that emotionally intelligent individuals tend to have greater job satisfaction, another emerging theme is that greater EI levels would result in improved job satisfaction. Other comments

included lower stress, better relationships and more teamwork, which supports literature (Teles et al. 2020; Membrive-Jiménez et al. 2020; Molero Jurado et al. 2018).

4.3 Perceptions – The importance of EI skills in one's career

Section 4.3.1 addresses the importance of EI skills being dependent on one's role, whilst Section 4.3.2 presents the perceptions on the necessity for future accountants to possess EI skills. Section 4.3.3 discusses the extent EI is crucial for one to be in a better position in different areas.

4.3.1 The importance of EI skills being dependent on one's role

Cutajar (2014) suggested that not all EI skills are important for performance, especially in relation to lower ranked employees and that importance increases on career progression. Abraham (2006) highlighted that specific EI skills are dependent on one's role. Therefore, participants were requested to put forward their perceptions on the importance of specific EI skills being dependent on role. Table 4.4 illustrates the main themes derived from the comments.

Themes	WH Count	%	UoM Graduates Count	%
Dependent on role	124	70.9%	74	85.1%
Not dependent on role	51	29.1%	13	14.9%
Total responses	**175**	**100.0%**	**87**	**100.0%**

Table 4.4: Themes – The importance of EI skills being dependent on role

In line with literature (Cutajar 2014; Abraham 2006), most respondents believed that importance of specific EI skills are dependent on one's position. In fact, some commented that certain EI skills from the skillset may be required within different

positions. For instance, some suggested that skills included in the self-management cluster are more fundamental at the start of one's career/junior positions. This supports Wells et al. (2009) who argued that certain EI skills were more fundamental at the start of one's career. Some noted that the relationship management skills become increasingly important within those holding managerial/higher-level positions and involved in decision-making. Additionally, some suggested that skills falling within the self-awareness and social awareness clusters are consistently important, no matter the role. However, some specified that although certain roles require specific EI skills, all roles require a basic foundation of the EI skillset.

4.3.2 Necessity for future accountants to possess EI skills

The importance of EI has been highlighted in various professions (Raghubir 2018; Parrish 2015; Douglas 2015; Kosti et al. 2014). Akers and Porter (2003) argued that EI skills are fundamental for the accountancy profession. Figure 4.2 illustrates the perspectives on the importance for future accountants to possess EI skills. The findings suggest that most agreed future accountants should possess EI skills. This substantiates Tsiligiris and Bowyer (2021) who noted that accountants are required to possess EI skills. Furthermore, this is congruent with the World Economic Forum (2020) who claimed that EI skills are one of the most important skills to possess in any job by 2025. Additionally, this agreed with ACCA (2020) who suggested that EI is crucial for an accountant to keep up with the dynamic environment. This implies that respondents are aware of the importance of future accountants possessing EI skills.

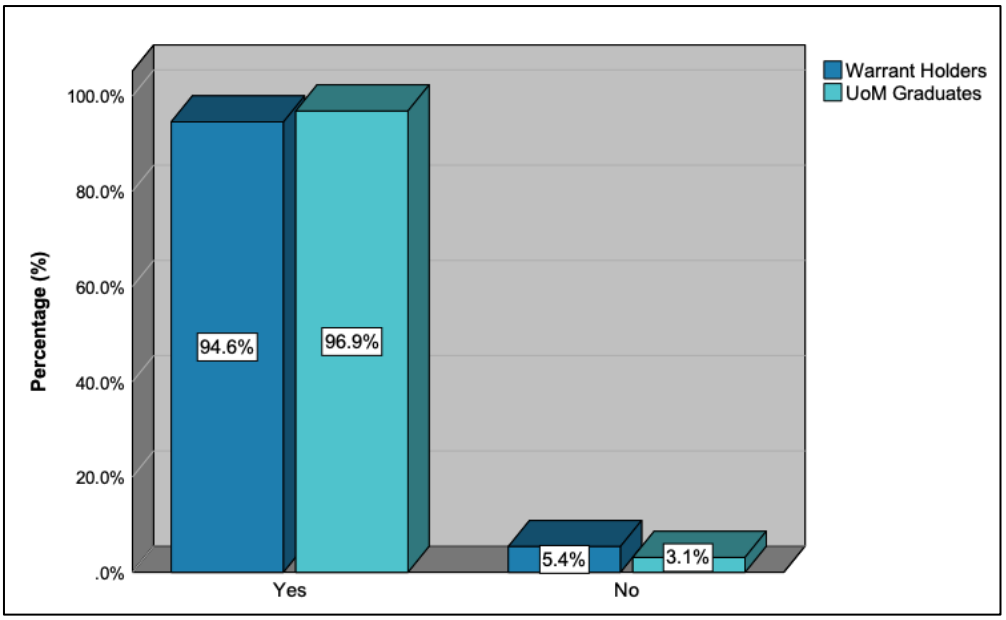

Figure 4.2: Perceptions – Should future accountants possess EI skills?

The Mann-Whitney U test shows no statistically significant difference(P=0.379) between perceptions on whether future accountants should possess EI skills. Thus, the null hypothesis is accepted, meaning that on average perceptions of WH and graduates in this regard vary marginally. Additionally, respondents were requested to state why they believe future accountants should or should not possess EI skills.

	Themes	WH Count	%	UoM Graduates Count	%
Yes	Profession has become people-oriented	54	37.0%	32	44.4%
	To be a successful accountant one needs to be emotionally intelligent	29	19.9%	20	27.8%
	Variety of skills is good	23	15.8%	2	2.8%
	For disagreements when required	17	11.6%	2	2.8%
	Better team integration and to satisfy client needs	9	6.2%	10	13.9%
	Increased productivity levels	7	4.8%	4	5.6%
	Change in corporate culture	4	2.7%	2	2.8%
No	Being considerably caring and empathetic may hinder work effectiveness	3	2.1%	0	0.0%
Total responses		**146**	**100.0%**	**72**	**100.0%**

Table 4.5: Themes – Should future accountants possess EI skills?

Table 4.5 portrays that a main theme which emerged is that the profession is no longer desk-based but increasingly people-oriented. It was remarked that no man is an island and EI is key for accountants to work satisfactorily together. This supports Lambert and Morales (2017, p. 12) who argued that accountants can no longer work in solitude within an “ivory tower”. Certain comments suggested that future accountants should possess EI skills to increase productivity levels. This is congruent with Riaz et al. (2018) who argued that EI skills result in greater productivity. Furthermore, this agrees with Druskat et al. (2017) who found that EI contributes to team effectiveness. Another theme which arose is that EI skills are important for future accountants to have effective disagreements when

necessary. This argument supports Goleman (2020) who argued that if one is skilled within the respective four EI clusters, an individual would be able to effectively disagree when required.

The only theme put forward from those against future accountants possessing EI skills was that being too caring and empathetic may hinder one's effectiveness. This agrees with Chamorro-Premuzic and Yearsley (2017) who highlighted that if one is considerably empathetic and caring, they may be good at building relationships but unable to provide and receive criticism.

4.3.3 Extent EI is crucial for one to be in a better position in different areas

Table 4.6 shows that WH and graduates agreed on EI being crucial for one to recognise other individuals' feelings. This conforms with Drigas and Papoutsi (2018) who suggested that by means of EI, one would be in a better position to understand others' feelings. Respondents agreed that EI is crucial for one to be in a better position to be a successful leader. This supports Watkins et al. (2017) who claimed that EI is important to be a successful leader. Furthermore, respondents agreed that EI is crucial for one to be in a better position to devise approaches to manage conflict effectively. In fact, this agrees with Hopkins and Yonker (2015) who argued that a relationship exists between one's EI level and conflict management style.

The Mann-Whitney U test reveals no statistical significance between the perceptions regarding the extent to which EI is crucial for one to be in a better position to understand other individuals' feelings$_{(P=0.742)}$, be a successful leader$_{(P=0.092)}$ and devise approaches to manage conflict effectively$_{(P=0.904)}$. This

implies that the null hypothesis is accepted, meaning that on average the perceptions of WH and graduates in this regard are similar.

		Understand other individuals' feelings			Be a successful leader		
		Mean	SD	P-Value	Mean	SD	P-Value
Warrant Holders	Big-Four	4.465	0.871	0.742	4.614	0.787	0.092
	Mid-Tier	4.453	0.615		4.674	0.778	
UoM Graduates	Big-Four	4.512	0.551		4.674	0.522	
	Mid-Tier	4.382	0.697		4.588	0.500	
	Other	4.579	0.607		4.474	0.697	
		Devise approaches to manage conflict effectively					
		Mean	SD	P-Value			
Warrant Holders	Big-Four	4.567	0.793	0.904			
	Mid-Tier	4.526	0.944				
UoM Graduates	Big-Four	4.698	0.465				
	Mid-Tier	4.706	0.463				
	Other	4.316	0.946				

Scale from 1 (Completely disagree) to 5 (Completely agree)
**The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level*

Table 4.6: Perceptions – Extent EI is crucial for one to be in a better position

4.4 Perceptions – The importance of EI and non-EI skills for accountancy graduates

Coady et al. (2018) revealed that employers considered non-EI skills as more important than EI skills. Contrastingly, Figure 4.3 depicts that overall, most respondents believed that non-EI skills are equally important to EI skills.

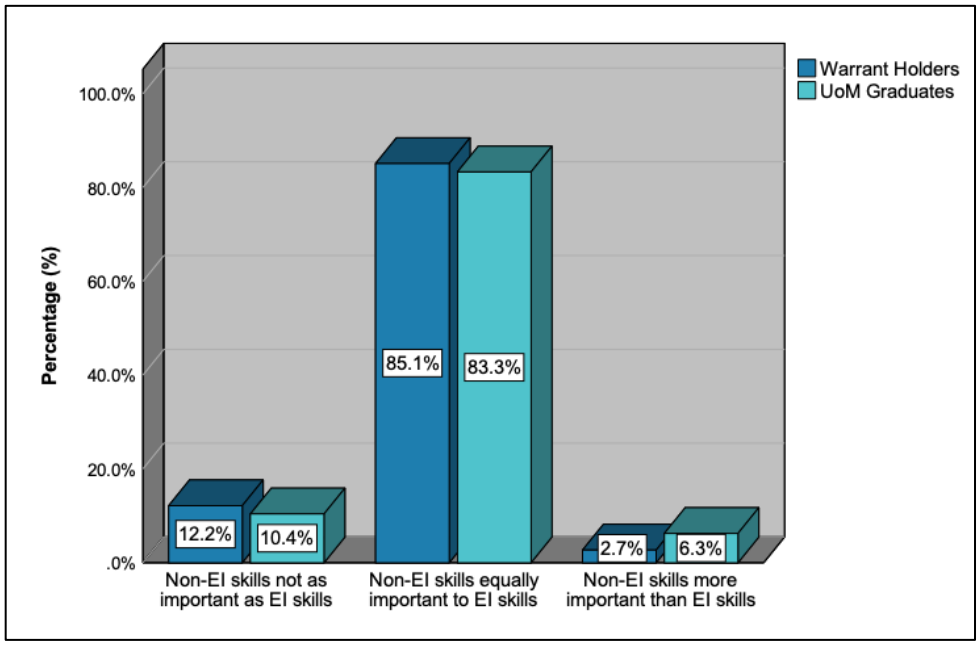

Figure 4.3: Perceptions – Importance of non-EI skills compared to EI skills

The Mann-Whitney U test shows no statistical significance$_{(P=0.277)}$ between perceptions of WH and graduates regarding the importance of non-EI skills compared to EI skills. Thus, the null hypothesis is accepted, meaning that on average the perceptions of WH and graduates in this regard vary marginally.

Table 4.7 illustrates the perceived relevance of the non-EI skillset for accountancy graduates within big-four or mid-tier firms. Coady (2014) revealed that employers perceived financial accounting$_{(\bar{x}=4.74)}$ as the most important non-EI skill. Contrastingly, big-four WH considered written communication$_{(\bar{x}=4.583)}$ as the most

important non-EI skill. This supports Dolce et al. (2020) who found that demand is increasing for graduates to be in possession of sufficient communication skills. Similar to perceptions of graduates$(\bar{x}=4.61)$ in the study conducted by Coady (2014), mid-tier WH$(\bar{x}=4.400)$ perceived analytical skills as the most important non-EI skill. Conversely, UoM graduates, irrespective of firm, perceived written communication as the most important non-EI skill for big-four or mid-tier environments.

The findings show that both WH and graduates considered strategy and governance as the least important non-EI skill for big-four or mid-tier work environments. This is congruent with Coady (2014) who suggested that employers considered strategy and governance$(\bar{x}=3.72)$ as the least important non-EI skill. However, Coady (2014) found that graduates considered finance$(\bar{x}=3.71)$ as the least important non-EI skill in the workplace. Thus, contrasting with the perspective of local graduates. Overall, at times certain discrepancies may exist between perceptions due to different cultures and work environments.

As depicted in Table 4.7, the Mann-Whitney U test shows a significant difference between perceptions on the relevance of financial accounting$(P=0.036)$, management accounting$(P=0.007)$, strategy and governance$(P=<0.001)$ and written communication$(P=0.013)$ for graduates working within big-four or mid-tier firms. Thus, the alternative hypothesis is accepted, meaning that on average the perceptions of WH and graduates in this regard vary significantly.

	Warrant Holders				UoM Graduates						P-Value
	Big-Four		Mid-Tier		Big-Four		Mid-Tier		Other		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Financial accounting	4.213	0.741	4.232	0.983	4.535	0.702	4.412	0.821	4.158	0.765	*0.036
Bookkeeping	3.992	0.904	3.884	0.977	3.814	1.006	4.235	0.741	3.684	1.003	0.922
Management accounting	3.937	1.118	3.905	0.957	3.721	1.076	3.588	1.019	3.526	1.020	*0.007
Taxation	4.102	0.862	4.179	0.825	4.023	0.913	4.118	1.008	4.053	0.970	0.716
Audit and assurance	4.221	0.967	4.063	1.138	4.395	0.821	4.059	0.983	4.263	0.806	0.634
Finance	4.039	1.011	3.947	1.045	4.186	0.732	4.206	0.729	3.790	1.032	0.736
Strategy and governance	3.835	1.029	3.863	1.007	3.442	0.983	3.059	1.043	3.263	0.991	*<0.001
Information technology	3.874	0.976	3.916	1.028	3.884	0.879	3.618	0.954	3.421	1.305	0.077
Analytical skills	4.409	0.867	4.400	0.804	4.558	0.666	4.324	0.638	4.526	0.697	0.998
Integrative thinking	4.441	0.851	4.295	0.797	4.349	0.870	4.441	0.746	4.211	0.855	0.765
Oral communication	4.472	1.022	4.347	0.835	4.698	0.708	4.471	0.707	4.632	0.597	0.185
Written communication	4.583	0.791	4.390	0.937	4.814	0.664	4.588	0.701	4.684	0.582	*0.013

Scale from 1 (Very irrelevant) to 5 (Very relevant)
**The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level*

Table 4.7: Perceptions – Importance of non-EI skills for graduates to possess

Most relevant skills for graduates working in big-four and mid-tier firms

Least relevant skills for graduates working in big-four and mid-tier firms

Table 4.8 highlights the findings on the perceived relevance of the EI skillset for accountancy graduates within big-four and mid-tier firms. Coady (2014) revealed that transparency$_{(\bar{x}=4.60)}$ was perceived as the most important EI skill by employers. Contrastingly, big-four WH considered teamwork and collaboration$_{(\bar{x}=4.512)}$ and mid-tier WH perceived adaptability$_{(\bar{x}=4.474)}$ as the most important EI skill. Furthermore, Coady (2014) suggested that graduates perceived service$_{(\bar{x}=4.46)}$ as the most important EI skill. This differs from the perspectives of local graduates in any type of firms, since service was not placed in the top three most important skills.

Big-four$_{(\bar{x}=4.055)}$ and mid-tier$_{(\bar{x}=3.979)}$ WH considered developing others as the least important EI skill for graduates working in big-four or mid-tier environments. This contrasts with Coady (2014) who revealed that employers perceived change catalyst$_{(\bar{x}=3.68)}$ as the least important EI skill. Coady (2014) found that graduates perceived influence as the least important EI skill$_{(\bar{x}=3.75)}$. However, only graduates working in big-four$_{(\bar{x}=3.791)}$ and mid-tier firms$_{(\bar{x}=3.647)}$ agreed with this.

Possibly, differences between the perceptions of WH and graduates with those of employers and graduates revealed by Coady (2014) may be due to contextual differences. At times differences were present between the perceptions of the respondents. This could be because respondents work in different environments and may have varying perspectives regarding the skills most important for graduates.

	Warrant Holders				UoM Graduates						P-Value
	Big-Four		Mid-Tier		Big-Four		Mid-Tier		Other		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Emotional self-awareness	4.339	0.986	4.190	1.085	4.023	1.058	3.971	0.758	4.053	0.911	*<0.001
Accurate self-assessment	4.228	1.002	4.379	0.901	4.256	0.759	4.029	0.834	4.105	0.875	*0.020
Self-confidence	4.465	0.843	4.411	0.951	4.674	0.644	4.588	0.609	4.526	0.612	0.168
Empathy	4.189	0.924	4.011	1.125	4.302	0.803	3.941	0.919	3.842	1.068	0.523
Organisational awareness	4.150	1.120	4.126	1.024	4.326	0.747	3.882	1.149	4.158	0.602	0.440
Service	4.323	1.090	4.326	0.994	4.163	0.754	4.059	0.886	4.421	0.607	*0.002
Self-control	4.260	1.002	4.284	0.996	4.186	0.824	4.147	0.926	4.316	0.671	0.123
Transparency	4.457	0.906	4.453	1.008	4.581	0.663	4.618	0.888	3.947	1.177	0.836
Adaptability	4.480	1.022	4.474	1.080	4.767	0.611	4.647	0.691	4.632	0.955	0.125
Achievement	4.118	1.028	4.200	0.974	4.419	0.731	4.324	0.727	3.684	1.416	0.453
Initiative	4.244	1.052	4.242	0.964	4.628	0.618	4.559	0.660	4.579	0.961	*<0.001
Optimism	4.236	0.963	4.074	1.044	4.279	0.826	4.177	0.626	4.263	0.562	0.734
Inspiration	4.158	0.904	4.095	1.140	3.977	0.771	4.088	0.830	4.000	0.882	0.056
Influence	4.134	0.876	4.274	1.026	3.791	0.861	3.647	0.950	3.895	0.809	*<0.001
Developing others	4.055	1.010	3.979	1.158	4.233	0.947	4.206	0.880	3.737	1.240	0.457
Change catalyst	4.173	0.865	4.032	0.973	3.930	0.768	3.853	0.892	3.790	0.976	*0.005
Conflict management	4.291	0.993	4.168	1.136	4.093	0.811	4.294	1.060	4.368	0.597	0.291
Teamwork and collaboration	4.512	1.007	4.400	1.066	4.744	0.621	4.529	0.825	4.737	0.452	0.169
Building bonds	4.331	0.960	4.147	1.072	4.651	0.613	4.441	0.824	4.211	1.084	*0.034

Scale from 1 (Very irrelevant) to 5 (Very relevant)
**The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level*

Table 4.8: Perceptions – Importance of EI skills for graduates to possess

Most relevant skills for graduates working in big-four and mid-tier firms

Least relevant skills for graduates working in big-four and mid-tier firms

The Mann-Whitney U test shows a significant difference in perceptions on the importance of emotional self-awareness$_{(P=<0.001)}$; accurate self-assessment$_{(P=0.020)}$; service$_{(P=0.002)}$; initiative$_{(P=<0.001)}$; influence$_{(P=<0.001)}$; change catalyst$_{(P=0.005)}$; and building bonds$_{(P=0.034)}$ for graduates in big-four or mid-tier firms. Thus, the alternative hypothesis is accepted, meaning that on average the perceptions of WH and graduates in this regard vary significantly.

Coady et al. (2018) found that employers and graduates considered all 31 skills as important. In agreement, Table 4.7 and 4.8 depict that most WH and graduates considered the range of skills provided to be important. This finding contributed to one of the main reasons why the Extent and Where Indices needed to be calculated, since such figures on their own do not provide much substance.

	Warrant Holders	**UoM Graduates**
Mean representing the importance for the 31 skills (EI and non-EI skills combined)	4.212	4.203

Table 4.9: Overall importance of skills

Table 4.9 indicates that both WH and graduates agreed that all 31 skills included in the questionnaire are important for graduates within big-four and mid-tier firms. WH$_{(\bar{x}=4.212)}$ obtained a marginally higher mean when compared to graduates$_{(\bar{x}=4.203).}$ Furthermore, the mean figures obtained are comparable to that of employers$_{(\bar{x}=4.22)}$ and graduates$_{(\bar{x}=4.22)}$ as revealed by Coady et al. (2018). However locally, WH and graduates perceived the EI and non-EI skills as being less important when compared to the employers and graduates as found by Coady et al. (2018). Possibly, this difference may be present due to contextual differences.

4.5 Conclusion

This section suggests that EI is considered as fundamental within the workplace. Furthermore, most respondents agreed that the importance of certain EI skills are dependent on one's role. Additionally, most respondents believed that future accountants should possess EI skills, emphasising the importance of accountants developing such skillset. All skills provided were considered by respondents as important for graduates working within big-four or mid-tier environments. Thus, given that the EI and non-EI skills were found to be fundamental, the following chapter focuses on the extent EI and non-EI skills have been developed by graduates from the perspectives of WH and graduates.

Chapter 5

Findings and Discussion – Objective 2

5.1 Introduction

This chapter discusses the findings relevant to the second objective, which addresses perceptions on the extent to which certain skills have been developed by graduates during the UoM accountancy programme. Figure 5.1 outlines the chapter.

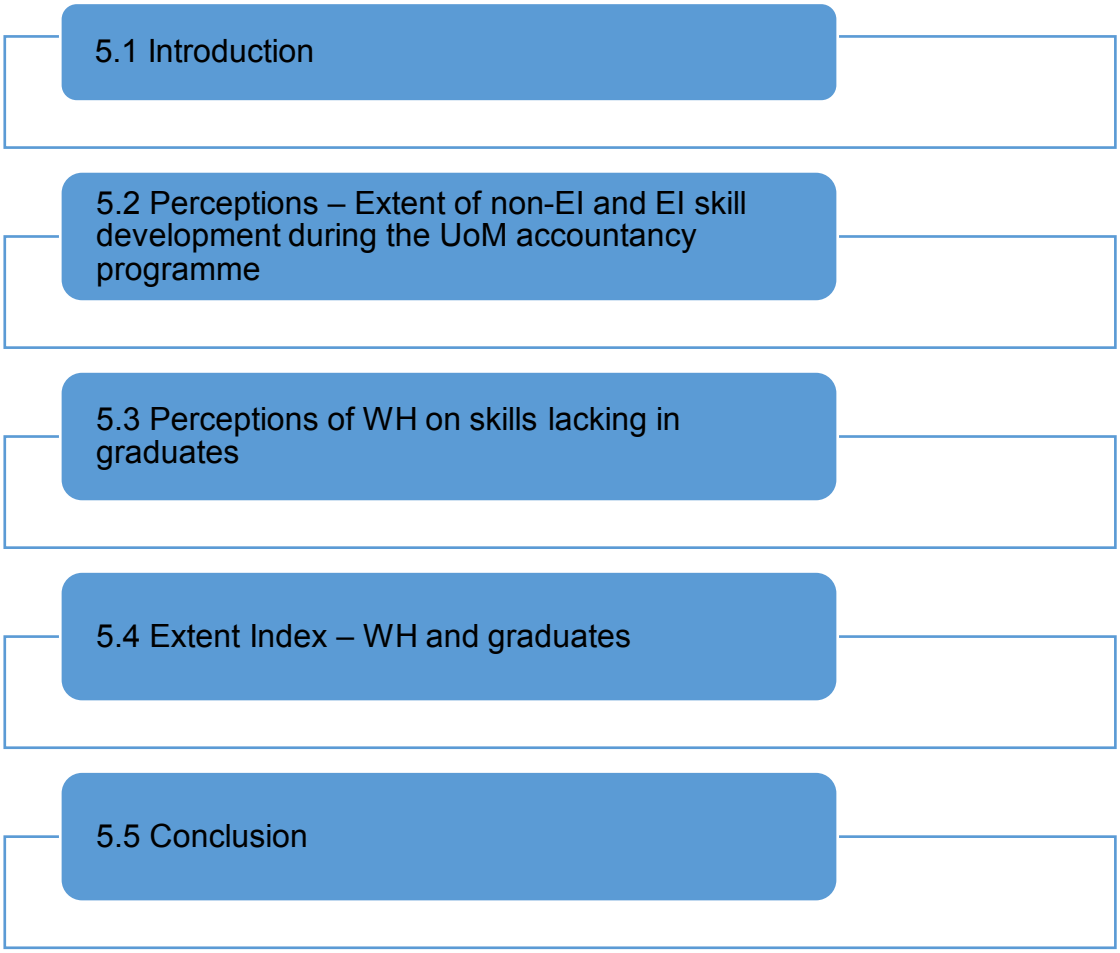

Figure 5.1: Chapter outline

5.2 Perceptions – Extent of non-EI and EI skill development during the UoM accountancy programme

A list of 12 non-EI skills was provided and participants were asked to indicate the extent they believe graduates have developed each skill. Table 5.1 shows that for all non-EI skills WH believed graduates have good development. Additionally, on average graduates believed they had good development in 9 of 12 non-EI skills; whilst very good development in the others. This difference may be because students were asked to assess their own ability and may be biased. The Mann-Whitney U test shows a statistically significant difference between perceptions on the extent audit and assurance$_{(P=<0.001)}$; finance$_{(P=0.007)}$; information technology$_{(P=<0.001)}$; analytical skills$_{(P=0.001)}$; integrative thinking$_{(P=<0.001)}$; oral communication$_{(P=0.005);}$ and written communication$_{(P=<0.001)}$ have been developed by graduates. Thus, the alternative hypothesis is accepted, meaning that in these areas on average the perceptions of WH and graduates vary significantly.

Coady (2014) identified that employers$_{(\bar{x}=3.36)}$ and graduates$_{(\bar{x}=3.68)}$ considered financial accounting as the non-EI skill most developed in graduates. The findings show that only big-four WH$_{(\bar{x}=3.370)}$ agreed with this. Coady (2014) found that graduates perceived information technology$_{(\bar{x}=2.41)}$ as the non-EI skill least developed in graduates. Table 5.1 conveys that graduates, irrespective of firm, agreed with this. Coady (2014) revealed that employers perceived strategy and governance$_{(\bar{x}=2.28)}$ as the non-EI skill least developed in graduates. However, no WH in any type of firm considered this skill as being the least developed. At times, dissimilarities may be present between this study's findings and Coady (2014) due to different university accountancy programmes being adopted in the jurisdictions, influencing the extent of graduates' skill development.

	Warrant Holders				UoM Graduates						P-Value
	Big-Four		Mid-Tier		Big-Four		Mid-Tier		Other		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Financial accounting	3.370	0.916	3.326	0.904	3.651	0.842	3.647	0.812	3.368	0.831	0.054
Bookkeeping	2.882	1.096	3.379	0.936	3.163	0.949	2.853	1.105	2.368	1.300	0.207
Management accounting	3.221	0.744	3.095	0.839	3.395	0.877	3.235	0.890	3.211	0.976	0.130
Taxation	2.921	0.832	2.905	0.773	3.023	1.058	3.177	1.029	3.316	1.157	0.131
Audit and assurance	2.992	0.947	3.105	0.951	3.465	1.162	3.794	1.095	3.526	1.307	*<0.001
Finance	3.110	0.884	3.116	0.886	3.419	1.052	3.559	1.050	3.263	1.368	*0.007
Strategy and governance	2.819	1.011	3.032	1.046	2.837	1.022	2.912	1.055	2.737	1.240	0.741
Information technology	2.929	1.149	2.842	1.085	2.140	0.889	2.088	1.111	2.105	0.994	*<0.001
Analytical skills	2.866	1.178	2.663	1.098	3.209	1.081	3.529	1.261	2.895	1.370	*0.001
Integrative thinking	2.614	1.209	2.547	1.137	3.140	1.104	3.147	1.396	3.158	1.385	*<0.001
Oral communication	3.213	0.965	2.874	1.123	3.488	1.099	3.324	1.174	3.474	1.467	*0.005
Written communication	3.039	1.079	3.253	1.091	3.954	1.068	3.912	1.083	3.421	1.121	*<0.001

Scale from 1 (Poor) to 5 (Excellent)
**The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level*

Table 5.1: Perceptions – Extent to which non-EI skills have been developed in UoM accountancy graduates

Skills most developed in recent UoM accountancy graduates

Skills least developed in recent UoM accountancy graduates

Participants were requested to indicate the extent to which they believe graduates have developed each EI skill. Cutajar (2014) revealed that a big-four WH suggested that UoM graduates are perceived as less emotionally intelligent compared to ACCA students. Contrastingly, Table 5.2 indicates that for all EI skills provided WH believed graduates have good development. Additionally, graduates believed they have good development in 14 EI skills, whilst very good development in the others. This difference in perceptions of WH and graduates may be because graduates are self-assessing and could be biased.

Coady (2014) suggested that employers$_{(\bar{x}=3.60)}$ and graduates$_{(\bar{x}=3.57)}$ perceived teamwork and collaboration as the EI skill most developed in graduates. Congruently, all respondents except big-four WH agreed with this. Additionally, this contrasts with Moore and Morton (2017) who found that university students tend to be deficient in teamwork skills. Coady (2014) revealed that change catalyst$_{(\bar{x}=2.34)}$ and conflict management$_{(\bar{x}=2.34)}$ were considered by employers as the EI skills least developed in graduates. The findings show that only graduates working in big-four$_{(\bar{x}=2.721)}$ and mid-tier$_{(\bar{x}=2.706)}$ firms considered change catalyst as least developed. Coady (2014) found that graduates considered emotional self-awareness$_{(\bar{x}=2.24)}$ as the EI skill least developed in graduates. However, the findings show that only mid-tier$_{(\bar{x}=2.824)}$ and other firm$_{(\bar{x}=2.790)}$ graduates considered this skill to fall within the bottom three.

As depicted within Table 5.2, the Mann-Whitney U test shows a statistically significant difference between the perceptions on the extent service$_{(P=0.005)}$; self-control$_{(P=<0.001)}$; transparency$_{(P=<0.001)}$; adaptability$_{(P=<0.001)}$; achievement$_{(P=<0.001)}$; initiative$_{(P=<0.001)}$; influence$_{(P=0.028)}$; conflict management$_{(P=<0.001)}$; teamwork and collaboration$_{(P=<0.001)}$; and building bonds$_{(P=<0.001)}$ have been developed by UoM

graduates. Thus, the alternative hypothesis is accepted, meaning that on average, the perceptions of WH and graduates on the extent of development of these skills vary significantly.

	Warrant Holders				UoM Graduates						P-Value
	Big-Four		Mid-Tier		Big-Four		Mid-Tier		Other		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Emotional self-awareness	2.976	0.930	3.137	0.974	3.070	0.986	2.824	1.242	2.790	1.273	0.677
Accurate self-assessment	2.843	1.027	3.021	0.945	2.954	1.023	2.882	1.225	3.105	1.329	0.514
Self-confidence	3.008	0.964	2.947	0.950	3.279	0.959	2.912	0.965	3.316	1.293	0.125
Empathy	2.969	1.015	2.937	0.966	3.093	1.377	3.147	1.158	3.158	1.068	0.082
Organisational awareness	3.016	1.031	2.968	0.928	3.116	1.051	2.765	1.046	2.526	1.124	0.533
Service	3.024	1.250	2.811	0.867	3.302	1.166	3.412	1.158	3.053	1.268	*0.005
Self-control	2.803	0.855	2.716	1.155	3.349	1.131	3.235	0.987	3.211	1.182	*<0.001
Transparency	3.118	0.860	3.074	0.890	3.767	1.212	3.941	0.851	3.263	1.195	*<0.001
Adaptability	3.047	0.844	2.884	0.909	3.884	1.179	3.647	1.178	3.790	1.134	*<0.001
Achievement	3.181	0.929	3.168	1.007	3.791	1.146	3.735	1.189	3.421	1.261	*<0.001
Initiative	2.906	0.963	2.905	0.957	3.512	1.162	3.353	1.098	3.632	1.012	*<0.001
Optimism	3.087	0.845	3.063	0.848	3.233	1.172	3.088	1.240	3.368	1.165	0.135
Inspiration	3.032	1.031	2.979	0.899	3.023	1.012	3.118	0.978	2.895	1.150	0.561
Influence	2.795	1.034	2.926	0.841	2.930	1.056	3.029	1.167	3.474	1.172	*0.028
Developing others	2.984	0.959	2.863	0.963	2.837	1.153	3.177	1.058	2.842	1.344	0.921
Change catalyst	2.724	0.981	2.747	0.945	2.721	1.141	2.706	1.060	2.737	0.991	0.924
Conflict management	2.654	1.115	2.821	1.139	3.209	1.206	3.265	1.442	3.526	1.349	*<0.001
Teamwork and collaboration	3.260	0.970	3.295	1.071	4.140	0.966	4.294	0.760	4.421	0.838	*<0.001
Building bonds	3.291	0.952	3.126	1.034	4.047	1.090	4.088	0.866	4.263	0.872	*<0.001

Scale from 1 (Poor) to 5 (Excellent)
**The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level*

Table 5.2: Perceptions – Extent to which EI skills have been developed in UoM accountancy graduates

☐ Skills most developed in recent UoM accountancy graduates

☐ Skills least developed in recent UoM accountancy graduates

Table 5.3 depicts the mean figures on the extent to which graduates have developed the non-EI and EI skills. Both WH$_{(\bar{x}=2.9878)}$ and graduates$_{(\bar{x}=3.2749)}$ lean towards the good category on the Likert scale.

	Warrant Holders	UoM Graduates
Mean	2.9878	3.2749

Table 5.3: Mean extent of development of the 31 skills in graduates

When comparing the mean importance score of all 31 skills, as revealed in Chapter 4, Section 4.4 for WH$_{(\bar{x}= 4.212)}$ and graduates$_{(\bar{x}= 4.203)}$, to the mean extent of development in graduates, the mean extent of development is lower for both WH$_{(\bar{x}=2.9878)}$ and graduates$_{(\bar{x}=3.2749)}$. This is congruent with Coady et al. (2018) who found that the mean extent of skill development was less than the mean importance of such skills.

Furthermore, Coady et al. (2018) revealed that for the mean extent of skill development in graduates, employers obtained a mean of 2.78; whilst graduates obtained a mean of 2.92. Thus, the mean extent of development, for local WH$_{(\bar{x}=2.9878)}$ and graduates$_{(\bar{x}=3.2749)}$ are slightly higher than those derived by Coady et al. (2018). This could be because the UoM accountancy programme may develop the provided skills better than the universities considered by Coady et al. (2018).

Overall, results indicate that WH believed graduates have good development in all 31 skills provided, whilst UoM graduates believed they have good development in 23 of 31 skills. This finding contrasts with Coady et al. (2018) where employers suggested that graduates have lower than good development in 22 skills and graduates believed they have lower than good development in 17

skills. This could be because the UoM may develop these skills better in graduates than the universities considered by Coady et al. (2018).

5.3 Perceptions of WH on skills lacking in graduates

Although, in Section 5.2 the findings show that WH believed graduates have a good development of the provided skills, certain comments were submitted regarding skills lacking in graduates. Table 5.4 depicts the themes extracted.

	Themes	WH Count	%
EI Skills	**Conflict management:** Conflict is inevitable and graduates tend to not know how to manage it	16	11.9%
	Self-control: Important to deal with stressful and high-pressure situations	13	9.6%
	Self-confidence: Important to ask the necessary questions	11	8.1%
	Service: Graduates are not knowledgeable on how to provide services to clients	6	4.4%
	Initiative: Important skill for graduates to succeed in big-four and mid-tier firms	5	3.7%
	Teamwork and collaboration: Sometimes graduates struggle to work in a team	3	2.2%
Non-EI Skills	**Integrative thinking:** Crucial to apply theory to practice	29	21.5%
	Analytical skills: Important to solve problems, act sceptically and critically	18	13.3%
	Financial accounting: All areas of the profession require this skill; graduates know the theory but struggle when applying it	14	10.4%
	Oral communication: Important skill when dealing with clients	13	9.6%
	Bookkeeping: Important since one needs to know the basics before delving into the technicalities	7	5.2%
Total responses		**135**	**100.0%**

Table 5.4: Themes – Perceptions of WH on skills lacking in graduates

Most comments by WH suggest that integrative thinking is the non-EI skill most lacking in recent graduates and considered important to apply theory to practice. This supports Van Mourik and Wilkin (2019) who stated that professional bodies are concerned regarding graduates' capabilities in applying knowledge. Another emerging theme suggested that analytical and oral communication skills are lacking in graduates. This is congruent with literature (SHRM 2019; Moore, Morton 2017) who found that university students are deficient in critical thinking and oral communication skills. Furthermore, this supports Wolcott and Sargent (2021) who suggested that accountancy graduates lack critical thinking skills. Schoenberger-Orgad and Spiller (2014) revealed that overcrowded university programmes may hinder students' critical thinking skill development. Thus, this could be a reason why local graduates lack this skill. The majority agreed that conflict management is the EI skill lacking most in graduates, which agrees with Lang (2009) who claimed that university business programmes neglect conflict management skills.

5.4 Extent Index – WH and graduates

Table 5.5 illustrates the results of the Extent Index calculation, representing the skills least developed in graduates, depending on their level of importance. The greater the Extent Index score, the less developed is the skill, given its level of importance for graduates in big-four and mid-tier firms.

Skill area	Warrant Holders Index	UoM Graduates Index	Warrant Holders Rank	UoM Graduates Rank
Integrative thinking	5.06	4.53	1	7
Analytical skills	4.74	4.49	2	8
Conflict management	4.65	4.20	3	17
Self-control	4.61	4.19	4	18
Change catalyst	4.49	4.67	5	4
Adaptability	4.49	4.07	6	20
Self-confidence	4.45	4.79	7	2
Service	4.41	4.16	8	19
Influence	4.39	4.01	9	23
Accurate self-assessment	4.39	4.59	10	5
Initiative	4.36	4.32	11	14
Oral communication	4.30	4.40	12	11
Transparency	4.29	3.92	13	24
Written communication	4.29	4.02	14	21
Taxation	4.24	4.24	15	16
Emotional self-awareness	4.19	4.49	16	9
Empathy	4.16	4.28	17	15
Organisational awareness	4.13	4.71	18	3
Inspiration	4.10	4.34	19	12
Developing others	4.10	4.57	20	6
Audit and assurance	4.08	3.87	21	26
Teamwork and collaboration	4.07	3.60	22	30
Optimism	4.05	4.33	23	13
Information technology	4.02	5.73	24	1
Strategy and governance	3.95	3.77	25	27
Building bonds	3.94	3.58	26	31
Achievement	3.91	3.75	27	28
Finance	3.84	3.92	28	25
Bookkeeping	3.81	4.45	29	10
Financial accounting	3.76	4.02	30	22
Management accounting	3.70	3.61	31	29
Grey shading represents non-EI skills				

Table 5.5: Extent Index scores and rankings

Coady et al. (2018) found that accountancy graduates attributed the lowest Extent Index score to the non-EI skill of management accounting(3.24). Additionally, the findings agreed with this since the non-EI skill of management accounting was allocated the lowest Extent Index score by WH(3.70) and UoM graduates(3.61), meaning that such skill is more developed, given its level of importance in big-four and mid-tier firms. The reason for this finding could be since the main service lines of big-four and mid-tier firms do not focus on management accounting. Contrastingly, Coady et al. (2018) revealed that employers allocated the lowest Extent Index score to the non-EI skill of information technology(3.66).

WH allocated the non-EI skill of integrative thinking(5.06), the greatest Extent Index score, implying that such skill is less developed in recent graduates, given its importance in big-four and mid-tier firms. This slightly differs from the findings of Coady et al. (2018), where employers allocated the greatest Extent Index score to the non-EI skill of bookkeeping(4.81). This difference may be present due to different accountancy programmes implemented in other jurisdictions and differing perceptions on non-EI skills crucial for graduates in the workplace.

Coady et al. (2018) revealed that graduates attributed the highest Extent Index score to audit and assurance(4.66). Contrastingly, information technology(5.73), was attributed the highest Extent Index score by UoM graduates, meaning such skill is perceived as less developed in graduates, given its importance within big-four and mid-tier firms. This difference may be present due to dissimilarities in the accountancy programmes and differing perceptions on skill importance. Pan and Seow (2016) claimed that there is an increasing need for accountants to be proficient in IT for improved productivity. Thus, it could be that this skill was attributed such high Extent Index for this reason.

For EI skills, WH allocated conflict management(4.65) the highest Extent Index score. In fact, in Section 5.3 this skill was highlighted by WH as most lacking in recent graduates. Contrarily, Coady et al. (2018) stipulated that employers allocated the greatest Extent Index score to service(5.03). This difference could be due to differing perceptions of WH in various jurisdictions on the extent of EI skill development and the importance of such skills.

Coady et al. (2018) revealed that for EI skills, graduates provided the highest Extent Index score to service(5.31); whereas UoM graduates perceived self-confidence(4.79) as highest. Furthermore, Coady et al. (2018) found that employers(3.44) and graduates(3.59) provided teamwork and collaboration the lowest Extent Index score. Contrastingly, WH and graduates allocated the lowest Extent Index score to achievement(3.91) and building bonds(3.58) respectively. This possible discrepancy may be due to differing graduates' perceptions in various jurisdictions, regarding the extent of EI skill development and the importance of such skills.

5.5 Conclusion

Overall, the findings reveal that WH believed all 31 skills provided have been satisfactorily developed in recent graduates during the UoM accountancy programme; whilst graduates believed they have very good development in 8 of 31 skills, and good development in the others. Furthermore, when compared to Coady et al. (2018) the mean extent developed scores for local WH and graduates were higher, meaning that such skills are perceived as being more developed by UoM graduates. Therefore, it seems that the UoM is in a good position in terms of EI and non-EI skill development. However, although these skills appear to be adequately developed in graduates, it does not imply that they

are important to be developed during the accountancy programme. Therefore, the next chapter addresses the perceptions on the extent to which such skills are expected to be developed during the programme.

Chapter 6

Findings and Discussion – Objective 3

6.1 Introduction

This chapter addresses the third objective focusing on perceptions of WH and graduates regarding the accountancy programme and the extent EI and non-EI skills should be developed during the programme. Figure 6.1 outlines the chapter.

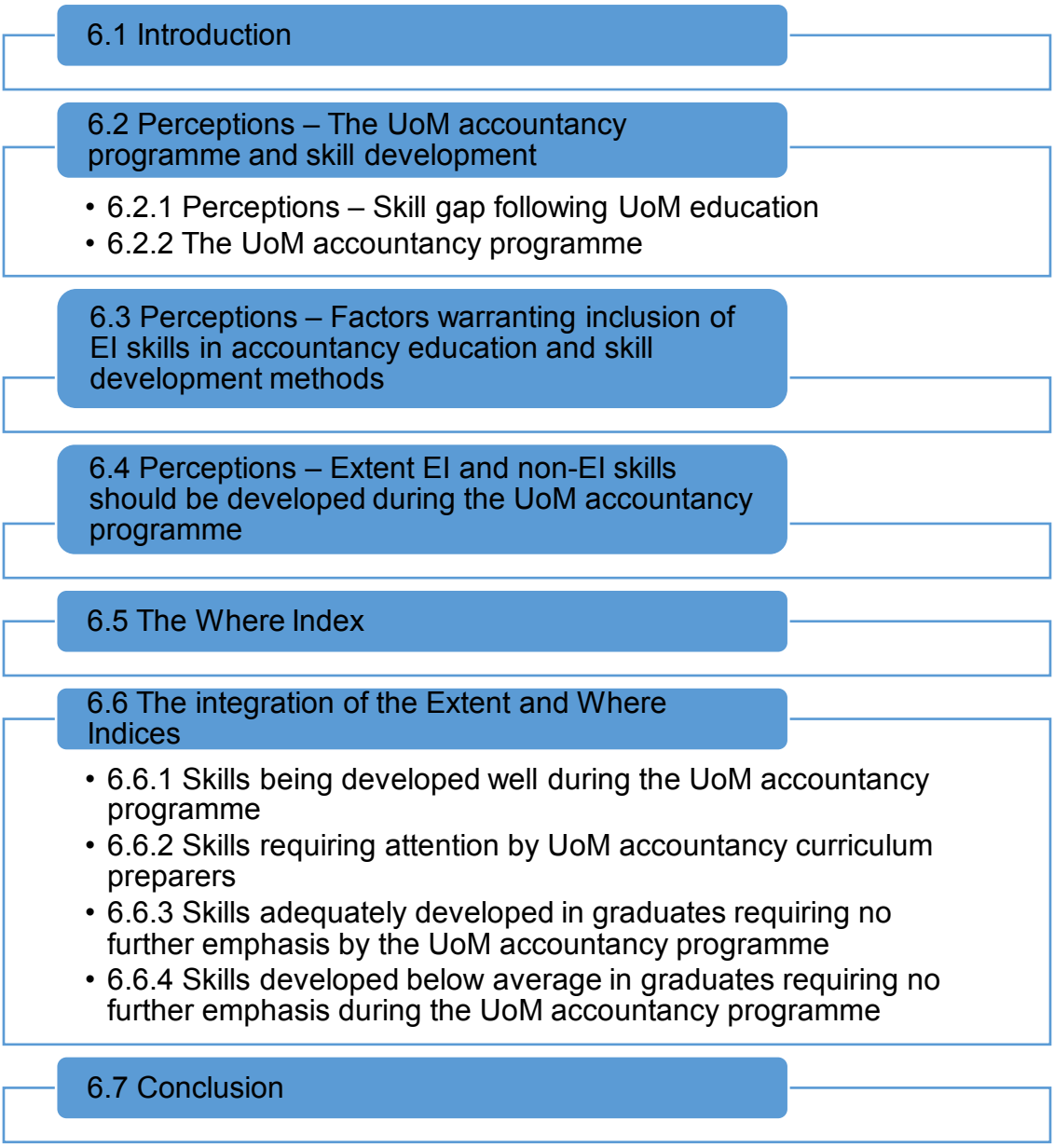

Figure 6.1: Chapter outline

6.2 Perceptions – The UoM accountancy programme and skill development

Section 6.2.1 presents perceptions on the skill gap; whilst Section 6.2.2 outlines perceptions on the UoM accountancy programme.

6.2.1 Perceptions – Skill gap following UoM education

Farrugia (2019) found that locally a skill gap of personal, interpersonal and technical skills is present. Literature (Webb, Chaffer 2016; Jones 2014; Daff et al. 2012; Kavanagh, Drennan 2008) suggested that university programmes contribute towards a skill gap in the accountancy profession. Correspondingly, Figure 6.2 illustrates that the majority of respondents agreed a skill gap exists within the accountancy profession following UoM education. The Mann-Whitney U test shows no statistical significance$_{(P=0.362)}$ between perceptions on whether a skill gap exists following UoM education. Thus, the null hypothesis is accepted, meaning that on average the perceptions of WH and graduates in this regard are similar.

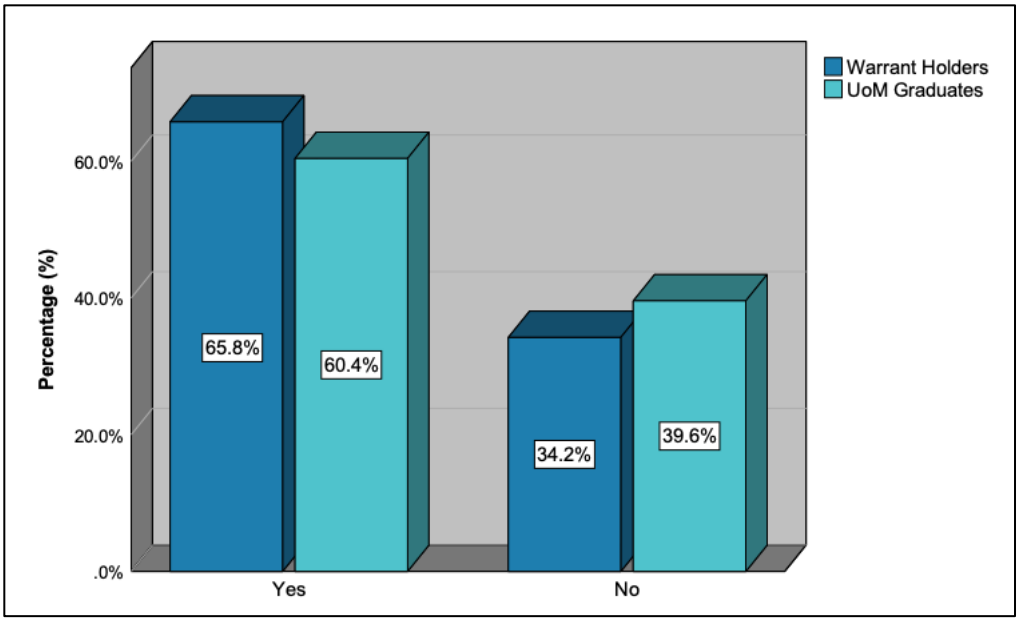

Figure 6.2: Perceptions – Skill gap in the profession following UoM education

Additionally, respondents were requested to give reasons for their answers. Table 6.1 depicts the main themes extracted from these comments.

	Themes	WH Count	%	UoM Graduates Count	%
Yes	Skill gap is created since UoM students are not provided with practical experience	61	62.9%	29	63.0%
	The UoM accountancy programme is not adjusted to remain abreast with the changing times	29	29.9%	15	32.6%
No	Skill gap in accountancy profession is not necessarily the result of UoM education	7	7.2%	2	4.3%
Total responses		**97**	**100.0%**	**46**	**100.0%**

Table 6.1: Themes – Skill gap in the profession following UoM education

Table 6.1 indicates that most suggested that a skill gap exists within the profession due to lack of practical experience during the accountancy programme. Some noted that certain graduates obtain excellent examination results yet struggle when starting their career. This conforms with Marx et al. (2020) who argued that by introducing practical experience, accountancy programmes would assist students' skill development, narrowing the skill gap. However, it is important to note that as per the Accountancy Profession Act, completion of the Master in Accountancy programme is only part requirement to become a warranted accountant; whilst work experience following programme completion is another requirement. Thus, the main aim of the programme is to equip students with technical knowledge for their career. Although comments suggest that a practical component should be included to narrow the skill gap,

graduates would be able to acquire practical skills when gaining work experience after course completion to obtain their warrant. Therefore, these comments highlight undue expectations of the UoM. Other comments indicate that a skill gap exists since the programme is not adjusted to remain abreast with the changing times. This agrees with Myers and Tucker (2005) who argued that courses should be updated to remain abreast with the professions' requirements and Siegel et al. (2010) who found that accountancy programmes are not satisfying market expectations.

6.2.2 The UoM accountancy programme

Literature (Gammie et al. 2002; Barbera 1996) deduced that universities tend to concentrate on financial and regulatory aspects, neglecting other areas. Jackling and De Lange (2009) argued that Australian university accountancy programmes focus on technical skills neglecting other important areas. In agreement, Figure 6.3 depicts that locally, most agreed that the programme focuses on financial, technical and regulatory aspects, neglecting other areas.

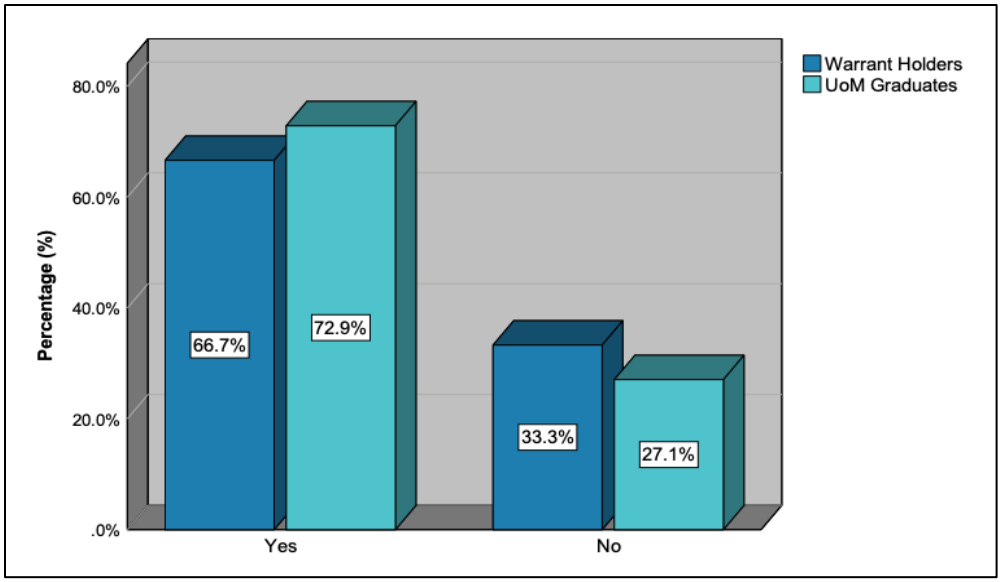

Figure 6.3: Perceptions – UoM accountancy programme focuses on financial, technical and regulatory aspects, neglecting other areas

The Mann-Whitney U test shows no statistically significant difference$_{(P=0.271)}$ between the perceptions whether the UoM accountancy programme focuses on financial, technical and regulatory aspects neglecting other areas. Thus, the null hypothesis is accepted, meaning that on average, the perceptions of WH and graduates in this regard are similar. Furthermore, participants were requested to identify areas they perceive that the UoM neglects. Table 6.2 illustrates the themes extracted.

Themes	WH Count	%	UoM Graduates Count	%
Practical side of the profession; UoM focuses only on theoretical concepts	43	32.1%	24	35.8%
Accounting software used in practice	20	14.9%	9	13.4%
Providing basic accounting services i.e., filling in VAT returns and taxation	17	12.7%	7	10.4%
Dealing with clients	12	9.0%	4	6.0%
Public speaking	11	8.2%	6	9.0%
Stress management	9	6.7%	3	4.5%
EI skills; empathy, self-confidence, self-assessment	7	5.2%	5	7.5%
Building professional relationships	4	3.0%	3	4.5%
Work-life balance	4	3.0%	2	3.0%
Analytical skills	3	2.2%	1	1.5%
Time management	2	1.5%	1	1.5%
Project management	2	1.5%	2	3.0%
Total responses	**134**	**100.0%**	**67**	**100.0%**

Table 6.2: Themes – Areas neglected by the accountancy programme

Literature (Yap et al. 2014; Fouché 2013) revealed that accounting education focuses on content knowledge, rather than the practical side. Other literature (Stanley, Xu 2019; Flood, Wilson 2008) argued that university accountancy

programmes should provide students with concepts supporting practices, rather than technical comprehension. In agreement, a main theme which emerged is that the programme neglects the practical side. In fact, Jackson and Meek (2021) argued that universities are being pressured to integrate practical components into accountancy programmes to prepare students for their careers. Thus, certain universities in the United Kingdom provide students with a placement year to acquire practical experience. Further comments suggested that education on accounting software has been neglected. This agreed with Pan and Seow (2016) who claimed that there is an increasing requirement for accountants to acquire skills in information technology.

6.3 Perceptions – Factors warranting inclusion of EI skills in accountancy education and skill development methods

The EC (2021) argued that for one to be successful post-COVID-19 it is crucial for employees to possess EI. Furthermore, Sangster et al. (2020) suggested that due to COVID-19 revisions should be made to educational programmes to include development of certain EI competencies. Table 6.3 suggests respondents agreed that the COVID-19 pandemic warrants inclusion of EI skills within the curriculum. Literature revealed that the digital age (PWC 2021; ACCA 2018), automation of roles (Kastberg et al. 2020) and artificial intelligence (Beck, Libert 2017) has increased the importance of EI. In fact, respondents agreed that EI skill development should be included within accountancy education because of these factors. The Mann-Whitney U test shows a statistically significant difference between perceptions of WH and graduates on whether the COVID-19 Pandemic$_{(P=0.003)}$ and automation of roles$_{(P=0.016)}$ warrants the inclusion of EI within prospective accountants' education. Thus, the alternative hypothesis is accepted, meaning that on average perceptions in this regard varied significantly.

		COVID-19 pandemic			Automation of roles		
		Mean	SD	P-Value	Mean	SD	P-Value
Warrant Holders	Big-Four	3.591	1.003	*0.003	3.898	0.744	*0.016
	Mid-Tier	3.642	0.944		3.884	0.849	
UoM Graduates	Big-Four	3.884	1.074		3.907	0.868	
	Mid-Tier	3.912	0.965		4.382	0.697	
	Other	4.105	0.809		4.000	0.745	
		Digital age			**Artificial intelligence**		
		Mean	SD	P-Value	Mean	SD	P-Value
Warrant Holders	Big-Four	4.087	0.836	0.407	4.055	0.970	0.154
	Mid-Tier	4.168	0.753		4.084	0.859	
UoM Graduates	Big-Four	3.884	0.981		3.814	0.958	
	Mid-Tier	4.235	0.855		4.088	0.866	
	Other	3.842	0.898		3.947	0.911	

Scale from 1 (Completely disagree) to 5 (Completely agree)
The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level

Table 6.3: Perceptions – Extent factors warrant inclusion of EI in prospective accountancy students' education

Kastberg et al. (2020) suggested that students' EI skills improved by programmes designed to increase one's EI. Table 6.4 revealed that respondents agreed that working in groups, researching accounting issues, role play communicating with a client, writing memos, and completing the statements of a hypothetical company would improve EI and non-EI skills required by the profession. This supports Esmond-Kiger and Kirch (2003) who highlighted that these methods would improve development of such skillset. Therefore, the skills identified as requiring more attention in the following section, may be improved by inclusion of such activities.

		Working in groups			Researching accounting issues		
		Mean	SD	P-Value	Mean	SD	P-Value
Warrant Holders	Big-Four	4.409	0.671		4.055	0.857	
	Mid-Tier	4.368	0.669		4.021	0.899	
UoM Graduates	Big-Four	4.116	0.981	0.114	3.535	1.120	*0.001
	Mid-Tier	4.265	0.710		3.529	1.285	
	Other	4.316	0.749		3.526	1.219	
		Role play communicating with a client			**Writing memos**		
		Mean	SD	P-Value	Mean	SD	P-Value
Warrant Holders	Big-Four	4.173	0.808		4.205	0.810	
	Mid-Tier	4.253	0.757		4.074	0.775	
UoM Graduates	Big-Four	4.209	0.940	0.143	3.930	0.936	0.342
	Mid-Tier	4.500	0.707		4.088	0.900	
	Other	4.211	0.787		4.053	0.970	
		Completing statements of a hypothetical company					
		Mean	SD	P-Value			
Warrant Holders	Big-Four	3.835	0.998				
	Mid-Tier	3.989	0.917				
UoM Graduates	Big-Four	3.791	0.861	0.517			
	Mid-Tier	4.000	1.015				
	Other	3.684	1.057				

Scale from 1 (Completely disagree) to 5 (Completely agree)
** The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level*

Table 6.4: Perceptions – Inclusion of activities in the curriculum on future graduates' skills

The Mann-Whitney U test only shows a statistically significant difference between perceptions on the inclusion of researching accounting issues$_{(P=0.001)}$ within the accountancy curriculum to increase the EI and non-EI skills of graduates. Thus, the alternative hypothesis is accepted, meaning that on average the perceptions of WH and graduates in this regard vary significantly.

6.4 Perceptions – Extent EI and non-EI skills should be developed during the UoM accountancy programme

Although, Section 6.3 highlights the importance of including EI skill development into the accountancy curriculum, the extent such skills should be developed during the UoM requires consideration. Table 6.5 conveys the perceptions on the extent non-EI skills should be developed during the programme.

Coady (2014) revealed that strategy and governance was considered by employers$(\bar{x}=3.18)$ and graduates$(\bar{x}=3.59)$ as the non-EI skill requiring least development. In agreement, all respondents perceived this skill as being within the bottom three skills requiring least development during the UoM accountancy programme.

Furthermore, Coady (2014) highlighted that employers perceived written communication$(\bar{x}=4.30)$ as the non-EI skill requiring most development during university. Congruently, only big-four WH$(\bar{x}=4.284)$ agreed with this. Coady (2014) suggested graduates perceived financial accounting$(\bar{x}=4.45)$ as the non-EI skill requiring most development during university. The findings indicate that only mid-tier graduates$(\bar{x}=3.971)$ perceived this skill as one of the top three skills requiring development during the programme. At times certain discrepancies in perceptions may exist due to different jurisdictions having individuals with varying expectations of skill development from universities.

The Mann-Whitney U test shows a statistically significant difference between perceptions on the extent management accounting$(P=<0.001)$; finance$(P=<0.001)$; strategy and governance$(P=<0.001)$; and information technology$(P=0.003)$ should be developed. Thus, the alternative hypothesis is accepted, meaning that on

average the perceptions of WH and graduates in this regard vary significantly. Possibly, this difference in perceptions may be present due to graduates not understanding the market requirements to the same degree as WH.

	Warrant Holders				UoM Graduates						P-Value
	Big-Four		Mid-Tier		Big-Four		Mid-Tier		Other		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Financial accounting	4.165	0.906	3.926	0.902	3.977	1.035	3.971	1.087	4.053	1.079	0.822
Bookkeeping	4.142	0.721	3.958	0.886	3.907	1.065	3.735	1.082	3.842	0.765	0.093
Management accounting	4.071	0.856	4.021	0.744	3.791	1.036	3.265	1.333	3.421	1.017	*<0.001
Taxation	4.252	0.756	4.147	0.758	4.186	0.958	4.088	0.996	4.263	0.872	0.780
Audit and assurance	4.110	0.748	4.074	0.789	3.930	1.078	3.941	1.153	3.579	0.838	0.215
Finance	4.197	0.797	4.116	0.849	3.744	1.002	3.471	1.135	3.895	1.150	*<0.001
Strategy and governance	3.843	0.830	3.800	0.833	3.279	1.031	3.235	1.156	3.263	1.240	*<0.001
Information technology	3.882	0.878	3.990	0.857	3.512	0.910	3.706	0.938	3.474	1.020	*0.003
Analytical skills	4.205	0.929	4.137	0.918	3.954	0.925	3.912	0.933	4.211	1.084	0.085
Integrative thinking	4.181	0.821	4.253	0.825	4.070	0.986	3.853	0.989	4.158	0.898	0.120
Oral communication	4.126	0.926	4.084	0.919	4.209	0.989	3.765	1.130	4.316	0.749	0.971
Written communication	4.284	0.863	4.042	0.910	4.140	1.125	3.882	1.149	4.105	0.875	0.531

Scale from 1 (No Development) to 5 (Excellent Development)
**The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level*

Table 6.5: Perceptions – Extent non-EI skills should be developed during the UoM programme

Skills requiring most development

Skills requiring least development

Coady (2014) revealed that employers($\bar{x}$=4.16) and graduates($\bar{x}$=3.99) considered teamwork and collaboration as the EI skill requiring most development during university. In agreement Table 6.6 shows that most respondents perceived such skill as requiring greatest development. Furthermore, Coady (2014) found that employers considered change catalyst($\bar{x}$=2.88) to be the EI skill requiring least development during university. Contrastingly, big-four WH considered self-confidence($\bar{x}$=3.535) and mid-tier WH considered self-control($\bar{x}$=3.537) to require least development. Coady (2014) suggested that emotional self-awareness($\bar{x}$=3.28) and empathy($\bar{x}$=3.28) were perceived by graduates as requiring least development during university. However, the findings indicate that inspiration($\bar{x}$=3.488) and organisational awareness($\bar{x}$=3.206) were perceived to require least development during the programme by graduates in big-four and mid-tier firms respectively. This difference could be because individuals in various jurisdictions may have differing perceptions regarding the most important skills to be developed during university.

The Mann-Whitney U test shows a statistically significant difference between perceptions of WH and graduates on the degree to which accurate self-assessment(P=0.044); teamwork and collaboration(P=<0.001); and building bonds(P=<0.001) should be developed by graduates during the accountancy programme. Thus, the alternative hypothesis is accepted, meaning that on average the perceptions in this regard vary significantly. This could be because WH and graduates have different levels of work experience leading to different perceptions regarding the extent certain skills should be developed during the UoM.

	Warrant Holders				UoM Graduates						P-Value
	Big-Four		Mid-Tier		Big-Four		Mid-Tier		Other		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Emotional self-awareness	3.685	0.923	3.611	0.854	3.605	1.137	3.588	1.305	3.632	0.895	0.927
Accurate self-assessment	3.591	0.954	3.653	0.954	3.698	1.124	2.853	1.306	3.105	1.287	*0.044
Self-confidence	3.535	0.898	3.874	0.854	3.512	1.316	3.618	1.155	3.684	1.204	0.830
Empathy	3.709	0.935	3.716	0.953	3.930	1.033	3.794	1.095	3.526	1.264	0.271
Organisational awareness	3.638	0.870	3.600	0.764	3.674	1.107	3.206	1.175	3.053	1.026	0.076
Service	3.803	0.926	3.642	0.771	3.628	1.024	3.559	1.079	3.474	1.172	0.316
Self-control	3.614	0.891	3.537	0.823	3.581	1.160	3.471	1.285	3.421	0.902	0.799
Transparency	3.866	0.903	3.811	0.903	3.954	1.090	3.882	1.175	3.790	1.032	0.340
Adaptability	3.969	0.826	3.747	0.875	3.907	1.130	3.824	0.937	3.737	0.991	0.919
Achievement	3.811	0.824	3.758	0.942	3.837	1.022	3.412	1.209	3.316	1.336	0.228
Initiative	3.858	0.897	3.821	0.956	3.884	1.028	3.735	1.163	3.579	1.170	0.865
Optimism	3.756	0.852	3.568	0.781	3.767	1.043	3.971	1.087	3.211	1.182	0.293
Inspiration	3.780	0.844	3.695	0.826	3.488	1.055	3.853	1.209	3.158	1.302	0.327
Influence	3.764	0.811	3.768	0.778	3.558	1.119	3.706	1.031	2.947	1.393	0.095
Developing others	3.693	0.878	3.590	0.995	3.651	1.173	3.677	1.147	3.263	1.046	0.927
Change catalyst	3.677	1.076	3.621	0.865	3.744	1.026	3.324	1.249	3.368	1.012	0.311
Conflict management	3.717	0.835	3.832	0.964	3.861	1.037	3.647	1.368	3.474	1.264	0.938
Teamwork and collaboration	3.961	0.830	3.968	0.950	4.326	1.063	4.265	1.024	4.316	1.157	*<0.001
Building bonds	3.890	0.828	3.779	0.827	4.233	0.996	4.147	1.132	4.211	1.134	*<0.001

Scale from 1 (No Development) to 5 (Excellent Development)
**The perceptions of WH and graduates vary significantly when the p-value is less than the 0.05 significance level*

Skills requiring most development

Skills requiring least development

Table 6.6: Perceptions – Extent EI skills should be developed during the UoM programme

6.5 The Where Index

Table 6.7 displays the results of the Where Index calculation for WH and graduates. The Where Index highlights the most important skills to be developed, depending on their level of importance within big-four and mid-tier firms. A higher Where Index score implies that such skill is more appropriate to be developed during the accountancy programme.

Skill area	Warrant Holders Index	UoM Graduates Index	Warrant Holders Rank	UoM Graduates Rank
Written communication (WC)	4.86	5.09	1	2
Integrative thinking (IN)	4.76	4.67	2	8
Analytical skills (AS)	4.75	4.77	3	6
Oral communication (OC)	4.69	5.01	4	4
Teamwork and collaboration (TC)	4.57	5.37	5	1
Taxation (TX)	4.49	4.53	6	11
Adaptability (AD)	4.48	4.83	7	5
Financial accounting (FA)	4.43	4.71	8	7
Transparency (T)	4.42	4.66	9	9
Audit and assurance (AA)	4.39	4.39	10	13
Finance (F)	4.30	4.05	11	18
Self-confidence (SC)	4.22	4.42	12	12
Building bonds (BB)	4.22	5.04	13	3
Initiative (I)	4.21	4.63	14	10
Service (S)	4.17	3.99	15	20
Bookkeeping (B)	4.14	4.04	16	19
Conflict management (CM)	4.12	4.18	17	15
Management accounting (MA)	4.10	3.43	18	30
Influence (IF)	4.08	3.51	19	29
Achievement (AC)	4.06	4.06	20	17
Emotional self-awareness (ES)	4.03	3.87	21	23
Accurate self-assessment (ASA)	4.01	3.64	22	27
Inspiration (IS)	3.99	3.82	23	24
Optimism (OP)	3.95	4.23	24	14
Self-control (SO)	3.95	3.94	25	22
Information technology (IT)	3.95	3.53	26	28
Empathy (E)	3.94	4.15	27	16
Change catalyst (CC)	3.88	3.65	28	26
Organisational awareness (OA)	3.87	3.74	29	25
Strategy and governance (SG)	3.80	2.85	30	31
Developing others (DO)	3.79	3.95	31	21
Grey shading represents non-EI skills				

Table 6.7: Where Index scores and rankings

Coady et al. (2018) found that employers(5.50) and graduates(5.42) allocated the greatest Where Index score to the non-EI skill of financial accounting. Contrastingly, Table 6.7 conveys that WH(4.86) and graduates(5.09), allocated the greatest Where Index score to the non-EI skill of written communication, meaning such skill is perceived as most appropriate for development during the accountancy programme. Differing perceptions may exist since individuals across various jurisdictions may have different perceptions on the skills requiring most development during university and their importance.

Coady et al. (2018) found that employers(5.04) and graduates(4.84) allocated the greatest Where Index score to the EI skill of teamwork and collaboration. In agreement, WH(4.57) and graduates(5.37) attributed the greatest Where Index score to this skill, implying that such skill is considered appropriate for development during the programme, given its importance in big-four and mid-tier firms. This overall alignment of perceptions may have occurred due to the growing importance of teamwork and collaboration in the accountancy profession, irrespective of firm and jurisdiction.

Coady et al. (2018) found that employers(3.36) and graduates(3.63) allocated the lowest Where Index score to the non-EI skill of strategy and governance; and locally WH(3.80) and graduates(2.85) agreed with this, meaning that such skill should be least developed in graduates, given its lower level of importance in the workplace. At times discrepancies in perceptions regarding skills requiring development during university and importance of skills may arise due to contextual differences relating to the profession.

Coady et al. (2018) revealed that employers(3.21) allocated the EI skill of change catalyst the lowest Where Index score. Conversely, WH(3.79) attributed the lowest Where Index score to the EI skill of developing others, meaning that such skills should be least developed during university, given their lower level of importance at the workplace. Furthermore, Coady et al. (2018) established that graduates(3.29) attributed the lowest Where Index scores to the EI skill of influence. Local graduates(3.51) agreed with this. Graduates had similar beliefs regarding the extent influence should be developed during university and its level of importance at the workplace. This could be because irrespective of jurisdiction, influence may be perceived to be developed at the workplace rather than at university.

6.6 The integration of the Extent and Where Indices

Overall, WH and graduates perceived all skills provided as being sufficiently developed in graduates and requiring development during the UoM. This information does not provide actionable information. Therefore, the Extent and Where Indices may be combined to derive a strategic map, providing insight regarding skills adequately developed in graduates and those possibly requiring further attention by the UoM accountancy curriculum preparers depending on skill importance. Figures 6.4 and 6.5 depict the strategic maps for WH and graduates respectively. The figures include two intersecting lines representing the overall mean score for the Extent and Where Indices, dividing the graph into four quadrants. As suggested in Chapter 3, Section 3.7.2 each quadrant depicts the extent to which each skill is developed and the degree to which each skill should be developed during the UoM accountancy programme. The meanings of these abbreviations are specified in Table 6.7.

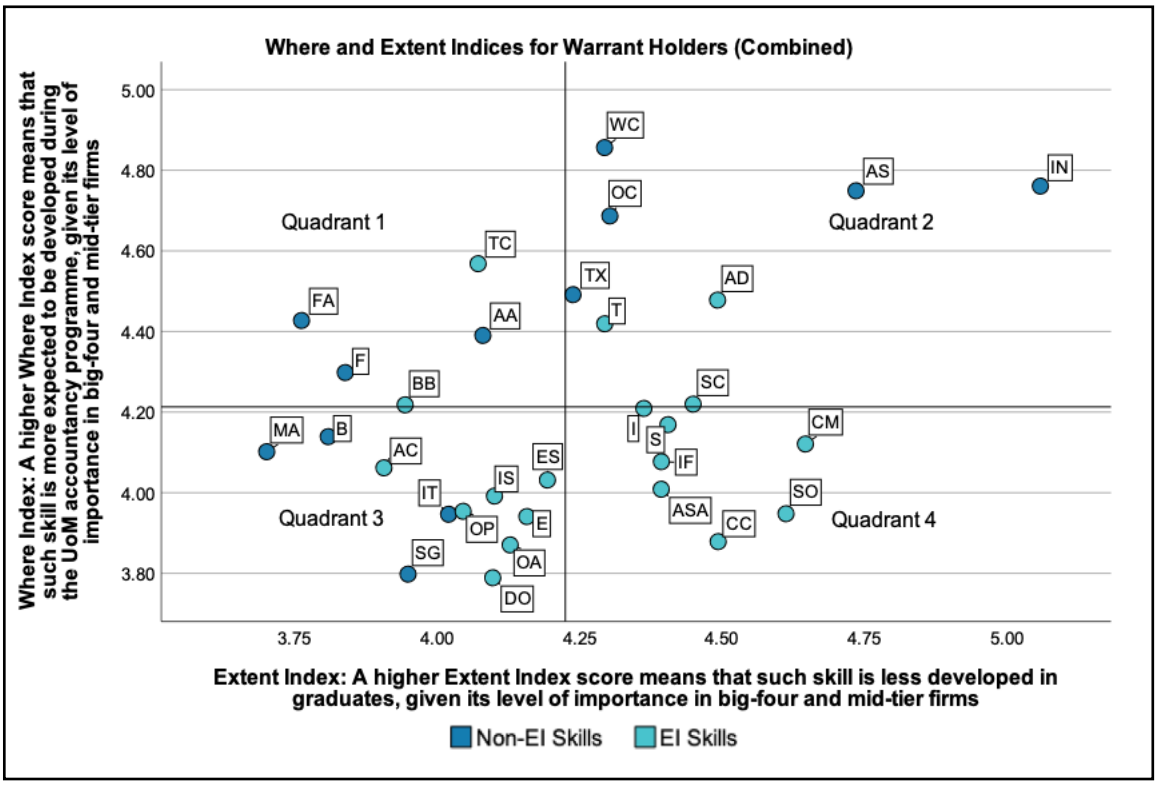

Figure 6.4: Strategic map – Extent and Where Indices (WH)

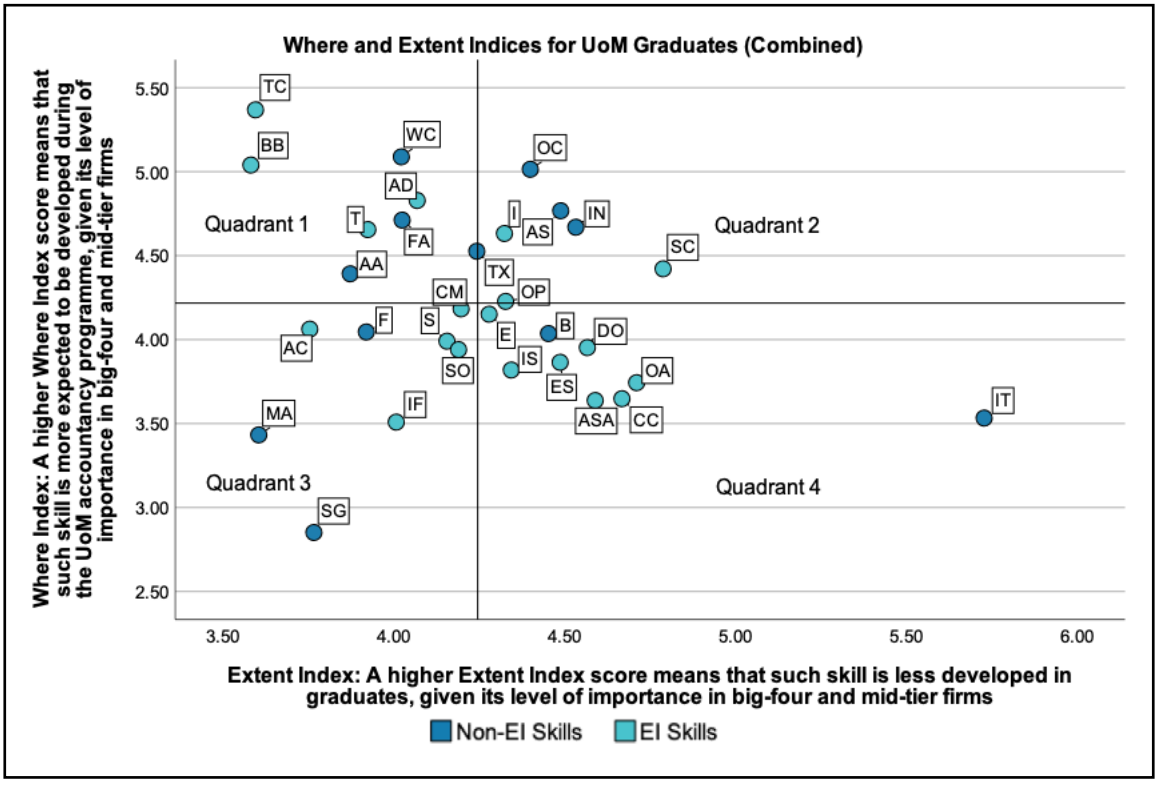

Figure 6.5: Strategic map – Extent and Where Indices (Graduates)

6.6.1 Skills being developed well during the UoM accountancy programme

Quadrant 1		
WH		**UoM Graduates**
Financial accounting	⟷	Financial accounting
Audit and assurance	⟷	Audit and assurance
Teamwork and collaboration	⟷	Teamwork and collaboration
Building bonds	⟷	Building Bonds
Finance		Taxation
		Written communication
		Adaptability
		Transparency
Grey shading represents non-EI skills		

Table 6.8: Skills being developed well during the UoM accountancy programme

Based on Figure 6.4 and 6.5, skills included within Table 6.8 fall within Quadrant 1. This quadrant includes skills which the UoM accountancy programme is developing well in graduates and that are of high importance within big-four and mid-tier firms. The findings indicate that WH and graduates agreed that financial accounting, audit and assurance, teamwork and collaboration and building bonds have been adequately developed in graduates during the UoM accountancy programme. This supports Coady et al. (2018) who revealed that employers and graduates agreed that teamwork and collaboration, financial accounting and building bonds are being adequately developed within graduates. Additionally, this finding disagrees with Wells et al. (2009) and Bui and Porter (2010) who argued that teamwork and collaboration still requires development. Possibly, these differences may be present because of different educational systems in various jurisdictions. Furthermore, it was not a surprise that financial accounting and audit and assurance were perceived as important and adequately developed in graduates, because these skills represent the main services offered to clients by big-four and mid-tier firms. Additionally, skills falling within this quadrant are

more technical in nature. This agrees with Wells et al. (2009) who argued that universities develop a strong basis of technical skills in accountancy students.

6.6.2 Skills requiring attention by UoM accountancy curriculum preparers

Quadrant 2		
WH		**UoM Graduates**
Oral communication	⟷	Oral communication
Analytical skills	⟷	Analytical skills
Integrative thinking	⟷	Integrative thinking
Self-confidence	⟷	Self-confidence
Adaptability		Optimism
Transparency		Initiative
Written communication		
Taxation		
Grey shading represents non-EI skills		

Table 6.9: Skills requiring attention

Based on Figure 6.4 and 6.5, skills included within Table 6.9 fall within the second quadrant. This quadrant includes skills perceived as less developed in graduates but are expected to be well developed by graduates during the accountancy programme. If neo-correspondence theory is adopted (Saunders, Machell 2000; Gintis 1971), it would be suggested that skills falling within this quadrant require further attention by curriculum preparers due to their degree of importance within big-four and mid-tier firms. WH and graduates agreed that oral communication, analytical skills, integrative thinking, and self-confidence fell within this quadrant. This corresponded with Coady et al. (2018) whereby, both employers and graduates placed analytical skills and integrative thinking within this quadrant. Additionally, this finding is congruent with other studies (Weaver, Kulesza 2014; Crawford et al. 2011; Kavanagh, Drennan 2008; Hassall et al. 2005) which highlighted the importance of integrative thinking and analytical skills. This

similarity may exist due to certain resemblances in accountancy programmes with respect to the development of these skills in different jurisdictions.

It is interesting to note that as per Table 6.9 WH perceived written communication, adaptability and transparency as requiring more attention by the UoM, however, conversely as per Table 6.8 graduates considered such skills as adequately developed during the programme. Additionally, WH perceived written communication, taxation, adaptability and transparency to fall within Quadrant 2, whereas graduates perceived such skills to fall within Quadrant 1. This difference may be present due to WH and graduates having similar beliefs regarding the skills to be developed during the UoM programme, but conflicting perspectives on the extent such skills have been developed.

6.6.3 Skills adequately developed in graduates requiring no further emphasis by the UoM accountancy programme

Quadrant 3		
WH		**UoM Graduates**
Management accounting	⟷	Management accounting
Achievement	⟷	Achievement
Strategy and governance	⟷	Strategy and governance
Optimism		Influence
Information technology		Service
Inspiration		Self-control
Emotional self-awareness		Conflict management
Empathy		Finance
Organisational awareness		
Developing others		
Bookkeeping		
Grey shading represents non-EI skills		

Table 6.10: Skills adequately developed in graduates requiring no further emphasis by the programme

Based on Figure 6.4 and 6.5, skills included within Table 6.10 fall within the third quadrant. These skills are considered adequately developed in graduates requiring no further emphasis by the programme. WH and graduates agreed that strategy and governance, management accounting and achievement fall within this quadrant, implying that such skills are adequately developed in graduates; however, are not expected to be highly developed during the UoM accountancy programme. Thus, require no further emphasis since graduates have developed these skills to a greater extent than expected. In fact, this is congruent with Coady et al. (2018), who found that employers and graduates perceived management accounting to fall within this quadrant. Possibly, management accounting fell within this quadrant, since the questionnaires were distributed to WH within big-four and mid-tier firms, where management accounting is not one of the main service lines and thus, considered less important.

Graduates considered finance to fall within Quadrant 3; whilst WH perceived it to fall within Quadrant 1. Furthermore, WH considered optimism to fall within Quadrant 3; whereas graduates perceived it to fall within Quadrant 2. Although in Section 6.2.2, WH suggested that the UoM programme lacks in providing students with knowledge on accounting software, WH considered information technology to fall within Quadrant 3. Possibly, this could be because the definition of information technology provided to WH did not include utilisation of accounting software. This finding agrees with Coady et al. (2018) who found that employers perceived information technology to fall within this quadrant. Furthermore, this supports Hassall et al. (2005) who stated that information technology is less of a requirement to be developed within accountancy graduates progressing into the working world. This could be because when compared to other skills provided, information technology may be perceived as unrelated to the profession and thus

less important for graduates to possess. Additionally, this is consistent with Howieson (2003) who argued that although information technology is fundamental it is of less importance when compared to analytical and communication skills. Therefore, this finding indicates lower expectation to develop information technology skills during university when compared to other more important skills.

Given that skills falling within Quadrant 3 are not expected to be highly developed during the programme, it may be implied that the UoM could dedicate less time and resources to the development of such skills. This would be the case if reverse correspondence theory is implemented, since this suggests that universities should not include development of skills within programmes that are unimportant at the workplace (Coady et al. 2018). In fact, Quadrant 3 provides UoM accountancy curriculum preparers with further insightful information, since they may decide to focus less on such skills rather than totally discard them. Thus, extra resources may be utilised to focus on skills requiring more attention (Quadrant 2).

6.6.4 Skills developed below average in graduates requiring no further emphasis during the UoM accountancy programme

Quadrant 4		
WH		**UoM Graduates**
Accurate self-assessment	⟷	Accurate self-assessment
Change catalyst	⟷	Change catalyst
Initiative		Empathy
Service		Inspiration
Influence		Bookkeeping
Conflict management		Developing others
Self-control		Organisational awareness
		Information technology
		Emotional self-awareness
Grey shading represents non-EI skills		

Table 6.11: Skills developed below average in graduates requiring no further emphasis during the programme

Based on Figure 6.4 and 6.5, skills included within Table 6.11 fall within the fourth quadrant. Skills falling in this quadrant are considered as less developed in graduates but require no further emphasis during the UoM accountancy programme, since they are less expected to be developed during the programme. Therefore, this quadrant consists of skills which do not require further attention during the accountancy programme. WH and graduates agreed that accurate self-assessment and change catalyst stood within this quadrant. Thus, although these skills are perceived as being less developed in graduates, the university is not expected to focus on improving them. This is consistent with Coady et al. (2018) who highlighted that employers and graduates perceived that accurate self-assessment and change catalyst fall within this quadrant.

It is interesting to note that WH considered information technology to fall within Quadrant 3; whilst graduates considered it to fall within Quadrant 4. WH perceived initiative to fall within Quadrant 4; whilst graduates considered it to fall in Quadrant 2. Additionally, WH considered service, influence, conflict

management and self-control to fall within Quadrant 4; whereas graduates perceived these to fall within Quadrant 3. Contrastingly, graduates perceived empathy, inspiration, developing others, organisational awareness, emotional self-awareness and bookkeeping to fall within Quadrant 4; whilst WH perceived these skills to fall within Quadrant 3. Possibly, these conflicting perspectives may have emerged due to differences in perceptions on the extent skills have been developed and expectations of skills to be developed during the programme.

With respect to influence, self-control, and conflict management, WH agreed with the employer's perspective, as revealed by Coady et al. (2018). Additionally, the UoM graduates agreed with the graduates studied by Coady et al. (2018) for empathy, developing others, organisational awareness, information technology and emotional self-awareness. These similarities could be due to individuals in different jurisdictions having similar perceptions regarding these skills in relation to the profession.

Coady et al. (2018) pointed out that 58% of EI skills were allocated to the fourth quadrant by either employers or graduates. In fact, the findings indicate that 63% of EI skills were allocated to this quadrant by respondents. This suggests that EI skills falling within this quadrant may not be considered as relevant for development within the accountancy programme when compared to other skills. This quadrant suggests that skills which are expected to be less developed within graduates are in fact less developed, implying that for these skills the UoM is utilising their resources efficiently. Furthermore, this suggests that the UoM is adhering to reverse correspondence theory (Coady et al. 2018), since skills falling within this quadrant are unimportant to be developed during university and are in fact, less developed within graduates.

6.7 Conclusion

This chapter revealed that most respondents agreed that a skill gap exists within the accountancy profession following UoM education. Furthermore, most respondents agreed that the digital age, automation of roles, COVID-19 pandemic and artificial intelligence warrant the inclusion of EI in prospective accountancy students' education. Additionally, the perceptions on the extent the provided skills should be developed during the programme were analysed. Furthermore, by means of the integration of the Extent and Where Indices, strategic maps were generated highlighting skills requiring further or less emphasis during the programme. Thus, providing insight regarding areas being adequately addressed by the UoM and those where there is marginal room for improvement. Considering this, the following chapter measures UoM accountancy students' EI level to understand if this increases during the students' university experience.

Chapter 7

Findings and Discussion – Objective 4

7.1 Introduction

This chapter addresses this study's fourth objective, to measure the UoM accountancy students' EI level in different years. Figure 7.1 outlines the chapter.

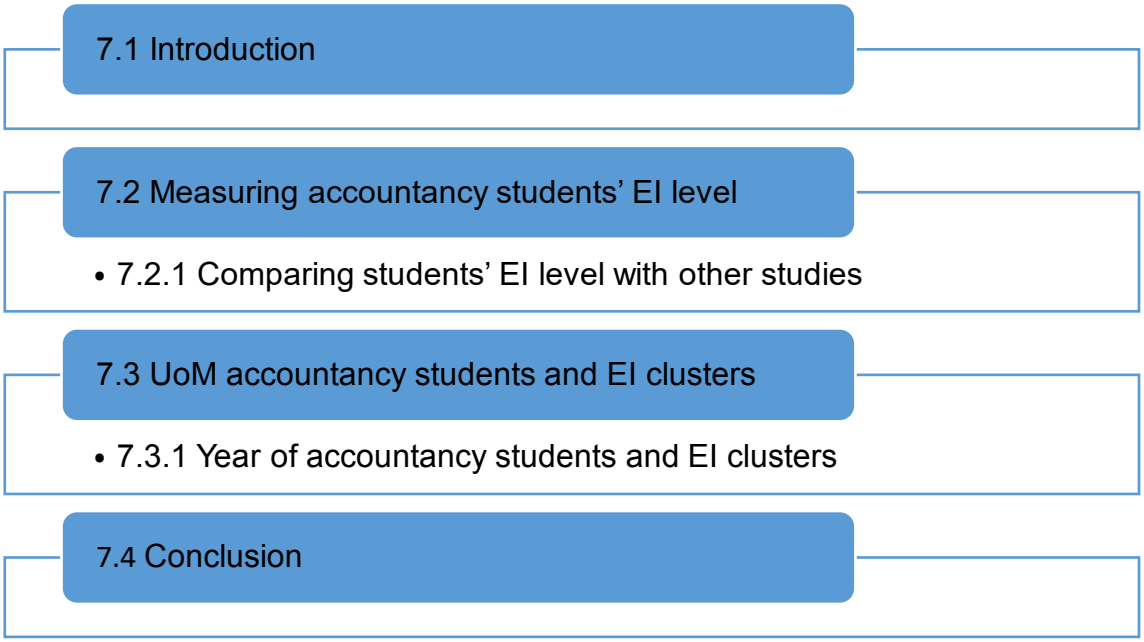

Figure 7.1: Chapter outline

7.2 Measuring accountancy students' EI level

As stated in Chapter 3, Section 3.3.3, the AES designed by Schutte et al. (2009) was utilised to measure accountancy students' EI level. Table 7.1 depicts the accountancy students' mean EI scores.

	Mean	SD	P-Value
First year	120.879	9.934	0.001
Second year	123.198	10.046	
Third year	126.000	9.731	
Fourth year	125.273	12.408	
Fifth year	129.225	11.913	
Total	124.358	10.846	

Table 7.1: Accountancy students' EI level

No range nor line of demarcation is provided for establishing an individual's EI level (Schutte et al. 2009). However, a greater EI score denotes a higher EI level. When compared to first-year students$_{(\bar{x}=120.879)}$, fifth-year students had a greater EI level$_{(\bar{x}=129.225)}$. Although comparing different professions, this agrees with Foster et al. (2017) who argued that as nursing students progress their EI level increases and Snowden et al. (2015) who claimed that EI increases by age. Figure 7.2 depicts the error bar graph representing the EI scores attributed to different years. Furthermore, this error bar graph depicts that as students progress, their respective mean EI score increases. This could imply that the UoM accountancy programme assists students in developing EI skills.

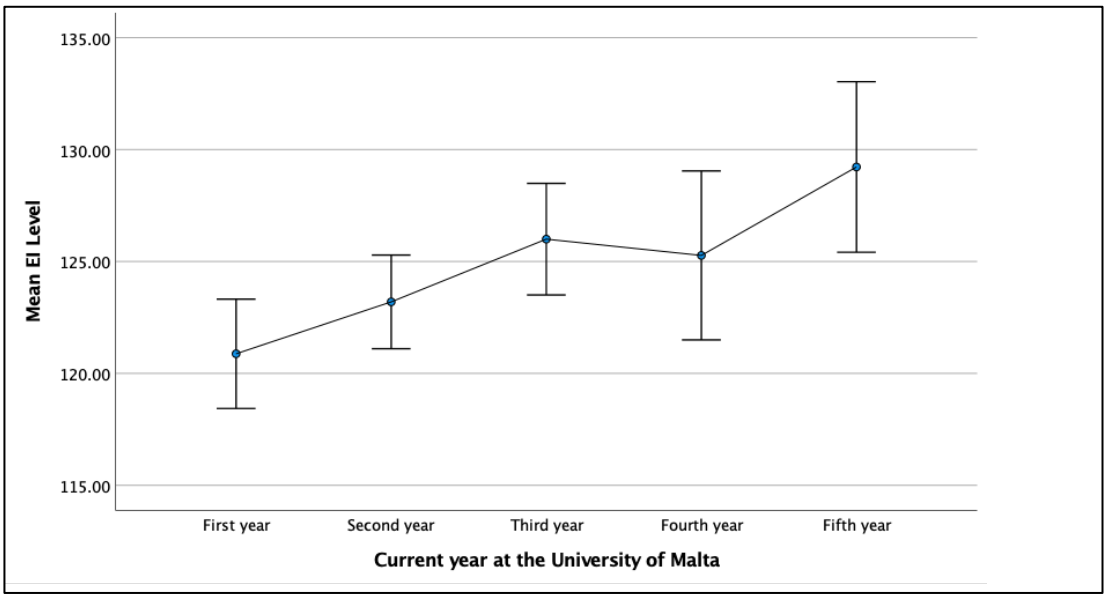

Figure 7.2: Accountancy students' mean EI level

The one-way ANOVA test demonstrates a statistically significant difference$_{(p=0.001)}$ between the mean EI scores of accountancy students in different years. This implies that the alternative hypothesis is accepted, meaning that the difference in mean EI scores as students' progress is significant and not attributed to chance.

7.2.1 Comparing students' EI level with other studies

The students' mean EI scores can be compared with other studies measuring EI. When comparing the mean EI score of first-year accountancy students$_{(\bar{x}= 120.879)}$ with first-year Australian university students$_{(\bar{x}=123.80)}$ studied by Bastian et al. (2005), the accountancy students scored an EI level of 2.92 lower.

Furthermore, when comparing the overall mean EI score$_{(\bar{x}=124.36)}$ obtained by accountancy students with postgraduate medical students in Delhi$_{(\bar{x}=124.4)}$ described by Ravikumar et al. (2017), the same result was obtained. Overall, accountancy students obtained a mean EI score$_{(\bar{x}=124.36)}$ slightly lower than Canadian university psychology students$_{(\bar{x}=127.78)}$ as revealed by Depape et al.

(2006). When comparing the mean scores obtained by the accountancy students to other studies, such scores are comparable. However, slight differences may arise due to different skills being taught in varying courses and because of contextual differences.

UoM accountancy students' EI scores were compared to those of big-four WH presented by Cutajar (2014). First-year students have a mean EI score($\bar{x}$=120.879) comparable to WH in the accounting department($\bar{x}$=120). However, first-year students scored lower than accountants within the audit/assurance($\bar{x}$=124), advisory($\bar{x}$=127) and taxation($\bar{x}$=127) departments. Fifth-year students obtained a mean EI score($\bar{x}$=129.225) greater than accountants within the accounting($\bar{x}$=120), audit/assurance($\bar{x}$=124), advisory($\bar{x}$=127) and taxation departments($\bar{x}$=127). As stated in Chapter 5, Section 5.2, WH and graduates believed that graduates had good development in all EI skills provided. In fact, the findings show that fifth-year students had a greater mean EI score than accountants in big-four firms. This difference may be the result of enhanced EI skill development in recent UoM students.

7.3 UoM accountancy students and EI clusters

As stated in Chapter 1, Section 1.2, Mayer and Salovey (1997) highlighted that EI may be further sub-divided into four clusters. The AES created by Schutte et al. (2009) is designed in consideration of the four clusters. The maximum score one may obtain for each cluster is 50, 45, 40 and 30 respectively. Table 7.2 depicts students' overall mean EI scores for the statements associated with each cluster. The findings show that mean scores greater than 3 were obtained for 30 items, indicating that overall, students possess EI characteristics. This finding disagreed with Cook et al. (2011) who found that Canadian, US and South African

university students had a low EI level. This implies that the UoM accountancy programme may better assist students' EI skill development when compared to universities in other jurisdictions.

Cluster 1: Perception of emotions	**Mean**	**SD**
Item 5	2.742	1.040
Item 9	3.930	0.777
Item 15	3.662	0.877
Item 18	4.007	0.724
Item 19	3.464	0.977
Item 22	3.712	0.720
Item 25	3.685	0.797
Item 29	3.421	0.900
Item 32	3.874	0.772
Item 33	2.788	1.079
Total	36.225	
Cluster 2: Managing own emotions	**Mean**	**SD**
Item 2	3.970	0.726
Item 3	3.818	0.801
Item 10	3.682	0.914
Item 12	3.596	0.783
Item 14	4.255	0.624
Item 21	3.387	0.960
Item 23	3.921	0.803
Item 28	2.308	1.002
Item 31	3.960	0.695
Total	34.282	
Cluster 3: Managing others' emotions	**Mean**	**SD**
Item 1	3.815	0.858
Item 4	3.970	0.753
Item 11	3.404	1.113
Item 13	3.679	0.922

Cluster 3: Managing others' emotions (continued)	**Mean**	**SD**
Item 16	3.957	0.730
Item 24	4.285	0.746
Item 26	3.709	0.882
Item 30	4.089	0.753
Total	30.907	
Cluster 4: Utilisation of emotions	**Mean**	**SD**
Item 6	4.113	0.774
Item 7	3.623	0.898
Item 8	3.930	0.854
Item 17	3.967	0.746
Item 20	3.864	0.768
Item 27	3.447	0.864
Total	22.944	2.938

Table 7.2: Students' overall mean EI scores for the four clusters

7.3.1 Year of accountancy students and EI clusters

Table 7.3 displays that in each of the four EI clusters fifth-year students obtained the greatest mean EI score. Conversely, first-year students obtained the lowest mean EI score in three of the four clusters. According to Cook et al. (2011) such increase in EI may arise due to the accountancy curriculum. Possibly, this implies that fifth-year students may have obtained a greater EI level due to further education received.

		Mean	SD	P-Value
Cluster 1: Perception of emotions	First year	34.909	4.402	0.003
	Second year	36.099	4.091	
	Third year	36.131	4.493	
	Fourth year	36.909	4.831	
	Fifth year	38.075	4.514	
	Total	36.225	4.483	
Cluster 2: Managing own emotions	First year	33.818	3.582	0.023
	Second year	33.890	3.453	
	Third year	35.115	2.876	
	Fourth year	33.773	4.345	
	Fifth year	35.225	4.240	
	Total	34.282	3.660	
Cluster 3: Managing others' emotions	First year	29.924	3.605	0.041
	Second year	30.637	3.551	
	Third year	31.607	3.195	
	Fourth year	30.886	3.847	
	Fifth year	32.100	3.727	
	Total	30.907	3.612	
Cluster 4: Utilisation of emotions	First year	22.227	3.190	0.007
	Second year	22.571	2.860	
	Third year	23.148	3.156	
	Fourth year	23.705	2.502	
	Fifth year	23.825	2.417	
	Total	22.944	2.938	

Table 7.3: Mean EI scores for each cluster by year

The Kruskal Wallis test shows a statistically significant difference between mean EI scores obtained and year of students in all four clusters. This means that the alternative hypothesis is accepted. Thus, the difference in students' mean EI scores as they progress is significant and not attributed to chance.

In relation to Cluster 1, when comparing the mean EI score obtained by Delhi postgraduate medical students($\bar{x}$=35.9), as revealed by Ravikumar et al. (2017) with UoM accountancy students($\bar{x}$=36.225), overall, the accountancy students scored

slightly higher. In Cluster 2, Delhi postgraduate medical students obtained a slightly greater mean EI level($\bar{x}$=35.34) compared to UoM accountancy students($\bar{x}$=34.282). Additionally, for Cluster 3 UoM accountancy students obtained a higher mean EI score($\bar{x}$=30.907) than the Delhi postgraduate medical students($\bar{x}$=29.52). For Cluster 4, UoM accountancy students obtained a mean EI score($\bar{x}$=22.944) lower than the Delhi postgraduate medical students($\bar{x}$=23.55). For these four clusters, differences may have arisen since comparisons were made with a different profession in another jurisdiction and skills taught may vary. Furthermore, these discrepancies may be present due to contextual differences.

7.4 Conclusion

This chapter revealed that as students progress their EI level increases, possibly implying that the accountancy curriculum assists students' EI skill development. UoM accountancy students' EI level was similar to those in other studies. Thus, when compared to other universities, it seems that the UoM is in a good position regarding students' EI skill development. The subsequent chapter summarises this study's findings, including recommendations and possible areas for future research.

Chapter 8

Summary, Conclusions and Recommendations

8.1 Introduction

Firstly, Section 8.2 summarises the study; whilst Section 8.3 summarises the findings relating to this study's objectives. Furthermore, Section 8.4 consists of various recommendations. Areas for further research are proposed within Section 8.5. Finally, the chapter is concluded within Section 8.6. Figure 8.1 outlines the chapter.

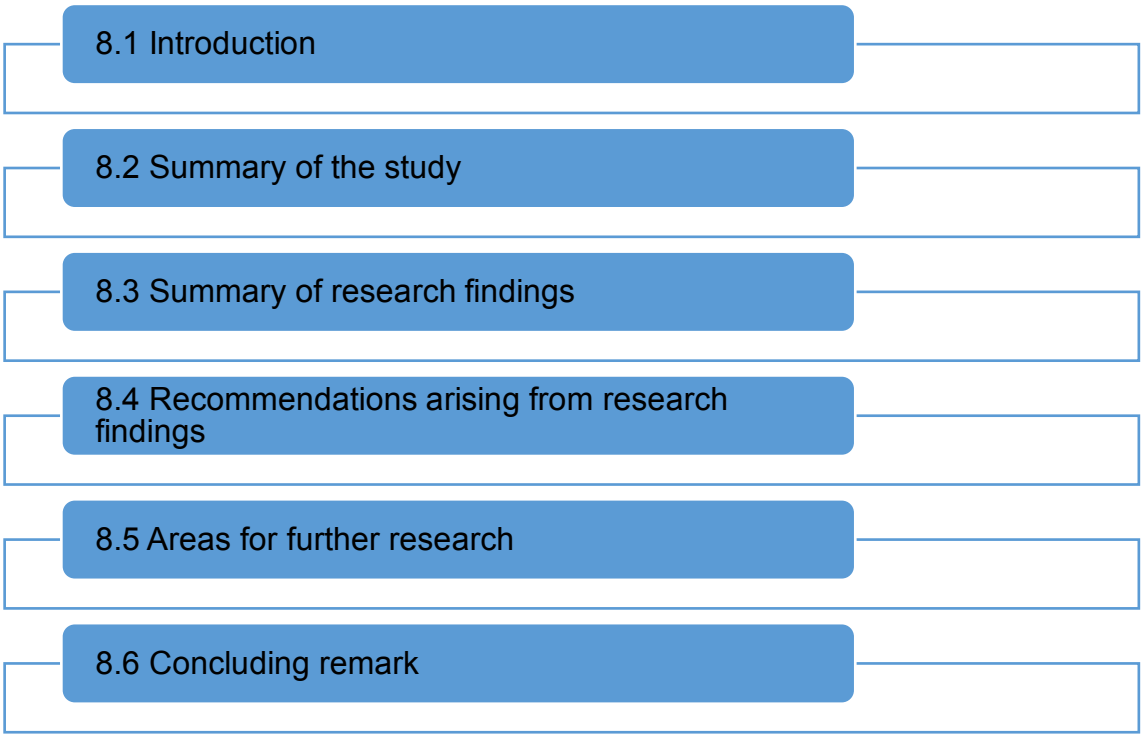

Figure 8.1: Chapter outline

8.2 Summary of the study

Motivated by the absence of local literature on EI focusing on UoM graduates, together with the growing importance of EI, this dissertation sought to assess the perceptions of WH and graduates on EI concentrating on accountancy graduates. Given that educational institutions play a crucial role in development of students' EI skills, this study measured UoM accountancy students' EI levels.

Following the preliminary research phase, which facilitated the formulation of the objectives, a quantitative approach was implemented. Thus, to address this study's first three objectives, questionnaires were distributed to WH and graduates; whilst to address the fourth objective another questionnaire comprising of the AES designed by Schutte et al. (2009) was distributed to UoM accountancy students. Subsequently, to fulfil this study's objectives the analysis of primary data was undertaken in light of relevant secondary data.

8.3 Summary of research findings

Objective one aimed to identify perceptions of graduates and WH on the importance of EI at the workplace, together with the EI and non-EI skills considered fundamental for graduates to possess within big-four and mid-tier work environments. In line with literature, respondents agreed that EI is a fundamental quality contributing to success within the workplace and in any position; personal satisfactory performance; and firm success. Overall, respondents believed emotionally intelligent personnel create a more positive work environment, enhancing service provision to clients. It was highlighted that certain EI skills increase in importance on career progression. Most agreed that future accountants should possess EI skills; one main reason being that the accountancy profession has become more people-oriented as opposed to desk-

based. Most respondents believed that EI and non-EI skills are equally important. Table 8.1 depicts the skills perceived as most important for graduates working in big-four or mid-tier firms. However, overall respondents considered all skills provided as important. In today's rapidly changing world, where personal interaction is becoming more prevalent, the findings emphasise the importance of developing such skillset to enable integration at the workplace and with clients.

	Most important skills for graduates at the workplace				
	WH		Graduates		
	Big-Four	Mid-Tier	Big-Four	Mid-Tier	Other
Non-EI skills	Written communication	Analytical skills	Written communication	Written communication	Written communication
EI skills	Teamwork and collaboration	Adaptability	Adaptability	Adaptability	Teamwork and collaboration

Table 8.1: Perceptions – Most important skills

The findings in relation to objective one emphasised the importance of accountancy students developing the provided skills. Thus, **objective two** investigated the opinion of graduates and WH regarding the extent to which graduates developed certain skills during the UoM accountancy programme. Table 8.2 depicts the skills perceived as most developed in graduates. Overall, respondents believed that the specified skills were adequately developed in recent graduates. This implies that the UoM is in a good position with respect to developing the provided skillset. However, WH perceived conflict management (EI skill) and integrative thinking (non-EI skill) as most lacking in recent graduates.

	Skills most developed in graduates				
	WH		Graduates		
	Big-Four	Mid-Tier	Big-Four	Mid-Tier	Other
Non-EI skills	Financial accounting	Bookkeeping	Written communication	Written communication	Audit and assurance
EI skills	Building bonds	Teamwork and collaboration	Teamwork and collaboration	Teamwork and collaboration	Teamwork and collaboration

Table 8.2: Perceptions – Skills most developed in graduates

Although the skillset provided was perceived as adequately developed in graduates, it does not imply that these skills should be developed during the accountancy programme. Thus, **objective three** aimed to understand perspectives regarding the UoM accountancy programme, and the degree to which certain EI and non-EI skills should be developed during the programme. Most respondents believed a skill gap exists following UoM education. It transpired that this gap is possibly caused by the absence of practical components. Respondents agreed that the UoM accountancy programme focuses mainly on the financial, technical and regulatory aspects, neglecting other important areas. However, it is important to note that this programme is part requirement for one to become a warranted accountant. Thus, practical work experience to obtain such warrant would be acquired following course completion and is not necessarily the responsibility of the UoM.

Certain factors, including the COVID-19 pandemic; automation of roles; digital age; and artificial intelligence warrant the inclusion of EI in prospective accountancy students' education. Thus, this emphasises the importance for the UoM accountancy programme to remain abreast with the dynamic environment. In fact, respondents agreed that working in groups, researching accounting issues, role play communicating with a client, writing memos and completing

statements of a hypothetical company would assist in prospective graduates' skill development. Therefore, these activities possibly could be incorporated into the programme to enhance skill development. Table 8.3 depicts the perceptions on the skills most expected to be developed during the programme.

	Skills most expected to be developed during the UoM accountancy programme				
	WH		Graduates		
	Big-Four	Mid-Tier	Big-Four	Mid-Tier	Other
Non-EI skills	Written communication	Integrative thinking	Oral communication	Taxation	Oral communication
EI skills	Adaptability	Teamwork and collaboration	Teamwork and collaboration	Teamwork and collaboration	Teamwork and collaboration

Table 8.3: Perceptions – Skills most expected to be developed

Insightful information was acquired by integrating the Extent and Where Indices, to derive strategic maps reflecting the position of WH and graduates. These maps were divided into four quadrants, representing the extent of skill development in graduates and the extent to which each skill should be developed during the UoM accountancy programme. Figure 1.1 portrays different quadrants, comprising of skills mutually perceived by WH and graduates to fall in each quadrant.

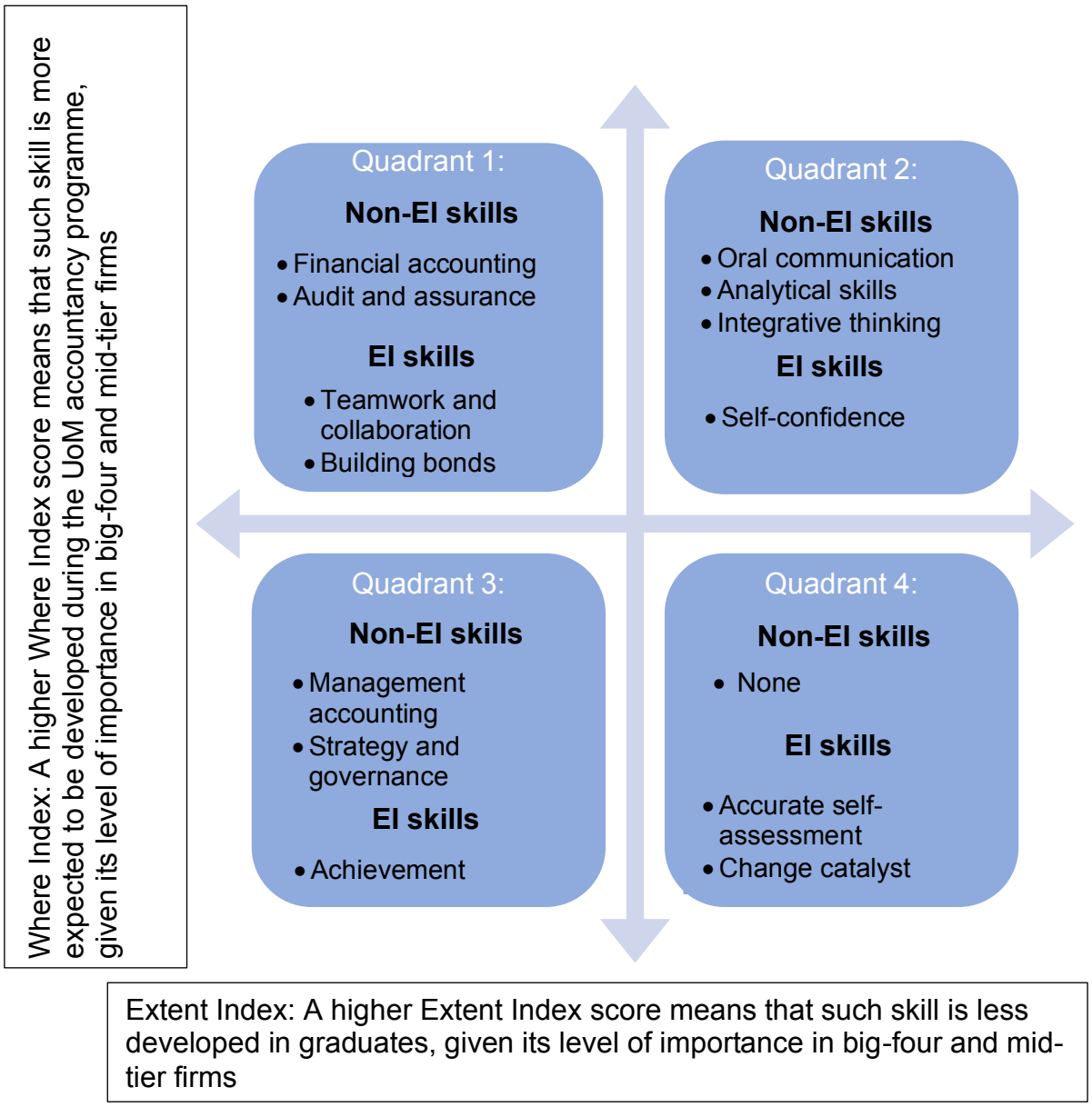

Figure 8.2: Quadrants – Mutual perception of skills by WH and graduates

Objective four measured the UoM accountancy students' EI level within different years. The EI scores derived for each year, by making use of the AES developed by Schutte et al. (2009), revealed that fifth-year accountancy students had a greater EI level than students in preceding years. Fifth-year accountancy students obtained the greatest EI score for three EI clusters. Overall, findings suggest that student progression in the accountancy course leads to a higher EI

level. This implies that the UoM, through its pedagogy, may improve students' EI level.

8.4 Recommendations arising from research findings

Although findings suggest that WH and UoM accountancy graduates perceived all EI and non-EI skills provided as important for graduates to possess, and that overall, graduates have adequately developed both skillsets; the strategic maps provided insightful actionable information. The subsequent section presents proposals resulting from the findings. However, it is important to note that UoM accountancy curriculum preparers should undertake an enhanced supplementary analysis before implementing the ensuing recommendations; especially since graduates may seek employment in firms other than those classified as big-four or mid-tier.

- **Skills requiring attention by the UoM accountancy programme curriculum preparers**

  The second quadrant which emerged from the integration of the Extent and Where Indices focused on EI and non-EI skills requiring attention by the UoM accountancy curriculum preparers, since such skills are developed below average in graduates but are of above average expectation to be developed during the UoM. From the perspective of WH and graduates, oral communication, analytical skills, integrative thinking and self-confidence stood within this quadrant. Additionally, WH perceived adaptability, transparency, written communication and taxation to fall within this quadrant; whereas from the graduates' perspective the skills of optimism and initiative stood within this quadrant. This provides accountancy curriculum preparers insightful information regarding the

skills requiring more attention; and emphasis should possibly be placed on their development.

- **Skills adequately developed within UoM graduates requiring no further emphasis during the UoM accountancy programme**

  The third quadrant derived from the strategic maps comprised of EI and non-EI skills adequately developed within graduates requiring no more emphasis during the UoM accountancy programme, since such skills are above average developed in graduates and are of below average expectations to be developed during the UoM. WH and graduates agreed that the non-EI skills of strategy and governance and management accounting and the EI skill of achievement require no further emphasis during the UoM accountancy programme. This implies that the UoM may dedicate less time and resources to the development of these skills and rather utilise such resources in the development of skills requiring more attention as highlighted above.

8.5 Areas for further research

It transpired from the research findings that the following areas necessitate further research:

- **Carrying out an identical study from the perspective of WH employed within small firms and/or in industry**

  This study focused on the perspectives of big-four and mid-tier firm WH together with UoM accountancy graduates. It would be interesting to replicate this study from the perspective of WH in industry or small audit firms, to identify and assess if any contrasting perceptions exist.

- **Conducting a similar study using a qualitative approach**

  A qualitative approach may yield more in-depth information regarding strategies that may be utilised by the UoM to integrate EI and non-EI skills identified by this study as fundamental for development. Furthermore, one may obtain lecturers' perceptions on how improvements can be made to skill development. Additionally, perspectives may be acquired from different stakeholders; including UoM accountancy students, the AB and the Malta Institute of Accountants.

- **Undertaking the same study focusing on ACCA students**

  This study may be replicated focusing on ACCA students, assessing whether WH and ACCA students consider the same EI and non-EI skills important for ACCA students. One could compare development of EI and non-EI skills in ACCA students to this study's findings. Subsequently, it would be interesting to measure local ACCA students' EI level and compare results with this study's findings, to ascertain whether contrasting skills are brought to the profession by UoM and ACCA students.

8.6 Concluding remark

Various factors such as the COVID-19 pandemic, digital age, automation of roles and artificial intelligence warrant the inclusion of EI in accountancy education. This study focused specifically on recent UoM accountancy graduates, who still have a lifetime of contribution to the accountancy profession. Focus was placed on the skills UoM accountancy graduates bring to the profession. In light of the importance of accountancy graduates being in possession of EI and non-EI skills in big-four and mid-tier firms, this warrants the continued development of such skills. An element of insight was provided to UoM accountancy curriculum

preparers regarding curriculum planning and implementation, taking into consideration market expectations of future professional accountants' EI and non-EI skills. As proposed, redistribution of resources may optimise efficiency and utilisation of available UoM resources in areas identified as requiring more attention.

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Regulatory

Accountancy Profession Act 1979 (c. 281 of the Laws of Malta). Malta: The Legislation Unit.

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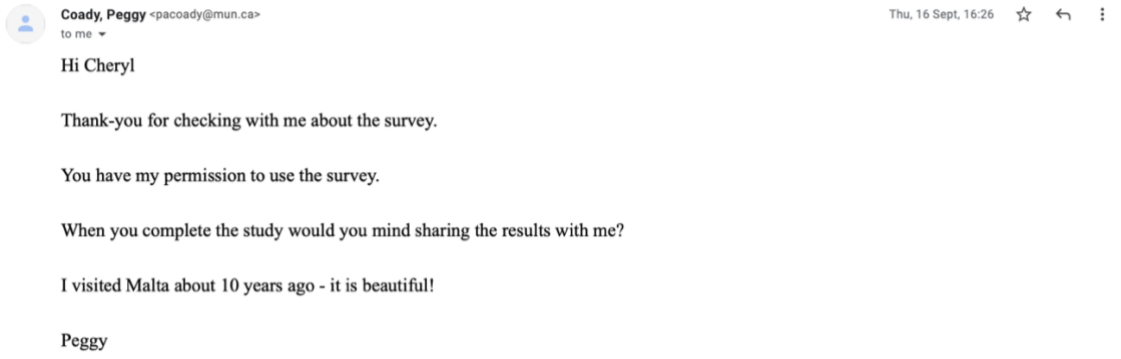
Appendices

Appendix A1.1: Permission from Dr. Coady to utilise the questionnaire research instrument



Coady, Peggy <pacoady@mun.ca> Thu, 16 Sept, 16:26

to me

Hi Cheryl

Thank-you for checking with me about the survey.

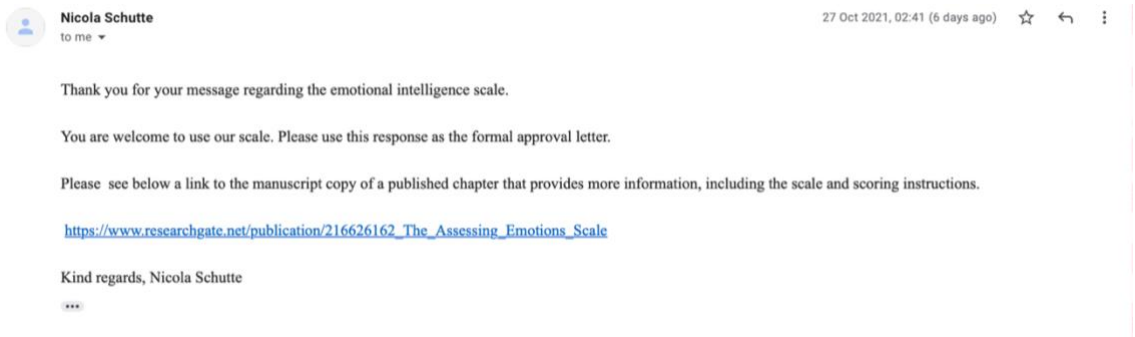
You have my permission to use the survey.

When you complete the study would you mind sharing the results with me?

I visited Malta about 10 years ago - it is beautiful!

Peggy

Appendix A1.2: Permission from Dr. Schutte to utilise the Assessing Emotions Scale



Nicola Schutte
to me

27 Oct 2021, 02:41 (6 days ago)

Thank you for your message regarding the emotional intelligence scale.

You are welcome to use our scale. Please use this response as the formal approval letter.

Please see below a link to the manuscript copy of a published chapter that provides more information, including the scale and scoring instructions.

https://www.researchgate.net/publication/216626162_The_Assessing_Emotions_Scale

Kind regards, Nicola Schutte

Appendix A1.3: Approval to distribute questionnaires to UoM accountancy students

Lauren Ellul 07:44 (22 minutes ago)
to me

Dear Cheryl,

I have no objection to this; however, you need to obtain permission from the respective lecturer.

Regards,

L-Università ta' Malta

Dr Lauren Ellul | Lecturer
B.Accty.(Hons), M.B.A.(Exec.) (Edin.&E.N.P.C.), F.I.A., C.P.A., Ph.D.(Birm.)

Head, Department of Accountancy
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Room 326B, FEMA Building
+356 2340 2700

Appendix A1.4: Questionnaire distributed to WH and graduates

Dear Participant,

I am Cheryl Mifsud, a Fifth year Master in Accountancy student at the University of Malta. I would like to take this opportunity to thank you for accepting my invitation to participate. As part of my dissertation entitled "Emotional Intelligence Skills in Accountancy Students and Graduates" I am required to obtain data from **warrant holders** within Big four and Mid-Tier firms and **UoM graduates** regarding **Emotional Intelligence (EI) skills**. Mayer and Salovey (1990, p. 189) are the pioneers of EI and identified EI to be a type of social intelligence "that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions". Goleman (2002) built on the concept and provided a wide range of skills one is required to encompass to be considered emotionally intelligent. In this questionnaire, the following set of EI and non-EI skills included in table 1 and table 2 below are going to be considered.

	Self PERSONAL COMPETENCE		**Other SOCIAL COMPETENCE**	
RECOGNITION	**Self-Awareness**		**Social Awareness**	
	EI Skill	**Definition**	**EI Skill**	**Definition**
	Emotional self-awareness	Recognising one's emotions and their effects	**Empathy**	Sensing others' feelings and perspectives
	Accurate self-assessment	Knowing one's strengths and limits	**Service**	Anticipating, recognising and meeting clients' needs
	Self-confidence	Sureness about one's self-worth and capabilities	**Organisational awareness**	The ability to read social and political networks in an organisation
REGULATION	**Self-Management**		**Relationship Management**	
	EI Skill	**Definition**	**EI Skill**	**Definition**
	Self-control	Keeping disruptive emotions and impulses under control	**Influence**	Using effective tactics of persuasion
	Adaptability	Flexibility in adapting to changing situations or overcoming obstacles	**Developing others**	Encouraging others' abilities through feedback and guidance
	Achievement	Striving to improve or meet a standard of excellence	**Change catalyst**	Initiating or managing change
	Initiative	Readiness to act and seize opportunities	**Conflict management**	Negotiating and resolving disagreements

	Optimism	Persistence in pursuing goals despite obstacles and set-backs	**Teamwork and collaboration**	Cooperatively working with others towards a shared goal
	Transparency	Displaying honesty, integrity, and trustworthiness	**Building bonds**	Cultivating and maintaining relationships
			Inspiration	Inspiring and guiding people

Table 1: Emotional Intelligence Skills (Goleman et al. 2002; Coady 2014)

Non-Emotional Intelligence Skills			
	Definition		**Definition**
Financial accounting	Interpretation and application of relevant accounting standards	**Finance**	Financial analysis and planning
Bookkeeping	Bank reconciliations, journal entry preparation and monthly accounting	**Strategy and governance**	Role of corporate governance within an organisation and strategy formulation
Management accounting	Budgeting, costing, and performance measurement	**Information technology**	Proficiency in latest information technology sources
Taxation	Personal and corporate tax preparation	**Analytical skills**	Articulating and solving problems
Audit and assurance	Financial statement auditing and other assurance services	**Integrative thinking**	Critical thinking when solving a problem
Oral communication	Effective listening, understanding and speaking	**Written communication**	Writing with clarity and precision

Table 2: Non-Emotional Intelligence Skills (Coady 2014)

It would be appreciated if the following instructions are read carefully for you to be able to respond correctly. This questionnaire includes both **closed-ended and open-ended questions**. I would be grateful if you take the time to answer both types of questions for the questionnaire to be complete. Thus, I would be provided with a clearer understanding regarding the perspectives that exist locally.

Kindly note that anonymity is guaranteed throughout the whole questionnaire. *Furthermore, approximately one should take around 30 minutes to fully complete this questionnaire.* If in any instance you do not feel comfortable to answer a certain question you are able to refrain from providing an answer without there being any type of prejudice or penalty. Thank you again for your contribution to this study. By proceeding you would be indicating that the outlined instructions have been fully understood.

Cheryl Mifsud *[ID number]* **Email**: *[Email Address]*
M.Accty Student **Mobile:** *[Mobile Phone Number]*

SECTION A: Demographics

The following information will allow the comparison of results by respondent profiles. Please remember that all information you provide is and will remain entirely anonymous.

1. Gender of participant

☐ Male
☐ Female

2. Qualification

☐ University of Malta
☐ ACCA
☐ Other: _____

3. Are you a warrant holder or non-warrant holder?

☐ Warrant holder
☐ Non-warrant holder

If you are a **non-warrant holder,** please ignore the following question (Q.4).

4. Approximate amount of University of Malta graduates your office employs per year

☐ Less than 3
☐ 4-7
☐ More than 7

If you are a **warrant holder,** please ignore the following question (Q.5).

5. Years since university of Malta Master in Accountancy graduation

☐ Just graduated (2021 graduate)
☐ 1 year (2020 graduate)
☐ 2 years (2019 graduate)

6. Type of firm you work in:

☐ Big-four firm
☐ Mid-tier firm *(Four or more principals)*
☐ Firm other than the big-four or mid-tier *(Less than four principals)*

7. Area of work specialisation

☐ Financial Accounting
☐ Management Accounting
☐ Audit/ Assurance
☐ Taxation
☐ Advisory

SECTION B: Importance of Emotional Intelligence and skills fundamental for graduates to possess within the workplace

This section deals with various skills. On the basis of your experience please select the appropriate response.

8. To what extent do you believe that Emotional Intelligence is a fundamental quality to possess:

	Completely Disagree	Somewhat Disagree	Neither Disagree, nor Agree	Somewhat Agree	Completely Agree
To be successful at the workplace					
For personal satisfactory performance					
For the organisation to be successful					
In decision-making situations					

9. In your opinion how important do you perceive Emotional Intelligence to fulfil your organisations top challenges?

Very Unimportant	Unimportant	Neutral	Important	Very Important

10. How would the work environment be impacted should employees have higher levels of Emotional Intelligence skills?

_____

_____

11. What are your views on the importance of specific Emotional Intelligence skills being dependent on one's role?

_____

_____

12.1 Do you believe that future accountants should possess Emotional intelligence skills?

☐ Yes
☐ No

12.2 Please specify why.

_____

_____

13. To what extent do you believe that Emotional Intelligence is crucial for one to be in a better position to:

	Completely Disagree	**Somewhat Disagree**	**Neither Disagree, Nor Agree**	**Somewhat Agree**	**Completely Agree**
Understand other individuals' feelings					
Be a successful leader					
Devise approaches to manage conflict effectively					

14. Overall, how do you consider the importance in the workplace, of non-emotional intelligence skills compared to emotional intelligence skills?

☐ Non-emotional intelligence skills not as important as emotional intelligence skills
☐ Non-emotional intelligence skills equally important to emotional intelligence skills
☐ Non-emotional intelligence skills more important than emotional intelligence skills

15. Indicate how relevant or not you believe each non-Emotional Intelligence skill area is in the workplace, for local accountancy graduates working in either big four or mid-tier accounting firms?

	Very irrelevant	Irrelevant	Neutral	Relevant	Very Relevant
Financial Accounting					
Bookkeeping					
Management Accounting					
Taxation					
Audit and Assurance					
Finance					
Strategy and Governance					
Information Technology					
Analytical Skills					
Integrative Thinking					
Oral Communication					
Written Communication					

Adapted from Coady et al. (2018)

16. Indicate how relevant or not you believe the following set of Emotional Intelligence skills are in in the workplace, with respect to local accountancy graduates, working in big four or mid-tier firms?

	Very Irrelevant	Irrelevant	Neutral	Relevant	Very Relevant
Self-Awareness					
Emotional Self-Awareness					
Accurate Self-Assessment					
Self-Confidence					
Social Awareness					
Empathy					
Organisational Awareness					
Service					
Self-Management					
Self-Control					
Transparency					
Adaptability					

	Very Irrelevant	Irrelevant	Neutral	Relevant	Very Relevant
Achievement					
Initiative					
Optimism					
Relationship Management					
Inspiration					
Influence					
Developing Others					
Change Catalyst					
Conflict Management					
Teamwork and Collaboration					
Building Bonds					

Adapted from Coady (2014)

SECTION C: Degree to which Emotional Intelligence and non-Emotional Intelligence skills have been developed in University of Malta accountancy graduates

This section deals with the Emotional Intelligence and non-Emotional Intelligence skills that recent Accountancy graduates developed by studying at the University of Malta.

17. If you are a **warrant holder** indicate the extent to which in your opinion, the recent university accounting graduates your organisation has hired, have developed the following non-Emotional Intelligence skills at the University of Malta.

    If you are a **non-warrant holder** indicate the extent to which in your opinion, you have developed the following non- Emotional Intelligence skills as a result of studying at the University of Malta.

	Poor	Fair	Good	Very Good	Excellent
Financial Accounting					
Bookkeeping					
Management Accounting					
Taxation					
Audit and Assurance					
Finance					
Strategy and Governance					
Information Technology					
Analytical Skills					
Integrative Thinking					
Oral Communication					
Written Communication					

Adapted from Coady (2014)

18. If you are a **warrant holder** indicate the extent to which in your opinion, the recent university accounting graduates your organisation has hired, have developed the following Emotional Intelligence skills at the University of Malta.

    If you are a **non-warrant holder** indicate the extent to which in your opinion, you have developed the following Emotional Intelligence skills by studying at the University of Malta.

	Poor	Fair	Good	Very Good	Excellent
Self-Awareness					
Emotional Self-Awareness					
Accurate Self-Assessment					
Self-Confidence					
Social Awareness					
Empathy					
Organisational Awareness					
Service					
Self-Management					
Self-Control					
Transparency					
Adaptability					
Achievement					
Initiative					
Optimism					
Relationship Management					
Inspiration					
Influence					
Developing Others					
Change Catalyst					
Conflict Management					
Teamwork and Collaboration					
Building Bonds					

Adapted from Coady (2014)

If you are <u>NOT</u> a warrant holder, please ignore question 15 and proceed to the following section.

19. In your view, which skills included in question 13 and 14 are lacking in recent accountancy graduates and why do you consider them important?

_____

_____

SECTION D: Extent to which students should develop certain Emotional Intelligence and non-Emotional Intelligence skills during the University of Malta accountancy programme

This section deals with the extent you believe students should develop certain Emotional Intelligence and non-Emotional Intelligence skills during the University of Malta accountancy programme.

20. 1 Does a skill gap in the accountancy profession exist following education received at the University of Malta?

☐ Yes
☐ No

20.2 Please specify why.

_____

_____

21. 1 Does the University of Malta accountancy programme tend to focus more on the financial, technical and regulatory aspects and end up neglecting other areas?

☐ Yes
☐ No

21.2 If **yes**, please specify the areas that you believe have been neglected.

_____

_____

22. To what extent do you believe that certain factors warrant the inclusion of Emotional Intelligence in the education of prospective UoM accountancy students?

	Completely Disagree	**Somewhat Disagree**	**Neither Disagree, Nor Agree**	**Somewhat Agree**	**Completely Agree**
COVID-19 pandemic					
Automation of roles					
Digital age					
Artificial intelligence					

23. If the development of Emotional Intelligence and non-emotional intelligence skills are included within the following activities to what extent do you think future graduates would improve their skills?

	Completely Disagree	Somewhat Disagree	Neither Disagree, Nor Agree	Somewhat Agree	Completely Agree
Working in Groups					
Researching Accounting Issues					
Role play communicating with a client					
Writing memos					
Completing statements of a hypothetical company					

24. Indicate the extent to which you believe each of the following non-Emotional Intelligence skills should be developed during the University of Malta accountancy programme.

	No Development	Some Development	Good Development	Very Good Development	Excellent Development
Financial Accounting					
Bookkeeping					
Management Accounting					
Taxation					
Audit and Assurance					
Finance					
Strategy and Governance					
Information Technology					
Analytical Skills					
Integrative Thinking					
Oral Communication					
Written Communication					

Adapted from Coady (2014)

25. Indicate the extent to which you believe each of the following Emotional Intelligence skills should be developed during the University of Malta accountancy programme.

	No Development	Some Development	Good Development	Very Good Development	Excellent Development
Self-Awareness					
Emotional Self-Awareness					
Accurate Self-Assessment					
Self-Confidence					
Social Awareness					
Empathy					
Organisational Awareness					
Service					
Self-Management					
Self-Control					
Transparency					
Adaptability					
Achievement					
Initiative					
Optimism					
Relationship Management					
Inspiration					
Influence					
Developing Others					
Change Catalyst					
Conflict Management					
Teamwork and Collaboration					
Building Bonds					

Adapted from Coady (2014)

Thank you for participating.

Appendix A1.5: Questionnaire distributed to UoM accountancy students

Dear Participant,

I am Cheryl Mifsud, a Fifth year Master in Accountancy student at the University of Malta (UoM). I would like to take this opportunity to thank you for accepting my invitation to participate within this questionnaire. As part of my dissertation entitled "*Emotional Intelligence Skills in Accountancy Students and Graduates"* to satisfy one research objective of my study, I am required to obtain data from accountancy students**.** This is in order to be able to measure the respective Emotional Intelligence (EI) levels and understand whether any improvements have been made as students progress throughout the Accountancy programme at the UoM. Therefore, to respond to this questionnaire, you are required to be reading for a:

- Degree in Bachelor of Commerce with Accountancy as one of your majors; or
- Master in Accountancy.

To provide you with some background, Mayer and Salovey (1990, p. 189) are considered as being the pioneers of EI and identified EI to be a type of social intelligence "that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions". Subsequently, Goleman (2002) built on the concept as highlighted by Mayer and Salovey (1990) and provided a wide range of skills one would encompass to be considered as an emotionally intelligent individual.

I would be grateful if you take the time to answer all of the questions that have been included in order for the questionnaire to be complete.

Additionally, kindly note that anonymity is guaranteed throughout the whole questionnaire. *Furthermore, approximately one should take around 10 minutes to fully complete this questionnaire.* If in any instance you do not feel comfortable to answer a certain question you are able to refrain from providing an answer without there being any type of prejudice or penalty.

Thank you again for your contribution to this study. By proceeding, you would be indicating that the aforementioned instructions set out have been fully understood.

Cheryl Mifsud *[ID number]*
M.Accty Student
Email: *[Email Address]*
Mobile: *[Mobile Phone Number]*

SECTION A: Demographics

1. Gender of participant

☐ Male
☐ Female
☐ Other

2. What year are you currently in at the University of Malta?

☐ First year
☐ Second Year
☐ Third Year
☐ Fourth Year
☐ Fifth Year

3. If you are second year or above, what is / was your other Major (apart from Accountancy)?

☐ Banking and Finance
☐ Marketing
☐ Public Policy
☐ Insurance
☐ Management
☐ Economics

SECTION B: The Assessing Emotions Scale

The items included within the table below make reference to your different emotions and reactions associated to certain emotions. Therefore, for **each statement included please select the option which best describes you**.

It is important to note that there is **no correct answer**. Therefore, when providing your response please be honest and select the option which best describes you in each situation.

	Strongly Disagree	**Somewhat Disagree**	**Neither Agree nor Disagree**	**Somewhat Agree**	**Strongly Agree**
1. I know when to speak about my personal problems to others.					
2. When I am faced with obstacles, I remember times I faced similar obstacles and overcame them.					
3. I expect that I will do well on most things I try.					
4. Other people find it easy to trust in me.					
5. I find it hard to understand the non-verbal messages of other people.					
6. Some of the major events of my life have led me to re-evaluate what is important and not important.					
7. When my mood changes, I see new possibilities.					
8. Emotions are one of the things that make my life worth living.					
9. I am aware of my emotions as I experience them.					

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
10. I expect good things to happen.					
11. I like to share my emotions with others.					
12. When I experience a positive emotion, I know how to make it last.					
13. I arrange events others enjoy.					
14. I seek out activities that make me happy.					
15. I am aware of the non-verbal messages I send to others.					
16. I present myself in a way that makes a good impression on others.					
17. When I am in a positive mood, solving problems is easy for me.					
18. By looking at their facial expressions, I recognise the emotions people are experiencing.					
19. I know why my emotions change.					
20. When I am in a positive mood, I am able to come up with new ideas.					
21. I have control over my emotions.					
22. I easily recognise my emotions as I experience them.					
23. I motivate myself by imagining a good outcome to tasks I take on.					
24. I compliment others when they have done something well.					

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
25. I am aware of the non-verbal messages other people send.					
26. When another person tells me about an important event in his or her life, I almost feel as though I experienced this event myself.					
27. When I feel a change in emotions, I tend to come up with new ideas.					
28. When I am faced with a challenge, I give up because I believe I will fail.					
29. I know what other people are feeling just by looking at them.					
30. I help other people feel better when they are down.					
31. I use good moods to help myself keep trying in the face of obstacles.					
32. I can tell how people are feeling by listening to the tone of their voice.					
33. It is difficult for me to understand why people feel the way they do.					

(Schutte et al. 2009, p. 21)

Thank you for participating.

Appendix A1.6: Calculation of margin of error for warrant holders

Margin of Error = $\mathcal{Z}\boldsymbol{\sigma_p}$

Where:

- For a 95% degree of confidence, $\mathcal{Z} = 1.96$
- σ_p is a representation of the standard deviation of the sampling distribution and is maximized when p= 0.5
- σ_p is derived from

$$\boldsymbol{\sigma_p} = \sqrt{\frac{\mathbf{P(1-p)}}{\mathbf{n}} \ \frac{\mathbf{(N-n)}}{\mathbf{N-1}}}$$

Where:

- **N = 1050**
- **n = 222**
- **p = 0.5** (σ_p is maximised when p= 0.5)

$$\boldsymbol{\sigma_p} = \sqrt{\frac{\mathbf{P(1-p)}}{\mathbf{n}} \ \frac{\mathbf{(N-n)}}{\mathbf{N-1}}} \ \mathbf{= \sigma_p} = \sqrt{\frac{\mathbf{(0.5)(0.5)}}{\mathbf{222}} \ \frac{\mathbf{(1050-222)}}{\mathbf{1050-1}}} = \mathbf{0.02981404766}$$

Maximum margin of error = $\mathcal{Z}\sigma_p$ = (1.96)(0.02981404766) = 0.0584355 = **5.84%**

Appendix A1.7: Calculation of margin of error for UoM accountancy graduates

Margin of Error = $\mathcal{Z}\boldsymbol{\sigma_p}$

Where:

- For a 95% degree of confidence, $\mathcal{Z} = 1.96$
- σ_p is a representation of the standard deviation of the sampling distribution and is maximized when p= 0.5
- σ_p is derived from

$$\boldsymbol{\sigma_p} = \sqrt{\frac{\mathbf{P(1-p)}}{\mathbf{n}} \ \frac{\mathbf{(N-n)}}{\mathbf{N-1}}}$$

Where:

- **N = 277**
- **n = 96**
- **p = 0.5 (**σ_p is maximised when p= 0.5)

$$\boldsymbol{\sigma_p} = \sqrt{\frac{\mathbf{P(1-p)}}{\mathbf{n}} \ \frac{\mathbf{(N-n)}}{\mathbf{N-1}}} \textbf{ = } \boldsymbol{\sigma_p} = \sqrt{\frac{\mathbf{(0.5)(0.5)}}{\mathbf{96}} \ \frac{\mathbf{(277-96)}}{\mathbf{277-1}}} = \mathbf{0.04132559681}$$

Maximum margin of error = $\mathcal{Z}\sigma_p$ =(1.96)(0.04132559681) = 0.080998 = **8.1%**

Appendix A1.8: Calculation of margin of error for UoM accountancy students

Margin of Error = $\mathcal{Z}\boldsymbol{\sigma_p}$

Where:

- For a 95% degree of confidence, $\mathcal{Z} = 1.96$
- σ_p is a representation of the standard deviation of the sampling distribution and is maximized when p= 0.5
- σ_p is derived from

$$\boldsymbol{\sigma_p} = \sqrt{\frac{\mathbf{P(1-p)}}{\mathbf{n}} \ \frac{\mathbf{(N-n)}}{\mathbf{N-1}}}$$

Where:

- **N = 514**
- **n = 302**
- **p = 0.5 (**σ_p is maximised when p= 0.5)

$$\boldsymbol{\sigma_p} = \sqrt{\frac{\mathbf{P(1-p)}}{\mathbf{n}} \ \frac{\mathbf{(N-n)}}{\mathbf{N-1}}} \textbf{ = } \boldsymbol{\sigma_p} = \sqrt{\frac{\mathbf{(0.5)(0.5)}}{\mathbf{302}} \ \frac{\mathbf{(514-302)}}{\mathbf{514-1}}} = \mathbf{0.01849591329}$$

Maximum margin of error = $\mathcal{Z}\sigma_p$ = (1.96)(0.01849591329) = 0.036252 = **3.63%**

Appendix A1.9: Demographics of warrant holders and graduates

	Warrant holders		UoM Accountancy Graduates	
Demographic Characteristic	**Frequency**	**%**	**Frequency**	**%**
Gender of Participant				
Male	98	44.14%	40	41.67%
Female	124	55.86%	56	58.33%
Total	**222**	**100%**	**96**	**100%**
Qualification				
University of Malta	146	65.77%	96	100%
ACCA	74	33.33%	0	
Other (ACA)	2	0.90%	0	
Total	**222**		**96**	**100%**
Warrant holder or non-warrant holder				
Warrant holder	222	69.81%		
Non-warrant holders			96	30.19%
Approximate number of UoM accountancy graduates employed by firm per year ***(Question was to be answered by warrant holders only)***				
Less than 3	35	15.77%	-	-
4-7	59	26.58%	-	-
More than 7	128	57.66%	-	-
Total	**222**	**100%**		
Years since UoM Master in accountancy graduation ***(Question was to be answered by graduates only)***				
Just graduated (2021 graduate)	-	-	42	43.75%
1 year (2020 graduate)	-	-	35	36.46%
2 years (2019 graduate)	-	-	19	19.79%
Total			**96**	**100%**

Type of Firm				
Big-four firm	127	57.21%	43	44.79%
Mid-tier firm	95	42.79%	34	35.42%
Firm other than the big-four or mid-tier	0	0.00%	19	19.79%
Total	**222**	**100%**	**96**	**100%**
Area of work specialisation				
Financial Accounting	49	22.07%	31	32.29%
Management Accounting	11	4.95%	2	2.08%
Audit/ Assurance	95	42.79%	42	43.75%
Taxation	47	21.17%	11	11.46%
Advisory	20	9.01%	10	10.42%
Total	**222**	**100%**	**96**	**100%**

Appendix A1.10: Demographics of UoM accountancy students

Demographic Characteristic	Frequency	%
Gender of Participant		
Female	166	54.97%
Male	136	45.03%
Total	**302**	**100%**
Current year at the UoM		
First year	66	21.85%
Second year	91	30.13%
Third year	61	20.20%
Fourth year	44	14.57%
Fifth year	40	13.25%
Total	**302**	**100%**
Other major if second year or above		
Banking and Finance	84	35.59%
Marketing	46	19.49%
Public Policy	2	0.85%
Insurance	49	20.76%
Management	22	9.32%
Economics	33	13.98%
Total	**236**	**100%**

Appendix A2.1: Figures for Extent Index working

$$Extent\ Index_i = I_i \times \frac{\bar{E}}{E_i}$$

	Mean scores for skill importance (I_i)		Extent Developed means (E_i)		Extent Index results	
	Warrant Holders	**UoM Graduates**	**Warrant Holders**	**UoM Graduates**	**Warrant Holders**	**UoM Graduates**
Financial accounting	4.2207	4.4167	3.3514	3.5938	3.7629	4.0248
Bookkeeping	3.9459	3.9375	3.0946	2.8958	3.8098	4.4529
Management accounting	3.9234	3.6354	3.1667	3.3021	3.7018	3.6055
Taxation	4.1351	4.0625	2.9144	3.1354	4.2393	4.2432
Audit and assurance	4.1532	4.2500	3.0405	3.5938	4.0811	3.8729
Finance	4.0000	4.1146	3.1126	3.4375	3.8396	3.9199
Strategy and governance	3.8468	3.2708	2.9099	2.8438	3.9498	3.7667
Information technology	3.8919	3.6979	2.8919	2.1146	4.0210	5.7270
Analytical skills	4.4054	4.4688	2.7793	3.2604	4.7359	4.4886
Integrative Thinking	4.3784	4.3542	2.5856	3.1458	5.0595	4.5328
Oral communication	4.4189	4.6042	3.0676	3.4271	4.3040	4.3997
Written communication	4.5000	4.7083	3.1306	3.8333	4.2947	4.0224
Emotional self-Awareness	4.2748	4.0104	3.0450	2.9271	4.1944	4.4869
Accurate self-assessment	4.2928	4.1458	2.9189	2.9583	4.3941	4.5894

Self-confidence	4.4414	4.6146	2.9820	3.1563	4.4501	4.7880
Empathy	4.1126	4.0833	2.9550	3.1250	4.1583	4.2792
Organisational awareness	4.1396	4.1354	2.9955	2.8750	4.1290	4.7106
Service	4.3243	4.1771	2.9324	3.2917	4.4060	4.1558
Self-control	4.2703	4.1979	2.7658	3.2813	4.6131	4.1897
Transparency	4.4550	4.4688	3.0991	3.7292	4.2950	3.9244
Adaptability	4.4775	4.6979	2.9775	3.7813	4.4930	4.0688
Achievement	4.1532	4.2396	3.1757	3.6979	3.9074	3.7546
Initiative	4.2432	4.5938	2.9054	3.4792	4.3636	4.3240
Optimism	4.1667	4.2396	3.0766	3.2083	4.0464	4.3275
Inspiration	4.1306	4.0208	3.0090	3.0313	4.1015	4.3440
Influence	4.1937	3.7604	2.8514	3.0729	4.3944	4.0075
Developing others	4.0225	4.1250	2.9324	2.9583	4.0985	4.5664
Change catalyst	4.1126	3.8750	2.7342	2.7188	4.4940	4.6676
Conflict management	4.2387	4.2188	2.7252	3.2917	4.6471	4.1972
Teamwork and collaboration	4.4640	4.6667	3.2748	4.2500	4.0728	3.5959
Building bonds	4.2523	4.4896	3.2207	4.1042	3.9447	3.5824
Average of mean extent developed score for 31 skills $(\bar{E})$			**2.9878**	**3.2749**		

Appendix A2.2: Figures for Where Index working

$$\text{Where Index}_i = I_i \times \frac{W_i}{\overline{W}}$$

	Mean scores for skill importance I_i		Extent should be developed during UoM Scores W_i		Where index calculation	
	Warrant Holders	**UoM Graduates**	**Warrant Holders**	**UoM Graduates**	**Warrant Holders**	**UoM Graduates**
Financial accounting	4.2207	4.4167	4.0631	3.9896	4.4275	4.7119
Bookkeeping	3.9459	3.9375	4.0631	3.8333	4.1393	4.0362
Management accounting	3.9234	3.6354	4.0495	3.5313	4.1020	3.4329
Taxation	4.1351	4.0625	4.2072	4.1667	4.4916	4.5265
Audit and assurance	4.1532	4.2500	4.0946	3.8646	4.3904	4.3921
Finance	4.0000	4.1146	4.1622	3.6771	4.2983	4.0458
Strategy and governance	3.8468	3.2708	3.8243	3.2604	3.7982	2.8517
Information technology	3.8919	3.6979	3.9279	3.5729	3.9468	3.5331
Analytical skills	4.4054	4.4688	4.1757	3.9896	4.7493	4.7675
Integrative thinking	4.3784	4.3542	4.2117	4.0104	4.7609	4.6695
Oral communication	4.4189	4.6042	4.1081	4.0729	4.6868	5.0146
Written communication	4.5000	4.7083	4.1802	4.0417	4.8565	5.0887
Emotional self-awareness	4.2748	4.0104	3.6532	3.6042	4.0318	3.8652
Accurate self-assessment	4.2928	4.1458	3.6171	3.2813	4.0089	3.6377
Self-confidence	4.4414	4.6146	3.6802	3.5833	4.2200	4.4218
Empathy	4.1126	4.0833	3.7117	3.8021	3.9410	4.1516
Organisational awareness	4.1396	4.1354	3.6216	3.3854	3.8707	3.7438

Service	4.3243	4.1771	3.7342	3.5729	4.1691	3.9909
Self-control	4.2703	4.1979	3.5811	3.5104	3.9481	3.9407
Transparency	4.4550	4.4688	3.8423	3.8958	4.4194	4.6555
Adaptability	4.4775	4.6979	3.8739	3.8438	4.4781	4.8288
Achievement	4.1532	4.2396	3.7883	3.5833	4.0620	4.0624
Initiative	4.2432	4.5938	3.8423	3.7708	4.2093	4.6321
Optimism	4.1667	4.2396	3.6757	3.7292	3.9541	4.2278
Inspiration	4.1306	4.0208	3.7432	3.5521	3.9919	3.8192
Influence	4.1937	3.7604	3.7658	3.4896	4.0773	3.5090
Developing others	4.0225	4.1250	3.6486	3.5833	3.7892	3.9526
Change catalyst	4.1126	3.8750	3.6532	3.5208	3.8789	3.6483
Conflict management	4.2387	4.2188	3.7658	3.7083	4.1211	4.1835
Teamwork and collaboration	4.4640	4.6667	3.9640	4.3021	4.5685	5.3686
Building bonds	4.2523	4.4896	3.8423	4.1979	4.2183	5.0398
Average of mean extent should be developed at university score for 31 skills ($\bar{W}$)			**3.8733**	**3.7396**		