The Selection and Professional Training of Internal Auditors in Malta: A Study

by

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A dissertation submitted in partial fulfilment of the requirements for the award of the Master in Accountancy degree in the Department of Accountancy at the Faculty of Economics, Management and Accountancy at the University of Malta

May 2025

L-Università ta' Malta

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Abstract

The Selection and Professional Training of Internal Auditors in Malta: A Study

PURPOSE: This study aims (i) to ascertain and assess the key factors that influence the selection of individuals forming the internal auditing (IAing) teams in Maltese insourced IAUs; (ii) to ascertain and assess the development of the training plan, including the onboarding and continuous training methodologies currently in place in Maltese insourced IAUs and the effectiveness of such methodologies; (iii) to recommend how any existing barriers relating to the selection and training processes of internal auditors (IAors) may be tackled so that such processes may become more effective.

DESIGN: A mixed-method approach was adopted, involving semi-structured interviews with 14 CAEs and a survey completed by 33 IAors.

FINDINGS: Recruitment was found to be predominantly reactive, hindered by the small Maltese internal audit (IA) talent pool. CAEs prioritised communication, analytical thinking, honesty, teamwork, educational background and experience in the recruitment process. Most IAors had an accountancy background, while very few held the Certified Internal Auditor credential.

Training plans were found informal, with structured onboarding and post-training assessments being largely absent. On-the-job training was seen as the most effective training methodology. Contrarily, e-learning was not found to be highly effective. Training on technical IA topics was often underemphasised, owing to the lack of relevance and availability in Malta. Additionally, training was found to be restricted by budget constraints and heavy workloads.

CONCLUSIONS: While both current selection and training processes for IAors are marginally functional, such processes could benefit from improved internal recruitment followed by additional training and increased collaboration among IAUs. The study also forwards various other recommendations for improving both processes.

IMPLICATIONS: This study implies the need for more awareness on the importance of better structured selection and training processes for IAors, this being for the sake of audit quality and entity success. Importantly, more strategic approaches and updated training plans need to be prioritised to better equip future IAors.

KEYWORDS: IAing, Selection, Professional Training, Insourced IAUs

Dedication

To my parents, with great appreciation for all you have given me.

Acknowledgements

The successful completion of this study would not have been possible without the invaluable support received from many individuals throughout the entirety of my academic journey.

Firstly, I would like to express my deepest gratitude to my supervisor, Professor Peter J. Baldacchino, Ph.D.(Lboro.), M.Phil.(Lboro.), F.C.C.A., F.I.A., C.P.A., for his invaluable guidance, dedication, and continuous support throughout this process.

I also extend my sincere thanks to all the research participants for accepting to support my research and providing their invaluable insights, without which, my research would not have been possible.

Words of thanks and appreciation are also deeply extended to my parents for their constant encouragement and for instilling in me the values that have guided me throughout my academic journey and beyond. I would also like to thank my brother and closest friends for their unwavering support.

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List of Abbreviations

AI	Artificial Intelligence
AVI(s)	Asynchronous Video Interview(s)
BoD	Board of Directors
CAE(s)	Chief Audit Executive(s)
CIA	Certified Internal Auditor
CISA	Certified Information Systems Auditor
CPD	Continuous Professional Development
EA	External Audit
GIAS	Global Internal Audit Standards
HCT	Human Capital Theory
HR	Human Resource
IA	Internal Audit
IAing	Internal Auditing
IAor(s)	Internal Auditor(s)
IAU(s)	Internal Audit Unit(s)
IIA	Institute of Internal Auditors
IT	Information Technology
MIA	Malta Institute of Accountants
PC(s)	Personal Characteristic(s)
RBVT	Resource-Based View Theory
Surveyresp(s)	Survey Respondent(s)

CHAPTER 1

INTRODUCTION

1.1 Introduction

This Chapter lays down the groundwork for the study. As presented in Figure 1.1, S.1.2 provides the background to the study. Following this, S.1.3 justifies the rationale for the study, and S.1.4 sets out the research objectives. S.1.5 then establishes the scope and limitations of the study. Finally, S.1.6 concludes this Chapter by providing an outline of the study's structure.

Figure 1.1: Outline of Chapter 1

1.2 Background to the study

1.2.1 The evolving role of internal auditors

The role of internal auditors (IAors) has evolved significantly in recent years, shifting from a limited focus on assurance, to a broader, more strategic advisory and consulting services provider (Joshi, Acharya 2022). Such evolution was accelerated by economic instabilities such as Enron, WorldCom and Covid-19 (Joshi, Acharya 2022). Modern IAors now address broader challenges, such as the economic complexity, extensive regulatory demands, and technological advancements of their respective entities (Eulerich, Eulerich 2020).

The value proposition of internal auditing (IAing) is reflected in the definition of the Institute of Internal Auditors (IIA), namely:

> *"An independent, objective assurance and advisory service designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management, and control processes" (IIA 2024b, p.12).*

1.2.2 The sourcing decision

An entity may choose to establish an internal audit unit (IAU) internally, co-source it, or fully outsource it (IIA 2024a). The IIA advocates that an IAU is most effective when its resources, competences, and structure are aligned with the entity's strategy and adhere to the Global Internal Audit Standards (GIAS) (IIA 2018). Hence, such considerations are crucial when determining the optimal sourcing approach.

An insourced IAU is one established and resourced within the entity itself and led by a Chief Audit Executive (CAE) (IIA 2024a). This model is beneficial since IAors possess strong knowledge of the entity's operations and maintain full visibility and control over audit operations (IIA 2024a). However, it also has its limitations. Considering the dynamic environments IAors operate within, insourced IAUs may lack the continuous in-house competences to effectively address all the risks faced by their entity (IIA 2024a). Additionally, budget limitations may arise (IIA 2024a).

An IAU may also be outsourced, whereby all internal audit (IA) services are provided by a qualified and competent external service provider, usually on an ongoing basis (IIA 2024a). Yet, the oversight and responsibility for the IA activity remains insourced, normally by a designated CAE or senior management-level employee (IIA 2018).

Entities may also opt for a co-sourcing approach, which involves collaboration between in-house IA staff and external service providers when specialised or additional resources are required (IIA 2024a). For such a structure to be effective, extensive co-ordination between the parties is required (IIA 2018). Co-sourcing

arrangements have been shown to facilitate knowledge transfer to internal staff, thereby improving the overall competences of the full-time employees (IIA 2018).

A local study by Micallef (2020) found that although IA co-sourcing is perceived as the most advantageous sourcing model, Maltese entities are generally hesitant to adopt it. Instead, most established entities prefer to set up an insourced IAU, while newly established entities tend to opt for an outsourced IAU.

1.2.3 The importance of employee selection and training

Torrington and Hall et al. (2020) defined human resource (HR) selection as a process that employs standardised methods and techniques to identify candidates who best align with the specific job criteria. The selection process is a most delicate one in any entity as it involves the selection of candidates who not only fit the requirements of the open positions, but fit also the entity culture (Savić-Tot, Runić-Ristić et al. 2021). Selecting the appropriate candidate is paramount for enhancing employee and entity performance, which ultimately drives entity success (Yamoah 2013). In fact, Azar (2005) highlighted the importance of putting the "*right person in the right seat at the right time".* If this process is not carried out effectively, entity performance and the securement of a competitive advantage will be particularly adversely affected (Savić-Tot, Runić-Ristić et al. 2021).

However, simply selecting the right candidate is in itself insufficient (Abhishek, Senthilkumar et al. 2018). Ongoing professional training must be provided to ensure competences are continually honed and proficiency is enhanced (Elnaga, Imran 2013). Elnaga and Imran (2013) defined training as programmes that equip employees with "*information, new skills or professional development opportunities*", while concurrently providing entities with a competitive advantage in the market. IIA Standard 3.1 – Competency, highlighted that CAEs should provide IAors with a mix of internal and external training opportunities (IIA 2024b).

1.3 Study rationale

The role of IAing within entities has become increasingly vital, evolving into a cornerstone of effective corporate governance by promoting accountability, risk

management and the integrity of financial reporting (Eulerich, Eulerich 2020). With growing regulatory demands and the complexity of modern business environments (Latif 2012, Dickson, Isaiah 2024), the need for robust IA practices has become increasingly critical (Steyn, Plant 2009).

IAUs are ideally composed of individuals with diverse educational and professional backgrounds (Rose 2016, Bonrath, Eulerich 2024). This diversity, while enriching, also presents challenges in maintaining consistent quality and standards within the unit (Joshi, Acharya 2022). Therefore, implementing structured selection processes and professional training frameworks is essential to enhance the effectiveness and operational strength of IAUs. A well-structured selection process ensures that individuals with the appropriate skills, personal characteristics (PCs), educational background and experience are recruited, while a comprehensive training framework supports continuous professional development (CPD), this ensuring that IAUs can adapt to emerging risks and regulatory changes.

Notwithstanding the importance of these factors, there is a noticeable gap in research focusing on the IA profession, particularly regarding the selection and training processes. While extensive research has been conducted internationally on employee selection and training in general, there is a dearth of studies specifically addressing the IA profession. This gap is even more pronounced in Malta, where no research known to the author has been conducted to date in this area.

The research situation in both the Maltese and international contexts provides an opportunity for this study to contribute to the academic and professional understanding of the IA profession. By addressing this gap, this study seeks to offer meaningful insights that can aid the development of more effective IAor selection and training processes, this ultimately strengthening the role of IA within corporate governance frameworks. Furthermore, it is hoped that the findings could serve as a benchmark for further studies in the area, thus contributing to the global body of knowledge on IAing.

1.4 Research objectives

The study had three objectives:

(1) To ascertain and assess the key factors that influence the selection of individuals forming the IAing teams in Maltese insourced IAUs.

(2) To ascertain and assess the development of the training plan, including the onboarding and continuous training methodologies currently in place in Maltese insourced IAUs and the effectiveness of such methodologies;

(3) To recommend how any existing barriers relating to the selection and training processes of IAors may be tackled so that such processes may become more effective.

1.5 Scope and limitations

In order to maintain the scope of this study within reasonable limits, it is limited to the selection and training processes implemented in insourced IAUs and therefore excludes any consideration of co-sourced and outsourced IAUs. Additionally, owing to the specified timeframe, this study incorporates relevant local and international research and developments up to 30th April 2025.

1.6 Overview of the study

Chapter 1 outlines the study's background, its rationale and need, the research objectives as well as the study's scope and limitations.

Chapter 2 discusses various literature sources from both the Maltese as well as the international scene relevant to the topic under review.

Chapter 3 outlines the research methodology adopted in this study.

Chapter 4 presents the research findings obtained from the interviews and surveys.

Chapter 5 discusses the findings highlighted in Chapter 4, in relation to the literature overviewed in Chapter 2.

Finally, **Chapter 6** concludes the study by summarising the key findings, offering recommendations and proposing areas for future research. The structure of the study is outlined in Figure 1.2.

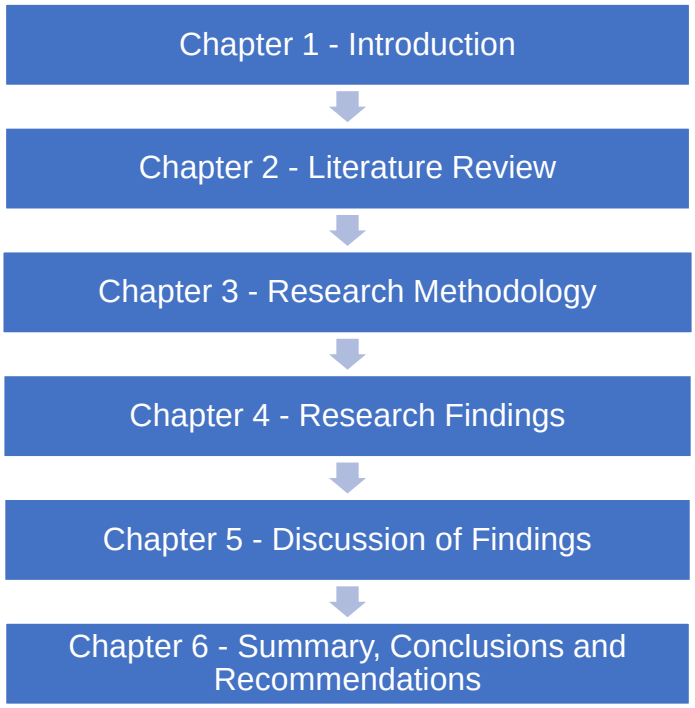

Figure 1.2: Structure of the study

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This Chapter presents a thorough analysis of the existing literature on the subject matter. Figure 2.1 outlines the Chapter's structure. S.2.2 discusses the process of developing a proficient IAU, while S.2.3 supports this and explores insights on training. Finally, S.2.4 concludes this Chapter.

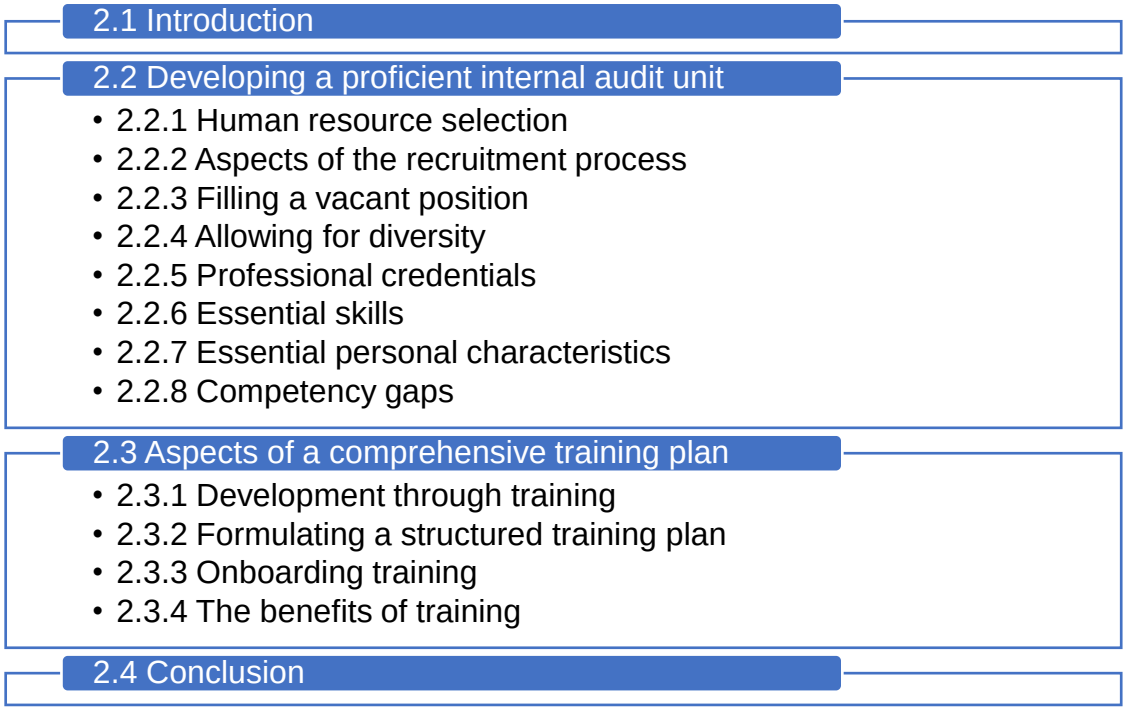

Figure 2.1: Outline of Chapter 2

2.2 Developing a proficient internal audit unit

2.2.1 Human resource selection

HR selection refers to the process of employing standardised methods and techniques to identify and select individuals who most closely match the criteria for a specific job (Torrington, Hall et al. 2020). This process is a vital component of the broader recruitment framework and is typically administered by the HR management function with support from the relevant department manager (Torrington, Hall et al. 2020). Yet, some entities, especially small, resource-constrained ones, occasionally resort to outsourcing the recruitment process to recruitment agencies (Abdullah, Ong et al. 2013).

Yamoah (2013) emphasised that employees form the cornerstone of an entity's success or failure. Consequently, the selection of high-quality IAors is particularly critical to the effectiveness of both the IAU and the wider entity (Seol, Sarkis et al. 2017). Additionally, Zampa Partners (2025) underscored that selecting the right IAor is pivotal for strengthening the corporate governance of the entity.

Harrington (2004) noted that IAors must possess a thorough set of skills and competences which enriches them to efficiently respond to the rapid changes and growing complexities of the business environment. Oxner and Oxner (2006) reinforced this by stating that IAors should display proficiency across a diverse set of areas.

In line with IIA Standard 3.1 - Competency, the responsibility for ensuring that the IAU is collectively competent rests with the CAE (IIA 2024b). To achieve this, IIA Standard 10.2 – Human Resources Management emphasises that the CAE must establish an IAU that balances the necessary knowledge, skills and abilities to meet the IA objectives (IIA 2024b). Should any gaps be identified, the CAE must implement hiring, training, outsourcing or other procedures (IIA 2024b). Rose (2016) argued that certain skills are more effectively acquired through robust selection rather than post-recruitment training, making strong recruitment frameworks essential.

2.2.2 Aspects of the recruitment process

The recruitment process is commenced through the establishment of the recruitment objectives, the job description and assessment criteria as this guides managers in the identification of the necessary knowledge, skills and competences that candidates must possess (Seol, Sarkis 2005).

Interviews are a critical element of the recruitment process, holding significant influence on hiring outcomes (Wang 2024). The conduct of multiple interviews, usually between two to three is suggested, since it enables the interviewers to determine whether the candidate is a potential good-fit (Wang 2024). Wang (2024) identified three main types of interview models: unstructured, semi-structured, and structured interviews. Unstructured interviews, characterised by the lack of predetermined questions and evaluation criteria, have been criticised

for their limited reliability and validity. Semi-structured interviews offer flexibility and follow a general topic guide, but lack a consistent sequence and standardised wording. In contrast, structured interviews adhere to a fixed set of questions posed uniformly to all candidates, thereby enhancing both validity and fairness in the assessment process.

However, such traditional models are inherently vulnerable owing to biases and the interviewees' ability to fake their answers (Wang 2024). In this regard, Charles and Florah (2021) suggested moving beyond the traditional model by incorporating ability, personality and interest tests into the candidate evaluation process. Similarly, Rose (2016) advocated for behavioural interviews that simulate real-life situations, as these improve the identification of candidates with critical skillsets. The use of asynchronous video interviews (AVIs) has also gained popularity in recent years (Torres, Mejia 2017, Lukacik, Bourdage et al. 2022), offering enhanced validity and reliability in the interview process (Lukacik, Bourdage et al. 2022). Lukacik and Bourdage et al. (2022) defined AVIs as online one-way videos wherein candidates record their responses to pre-set, standardised questions displayed on a screen. Traditionally such videos were reviewed manually by employers; however, Torres and Mejia (2017) suggested the integration of artificial intelligence (AI) tools within AVIs to automatically identify personality traits and other key attributes, while also reducing costs and accelerating the selection process.

2.2.3 Filling a vacant position

Chambers (2023) observed that a multitude of entities initiate the recruitment process for IAors only after encountering significant control and risk management failures. However, Bartlett and Kremin et al. (2016) argued that this approach is not ideal owing to the shortage of high-quality IAors, making it challenging for entities to attract job applicants and to retain IAU knowledge. Similarly, Opada and Ibrahim et al. (2024) asserted that reactive hiring challenges workforce stability and succession planning. A survey conducted by Chambers (2023) revealed that 60% of IAUs required more than three months to fill open IAor positions, with 30% taking more than six months to complete the hiring process.

Steyn and Plant (2009) found that the demand for IAors is high at more senior levels, with the opposite being true at trainee level, hypothesising that CAEs are reluctant to hire trainees owing to the IIA's limited guidance on training practices.

2.2.4 Allowing for diversity

Ideally, IAUs are composed of individuals with diverse educational and professional backgrounds, this enhancing their performance (Rose 2016, Bonrath, Eulerich 2024). In fact, the traditional view that the most effective IAors are those with accountancy degrees is increasingly being seen as outdated (Rose 2016, Chambers 2023).

Chambers (2023) argued that for an IAU to function optimally, it requires not only professionals with strong financial expertise but also individuals skilled in other areas, such as information technology (IT), compliance, and fraud investigations. This shift in perspective has been supported by the 2024 Pulse of Internal Audit Report (IIA 2024c), which revealed that financial reporting makes up only 14% of IA plans in North America. Moreover, Rose (2016) found that IAors with backgrounds beyond accountancy, IA and finance demonstrated higher critical thinking and communication skills. Any over-reliance on accountancy expertise at the cost of other critical skill sets can have significant negative consequences on IAUs, this including cancellations or delays in audits, the narrowing of audit scopes and reduced agility in responding to emerging risks owing to staffing limitations (Chambers 2023).

Additionally, Bonrath and Eulerich (2024) emphasised the significance of gender and national diversity, with the latter becoming increasingly important owing to the growing internationalisation of businesses and the global scope of IAing. While enriching, such diversity also presents challenges in maintaining consistent quality and standards within the unit (Joshi, Acharya 2022).

2.2.5 Professional credentials

In line with IIA Standard 3.1 – Competency, competency is demonstrated through the attainment of professional credentials (IIA 2024b). This is supported by a

survey conducted by The Internal Audit Foundation and Deloitte (2021) which found that certified IAors demonstrated higher overall competences when compared to non-certified ones. Tsintzas (2016) asserted that when an IAor embarks on a journey of acquiring such credentials, they establish a reputation characterised by integrity, dedication and commitment to both the profession and their entity.

The Certified Internal Auditor (CIA) certification issued by the IIA is the only globally recognised certification in IA, with an average of 30% of IAors worldwide holding such certification (Tsintzas 2016). The entrance requirements set out by the IIA for the acceptance into the CIA programme are flexible when compared to the requirements set out by other professional bodies (Steyn, Plant 2009). Moreover, the CIA examination is offered in 18 languages (Tsintzas 2016). Such open access and language versatility are designed to support the need for diversity within IAUs (Steyn, Plant 2009). Despite this, Deloitte (2021) and Bartlett and Kremin et al. (2016) noted that a skills shortage within the IA profession still persists, and thus, such open entry requirements have not adequately resolved the shortage of competent IAors.

Following the CIA credential, the most popular certification held by IAors is the Certification in Risk Management Assurance, with an average of 9% of IAors holding this credential (Tsintzas 2016). The Certified Information Systems Auditor (CISA) credential is also deemed valuable for IAors, especially those who are responsible for the IT systems audit (ISACA Now 2023).

Apart from certifications, Steyn and Plant (2009) observed that IAors are expected to hold a bachelor's degree, while CAEs are typically expected to hold postgraduate degrees. Experience was also deemed crucial, with 44.9% of IAors in South African IAUs having more than five years of professional IA experience (Steyn, Plant 2009).

2.2.6 Essential skills

A survey by the IIA identified seven key skills that CAEs prioritise during the recruitment process. Listed in order of importance, these are: analytical thinking, communication, accounting, risk management assurance, IT, industry-specific

knowledge and data mining and analytics (Rose 2016). Rose (2016) emphasised that the required skills should be compared to both the current audit plan and the IAUs broader strategies and future risks. However, in practice, this forward-looking approach is often overlooked.

While the GIAS are not legally mandated, having a strong knowledge of them is a valuable skill for IAors, as such standards promote the delivery of consistent, accurate and timely audits in a cost-effective manner (IIA n.d). These standards were updated in 2024, with implementation effective from 2025 (IIA 2025). They introduced, among other factors, guidance for supporting the strategic use of technological tools such as data analytics and AI to support more robust audit procedures (Whitington 2024). In this regard, Zampa Partners (2025) stressed the importance of selecting IAors with up-to-date knowledge of such standards, as they serve as a key guide in meeting compliance requirements. Similarly, Cohen and Sayag (2010) supported this, highlighting that adherence to the GIAS enhances IAU effectiveness.

2.2.7 Essential personal characteristics

Selecting candidates with the right PCs is essential, particularly in the IA profession as such characteristics significantly influence audit effectiveness (Endaya, Hanefah 2016).

Honesty is especially critical for IAors since the profession is built on trust and credibility (Zampa Partners 2025). Adaptability and being a team player also play a pivotal role (Seek 2024), given that IAors often operate in rapidly evolving environments. Furthermore, fitting with the entity culture and values is important since this enhances synergy and enhances commitment to the entity (Ahmad, Veerapandian et al. 2011). Similarly, Kedenburg (2025) argued that motivational fit is another key characteristic, since this enhances engagement, satisfaction and commitment to the entity. Conscientiousness is also important, acting as an accurate predictor of job performance (Shaffer, Postlethwaite 2013). Although appearance may seem superficial, Little and Craig Roberts (2012) noted that it can influence hiring decisions.

2.2.8 Competency gaps

Badara and Saidin (2014) posited that IAor competency influences the effectiveness of IAUs. Yet, a survey conducted by The Internal Audit Foundation and Deloitte (2021) identified competency gaps in a number of areas. Ranked in severity order, these are: IT control frameworks, data analytics, security and privacy, risk management, soft skills, fraud investigations and agile auditing methodologies.

When compared to their perceived importance for adding value to entities, competency levels in critical technologies, emerging risks and innovate knowledge areas such as cloud, virtual computing environments and disruptive technologies were also notably low (The Internal Audit Foundation, Deloitte 2021). In fact, IAors were yet feeling unprepared to provide effective assurance and advisory services in these areas, indicating that IAors had to evolve more quickly to keep pace, in particular, with new technologies and emerging risks to avoid becoming unable to fulfil their mission.

Deloitte (2021) recommended addressing these gaps by, *inter alia:*

1. Developing training and talent development paths to enhance skills, competences and digital proficiency across all levels, from trainee to CAEs; and
2. Redesigning recruitment strategies to target candidates with specialised technological and analytical expertise. This may include the exploration of sourcing IAors from across the globe.

2.3 Aspects of a comprehensive training plan

2.3.1 Development through training

Simply selecting the right candidate is not enough (Abhishek, Senthilkumar et al. 2018). Business environments are rapidly evolving, requiring individuals to keep abreast with changing requirements (Latif 2012, Dickson, Isaiah 2024). Ongoing professional training plays a pivotal role in this (Elnaga, Imran 2013). Steyn and Plant (2009) asserted that this is particularly true in the IA profession wherein IAors regularly encounter new challenges, complexities and opportunities that necessitate CPD of their skills, attributes and competences. Such development is crucial for IAors to add greater value to their entity.

In this regard, the IIA Code of Ethics stresses that IAors should only conduct engagements for which they possess "*the necessary knowledge, skills and experience*" (IIA 2019). The Code also emphasises the importance of IAors undertaking measures to improve their competences, effectiveness and quality of the services provided (IIA 2019). This can be achieved by engaging in CPD as stated in IIA Standard 3.2 - Continuing Professional Development (IIA 2024b). Similarly, IIA Standard 3.1 - Competency highlights the importance of IAors conducting a self-assessment to determine their skill gaps and the provision of an associated training plan (IIA 2024b). While IAors are ultimately responsible for adhering to this standard, the CAE plays a pivotal role in fostering an environment that facilitates the enhancement of skills, attributes and competences by providing the necessary training (IIA 2024b). Smith (2017) highlighted that for training to be considered valuable by employees, its purpose must be clearly communicated, including how it will benefit their personal growth and abilities.

2.3.2 Formulating a structured training plan

Developing a structured training plan is a fundamental aspect of employee development (Geskus 2023), one that remains essential regardless of the entity's size (Tung-Chun 2001). Structured training plans are positively correlated with enhanced employee performance and entity success (Elnaga, Imran 2013). Despite these benefits, Rose (2016) found that just over half of surveyed CAEs

reported having *"structured and documented"* training plans in their IAUs, with the rest indicating that their plans were either informal or not developed at all.

Smith (2017) proposed a three-step process for developing the training plan, which begins with conducting a needs assessment, as illustrated in Figure 2.2. However, Elnaga and Imran (2013) identified a flaw in the process, this being that many entities formulated the plan without clearly defining the training objectives or considering the specific knowledge, skills, and competences employees are expected to gain.

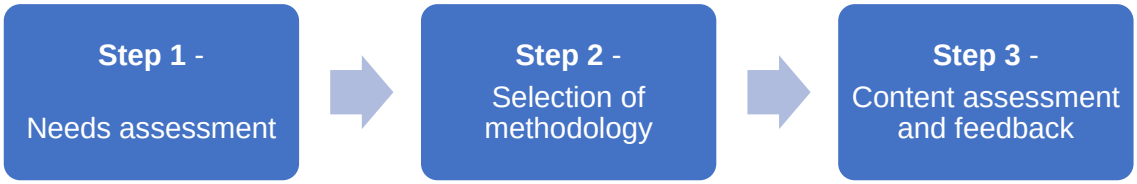

Figure 2.2: The training plan
Source: Smith (2017)

Needs assessment

Pike (2014) supported the 3-step approach proposed by Smith (2017), emphasising that training plans should only be formulated after a thorough needs assessment has been conducted. Employee involvement in this step is essential, as it enables the formulation of a precise and tailored plan, enhancing the overall effectiveness of training (Dalto 2015, Smith 2017). Collaboration between the CAE and IAor in developing the training plan is also consistent with the principles outlined in IIA Standard 10.2 – Human Resources Management (IIA 2024b).

Selecting the appropriate training methodology

The second step in the development of the training plan is the selection of the appropriate training methodology (Smith 2017). Abhishek and Senthilkumar et al. (2018) asserted that training methodologies can be broadly categorised into two types: internal training and external training. Internal training is typically informal and delivered by in-house personnel, focusing on entity practices or technical skills (Abhishek, Senthilkumar et al. 2018). This includes methods such as on-the-job training, mentoring, e-learning, directed reading and self-study programmes, and conducting training audits and research projects (Pickett 2011).

Conversely, external training is delivered by third-party specialists and includes attending and participating in professional conferences and seminars and pursuing professional certifications such as the CIA designation (Pickett 2011).

Cost-effectiveness of training methodologies

Training must be cost-effective for its benefits to be reaped (Yamoah 2013). Latif (2012) observed four main factors contributing to training effectiveness, these being satisfaction with the: training session, content, trainer and transfer of learning. Burke, Salvador et al. (2011) argued that methods which directly engage and integrate employees into the learning process tend to result in greater knowledge retention. In line with this, Booth (2007) found that learners *"generally retain 10% of what is read, 20% of what is heard, 30% of what is seen, 50% of material from group discussion, 75% of what is learned through practice and 90% of what they say and do".*

Cost is a key determinant in selecting appropriate training methodologies. Abhishek and Senthilkumar et al. (2018) emphasised that entities must weigh the financial implications when selecting training. Tsintzas (2016) suggested that the greatest barrier to training is the associated costs, which in most global regions is not sponsored by the entity. Kennedy (2009) highlighted that although high-quality training may incur greater initial costs, it often results in better long-term returns and avoids the inefficiencies of cheaper, ineffective alternatives.

A deeper dive into e-learning

E-learning is a flexible means of online training, enabling learners to access content at their preferred time and location (Shabha 2004, Lean, Ming et al. 2018). Zhang and Zhao et al. (2004) described it as "*cost-effective*" methodology, often incurring lower costs than in-person training. Such methodology gained popularity over the past few years; a trend accelerated by the Covid-19 pandemic (Baber 2022).

While some researchers found no significant difference in the effectiveness of online and in-person training methods (Lean, Ming et al. 2018, Wang, Ma et al.

2019), others observed that individuals prefer engaging with an expert and respond negatively to training delivered by a machine (Smith 2017).

Critics of online learning highlight several challenges. Fabito and Trillanes et al. (2021) identified issues such as difficulties in clarifying topics with tutors, lack of suitable training environments, and unreliable internet connectivity as significant barriers to effective online learning. Furthermore, the "*pre-packaged*" nature of some online courses can result in a lack of engagement, diminished learning outcomes and reduced applicability to specific work environments (Smith 2017). Baber (2022) added that the limited social interaction hindered the effectiveness of online training.

Training hours

Training must be provided on an ongoing basis, in line with IIA Standard 3.1 – Competency, which requires IAors to be proficient in both current and emerging areas (IIA 2024b). Tsintzas (2016) stressed that IAors must be lifelong learners to remain competitive in dynamic environments. To uphold this, CAEs should regularly assess the skills of individual IAors to identify any present gaps (IIA 2024b). When such gaps are found, appropriate training methodologies should be implemented to enhance the quality of work and strengthen competences (IIA 2024b).

Most training plans establish a minimum requirement of 40 annual hours of IA-related training per IAor (Tsintzas 2016). Yet, Tsintzas (2016) found that, on average, 57% of IAors within the EU receive training equal to or exceeding this threshold. Smith (2017) highlighted that the hours should be distributed across short, monthly training sessions, allowing employees to reflect on the material discussed and apply it effectively. Many studies found that the frequency of training and job performance have a directly proportional relationship (Kennedy 2009, Singh, Mohanty 2012, Elnaga, Imran 2013). Yet, Derouen and Kleiner (1994) contradicted this assessment and argued that the underperformance of employees is not entirely dependent on infrequent training. Similarly, Daniels (2003) asserted that training is "*not a panacea*" and thus, the assumption that training will bring underperforming employees up to speed is a misconception.

Content assessment and feedback

The final step in the development of the training plan involves assessing the training content and gathering employee feedback (Smith 2017). This is essential for refining future training initiatives, ensuring that sessions remain relevant and engaging (Smith 2017). Similarly, Farooq and Khan (2011) underscored the importance of this stage, asserting that no entity can be effective without input from employees at all levels.

Content assessment can be achieved by using quizzes to assess the extent of retention and by observing employees as they carry out tasks related to the training, providing insights into its effectiveness (Smith 2017). Such evaluations not only assess employee performance but also highlight areas where improvements to the training methodology or content may be necessary. Ultimately, these evaluations assist the CAE and IAors in identifying and prioritising areas for CPD and upskilling (IIA 2024b).

2.3.3 Onboarding training

A successful recruitment process goes beyond simply selecting the right candidate. It must be followed by an effective onboarding process, particularly one which emphasises training, if the entity's vision is to be achieved (Dickson, Isaiah 2024). Dickson and Isaiah (2024) noted that training is the most important element of the onboarding process since it equips the selected individual with the required skills to perform their tasks effectively.

Klein and Weaver (2000) agreed, stressing that a training plan is especially important upon employee onboarding since it guides the socialisation process. Kramer (2010) defined socialisation as the process through which new recruits learn about the entity's' structure and adapt to the culture within the workplace, enabling them to become productive assets of the team more quickly. Similarly, Meyer and Bartels (2017) highlighted that onboarding training is an advantageous tool that enhances the ability to meet entity goals, improve business performance and increase employee engagement.

Notwithstanding this, Kirchner and Stull (2021) observed that entities are often characterised by a lack of standardised onboarding training. Hommey, Ma et al. (2020) found that inadequate onboarding and training led 57% of employees to consider resigning within their first two years of employment. If such turnover materialises, entities may experience financial strain and face pressure to promptly refill key roles. This is particularly concerning in the IA field, where a persistent skills shortage exists (Bartlett, Kremin et al. 2016, Deloitte 2021). In light of this, Applegate (2004) highlighted the importance of delivering onboarding training that addresses both operational aspects and technical IA skills.

2.3.4 The benefits of training

Effective training yields significant benefits for both employees and the entity. Elnaga and Imran (2013) stressed that investing in training and development is paramount for entities striving to attain long-term business success.

A strong, up-to-date foundation of core competences supports IAors in pursuing personal goals while remaining competitive and relevant throughout their careers (IIA 2024b). Conversely, prolonged deficits in training, talent development, and staffing may hinder the entity's ability to evolve, this potentially causing stagnation or regression in previously strong areas (Elnaga, Imran 2013).

When employees recognise the entity's investment in their development, they become more motivated to work harder and perform better (Acton, Golden 2003). Additionally, training equips staff with essential knowledge, skills, and competences to perform their tasks more effectively, thereby reducing the likelihood of errors (Elnaga, Imran 2013). Beyond task efficiency, training also sharpens employees' critical thinking and creativity, this contributing to enhanced productivity (Elnaga, Imran 2013). Supporting this, Bartel (1991) observed a positive correlation between effective training and employee productivity. Yet, Swart and Brown et al. (2005) cautioned that such correlation is only realised when managers proactively identify and address factors that may undermine training effectiveness.

Moreover, Elnaga and Imran (2013) observed that effective training contributes to lower employee turnover. The narrower the gap between required and actual

skills, the higher the levels of employee satisfaction and retention. This ultimately strengthens the entity's capacity to retain a talented workforce and achieve a sustained competitive advantage.

2.4 Conclusion

This Chapter provided a comprehensive review of the available literature focusing on the selection and training processes of IAors. The following Chapter will present the research methodology employed in this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

As shown in Figure 3.1, this Chapter presents the research methodology employed in this study. S.3.2 details the preliminary research conducted. The theoretical framework and research design are discussed in S.3.3, while S.3.4 and S.3.5 focus on the research tool and participants, respectively. The data collection process is outlined in S.3.6, followed by the analysis of data in S.3.7. The research limitations are discussed in S.3.8, and S.3.9 concludes this Chapter.

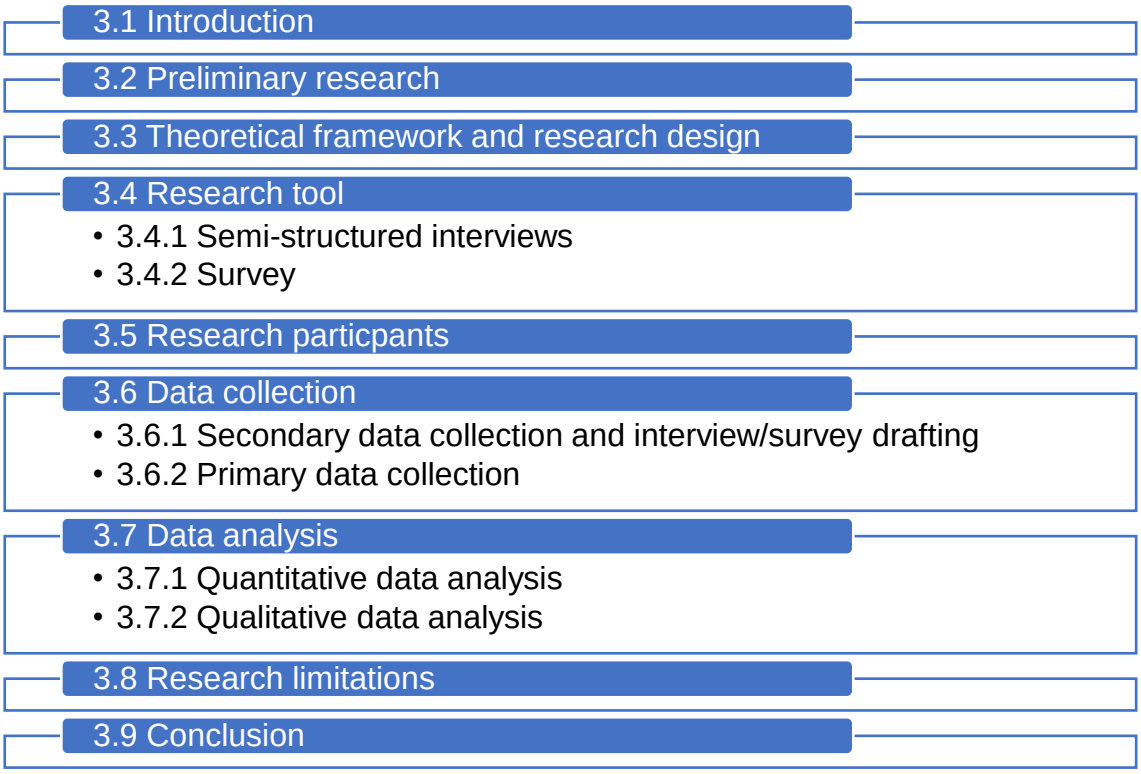

Figure 3.1: Outline of Chapter 3

3.2 Preliminary research

The study began with a detailed review of existing literature, encompassing academic papers, journal articles and previous dissertations to establish a strong understanding of the research area. This was supplemented by discussions with the supervisor, which facilitated the refinement of the research objectives.

Concurrently, confirmation was obtained from a number of CAEs to validate the study's relevance and to ensure that its initial reception was positive.

3.3 Theoretical framework and research design

The theoretical frameworks of this study are the Human Capital Theory (HCT) and the Resource-Based View Theory (RBVT). The study of how selecting and training processes help develop competent IAors is supported by the HCT. RBVT complements this by presenting IAor selection and training as strategic assets that can improve operational efficacy. Together, these theories direct the evaluation of present selection and training processes and provide guidance for suggestions aimed at enhancing such processes.

When conducting research, the starting point is always determining whether to employ a quantitative, qualitative or mixed-method approach, this depending on the type of data being sought (Saunders, Lewis et al. 2023).

Henline-Hall (2024) explained that quantitative research involves the gathering of numerical data from a large sample size which is analysed using statistical tests. Such analysis can be used to generalise findings to the population at large (Monfared, Derakhshan 2015). Yet, critics have argued that the quantitative approach is inherently vulnerable since regardless of how comprehensively a survey is developed, respondents may misunderstand a question or provide an untruthful answer to avoid potential adverse consequences (Lakshman, Sinha et al. 2000).

Conversely, qualitative research involves gathering and analysing data by observing participants' actions and opinions in a natural environment (Henline-Hall 2024), thereby involving an element of subjectivity. The sample size is smaller when compared to quantitative research (Monfared, Derakhshan 2015). However, in-depth conversations are held, resulting in a deeper understanding of the phenomenon being studied, one that lies beyond the reach of quantitative research (Kandel 2020). This approach is exploratory and open-ended; however, the findings cannot be generalised to the population at large (Monfared, Derakhshan 2015). Additionally, the quality of the results is dependent on both

the quality of the questions and the skills of the interviewer (Monfared, Derakhshan 2015).

The development of the mixed-method approach emerged as a response to the limitations inherent in relying solely on either quantitative or qualitative methods (Doyle, Brady et al. 2009). This approach integrates both methodologies, allowing them to be employed concurrently. By doing so, it capitalizes on the strengths and mitigates the weaknesses of each, leading to a more robust and well-rounded research outcome (McKim 2017, Henline-Hall 2024). Advocates of this approach asserted that the complexity of human experiences requires such a multifaceted research design to grasp their intricacies (Sandelowski 2000). McKim (2017) further emphasised that the mixed-method approach provides the flexibility needed to address complex research questions, offering broader and deeper insights than when qualitative or quantitative methods are applied in isolation. Consequently, this approach facilitates an enhanced exploration of the research problem, enriching the study's scope and depth (Henline-Hall 2024).

Since this study focused on evaluating the selection and training processes implemented in Maltese insourced IAUs, a mixed-method approach was considered appropriate.

3.4 Research tool

Semi-structured interviews and a survey, each incorporating a mix of close-ended and open-ended questions, were deemed the most suitable research tools for gathering detailed data that is aligned with the study's objectives.

3.4.1 Semi-structured interviews

Semi-structured interviews provided the flexibility and adaptability needed during the data collection process, allowing the researcher to probe further into participants' responses and explore previously unanticipated themes (DeJonckheere, Vaughn 2019). Additionally, the use of cues enabled the interviewer to prompt deeper reflection from interviewees and explore their

responses in greater depth, thereby enriching the quality of the data gathered (McGrath, Palmgren et al. 2019).

Keyton (2023) stressed that the quality of interviewee responses is strongly influenced by the quality of the questions posed and emphasised the importance of a well-structured interview schedule. In line with this, prior to commencing the interviews, the researcher developed a comprehensive interview schedule[1] applicable to all CAEs. As illustrated in Table 3.1, the interview schedule was organised into several sections, each containing interviewee-relevant questions informed by both the research objectives and the literature review. Section A1 provided a definition of a term used in a question, this eliminating potential misunderstandings, while Section A2 explained the Likert scales applied to the close-ended questions.

Section Heading	Question Number
Section 1: Developing a Proficient Internal Audit Unit	1-12
Section 2: Onboarding and Continuous Training of Internal Auditors	13-20
Section 3: Barriers & Recommendations	21-22
Section 4: Respondent Characteristics	23-28
Section A1 – Definitions	/
Section A2 – Likert Scales Used	/

Table 3.1: Layout of the interview schedule

As shown in Table 3.2, a combination of close-ended and open-ended questions was used. Additionally, the five-point Likert scales applied to the close-ended questions are found in Table 3.3.

Question Type	Question Number
Close-ended	1,6,10,11,16,19
Open-ended	2-5, 7-9, 12, 13-15,17-18, 20-22

Table 3.2: Classification of questions by type

[1] Vide A3.1

Scale	0	1	2	3	4
Response	Not important at all	Not important	Neutral	Important	Highly important
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	Very low	Low	Moderate	High	Very high

Table 3.3: Likert scale applied to the close-ended questions

Table 3.4 presents the respective research objective that each question was meant to contribute towards reaching.

Question Number	Research Objective *(as laid out in Ch1)*
1-12	Objective 1
13-20	Objective 2
21-22	Objective 3
23-28	General

Table 3.4: Interview schedule questions mapped to the research objectives

3.4.2 Survey

The survey allowed for additional insights to be gathered without the need for significant time of the researcher being consumed (Mazhar 2021). The questions[2] were presented in a logical sequence so that the survey respondents ("*surveyresps*") could easily complete the survey. The structure of the survey is shown in Table 3.5. It was divided into three main sections with surveyreps-relevant questions designed in accordance with the research objectives and in the light of the literature review. Prior to answering the questions, the surveyresps were presented with a consent form and asked to confirm their participation, or otherwise, in the research.

Section Heading	Question Number
Section 1: Developing a Proficient Internal Audit Unit	1-5
Section 2: Onboarding and Continuous Training of Internal Auditors	6-12
Section 3: Barriers & Recommendations	13-14

Table 3.5: Layout of the survey

[2] Vide A3.2

As shown in Table 3.6, a combination of close-ended and open-ended questions was used. Additionally, the five-point Likert scales applied to most close-ended questions can be found in Table 3.7. Other close-ended questions required surveyresps to select an option from a predefined list.

Question Type	Question Number
Close-ended	2-6,9-11
Open-ended	1,7-8,12-14

Table 3.6: Classification of questions by type

Scale	0	1	2	3	4
Response	Never	Rarely	Sometimes	Frequently	Always
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	Very low	Low	Moderate	High	Very high

Table 3.7: Likert scale applied to most close-ended questions

Table 3.8 presents the respective research objective that each question was meant to contribute towards reaching.

Question Number	Research Objective *(as laid out in Ch1)*
1-5	Objective 1
6-12	Objective 2
13-14	Objective 3

Table 3.8: Survey questions relating to the research objectives

3.5 Research participants

Owing to their significant involvement in the selection and training processes for IAors, CAEs of insourced IAUs were selected as the study's interview participants. Since there is no official list of entities operating an IAU, a comprehensive search was conducted through annual reports, entity websites, and LinkedIn profiles to identify relevant entities. From the researcher's search, it was concluded that 19 entities operate an insourced IAU in Malta.

CAEs were initially contacted through email or LinkedIn, along with a 'Letter of Introduction and Invitation to Participate'[3] to introduce the researcher and the

[3] Vide A.3.4

research area. In cases of no initial reply or where no email address was made available, phone calls were made to obtain the correct contact details. When still no response was received, a polite reminder was sent. Nonetheless, some entities still provided no reply or informed they could not participate in the research. Despite this, the researcher successfully conducted 14 interviews.

To further corroborate the findings, the IAors who constitute the IAUs were invited to complete an online survey. When the response rate was low, the CAE was requested to send a gentle reminder to his/her team. Ultimately, the researcher was able to collect a total of 33 completed surveys.

3.6 Data collection

Data collection is the foundation of any research study, without which the study cannot be completed (Mazhar 2021). Kabir (2016) stressed the importance of determining the type of data required prior to commencing data collection. Moreover, dedicating sufficient time to this phase is critical to extrapolate accurate and high-quality evidence (Kabir 2016).

3.6.1 Secondary data collection and interview/survey drafting

Secondary data was gathered from several literature sources, as indicated in Chapter 2. Such data provided the basis for drafting both the interview schedule and the survey questions.

Prior to commencing primary data collection, pilot interviews were conducted with two CAEs to identify any areas of the interview schedule that required improvement, with the overall aim of enhancing the quality and efficiency of the study (Hazzi, Maldaon 2015). Feedback from such sessions was carefully considered, resulting in refinements to the structure and wording of certain questions of both the interview schedule and the survey.

Additionally, the questions included in the interview schedule and survey followed the same structure. However, some questions posed to CAEs were not replicated in the survey for IAors as the CAEs perspective alone was deemed sufficient for the researcher to gain a clear understanding of the subject matter. Such

questions mainly focused on general IAU operations. Questions asked to surveyresps were more focused on their opinions on more specific areas, this allowing for the identification of discrepancies in responses between CAEs and IAors. Moreover, less questions reduced the time needed to complete the survey, this aiming to encourage greater survey participation.

3.6.2 Primary data collection

Interviews took place between the 5th of November 2024 and the 3rd of March 2025. These were arranged based on the participant's availability and preferred date, time and place. They were conducted in person at the interviewees' place of work, or online via Google Meet, Zoom or Microsoft Teams. Participants received the interview schedule in advance, thus allowing them sufficient time to familiarise themselves with the questions and prepare accordingly. During physical interviews, a hard copy of the schedule was provided, while, where interviews had to be held online, it was shared via screen sharing.

Before each interview, participants were asked to sign the 'Interview Consent Form', this serving as confirmation to participate in the research. Consent was also sought to record the interview, with the assurance provided that the recording would only be used for transcription purposes to ensure no relevant information was overlooked. In the instances where consent was not granted, comprehensive notes were documented throughout the interview.

In parallel with the CAE interviews, the survey was distributed to IAors using Google Forms, an online data collection tool. This phase spanned from the 5th of November 2024 till the 10th of March 2025, allowing ample time for IAors to complete the survey. Moreover, the survey was completely anonymous, enabling respondents to share their views freely without concern of being identified.

3.7 Data analysis

Data analysis plays a crucial role in research, involving the structured use of statistical and analytical methods to interpret data and extract insights relevant to the research objectives (Dibekulu 2020).

3.7.1 Quantitative data analysis

Quantitative data was gathered from the close-ended questions featured in both the interview schedule and survey. This data was analysed using Excel and IBM SPSS Statistics. To determine whether there were significant differences between the statements based on their mean rating scores, the Friedman test was applied. The mean rating scores ranged from 0 to 4, with 0 and 4 representing the scale points defined in Tables 3.3 and 3.7.

3.7.2 Qualitative data analysis

Qualitative data was gathered from the open-ended questions featured in both the interview schedule and survey. Additionally, when responding to Likert scale questions, interviewees were probed further, resulting in the collection of additional qualitative insight. To ensure accurate and high-quality data, the audio-recorded interviewees were subsequently transcribed. These transcriptions, together with the notes taken during interviews that were not audio-recorded were analysed in a thematic manner, highlighting common themes and patterns across interviewees.

3.8 Research limitations

One of the challenges faced in this study was the difficulty in determining whether entities operate an IAU, this resulting in a possible limitation in the number (19) of entities known to have an insourced IAU.

Moreover, some entities were unable to take part in the study owing to their company's policies, whilst others ignored the emails. However, following the researcher's persistent efforts, most CAEs*(14/19)* of the known in-sourced IAUs were successfully engaged and by that point the saturation level of response was deemed as having been reached.

Notably, despite numerous follow-ups and, as was expected from past similar surveys in Malta, survey participation was relatively lower, with 33 IAors completing it out of a total of 75 survey sheets being distributed to the IAors within the IAUs by the respective CAEs.

The time available for conducting the interviews was also limited, typically not allowing for more than an hour. Nevertheless, the researcher was able to ask all pertinent questions and collect the corresponding data.

Furthermore, a key limitation of semi-structured interviews was their inherent flexibility, which may lead to inconsistencies in the depth and scope of the information collection. To mitigate this, all interviews were conducted by the researcher who also used follow-up questions as necessary. Another challenge was the difficulty in eliminating participants' subjectivity in their responses. In fact, discrepancies were observed between the ratings given in the Likert scale questions and the remarks provided by some interviewees in the open-ended questions. Wherever possible, these inconsistencies were subsequently clarified with each individual interviewee.

3.9 Conclusion

This Chapter described the research methodology employed. The next Chapter will present the findings derived from the interviews and surveys.

CHAPTER 4

RESEARCH FINDINGS

4.1 Introduction

This Chapter analyses the responses to the interview schedule and where applicable, the survey as set out in A3.1 and A3.2 respectively. As illustrated in Figure 4.1, S.4.2 discusses the key characteristics influencing the selection process, S.4.3 addresses the steps taken to develop an effective training plan, while S.4.4 highlights barriers and recommendations in the selection and training processes. Finally, S.4.5 concludes this Chapter.

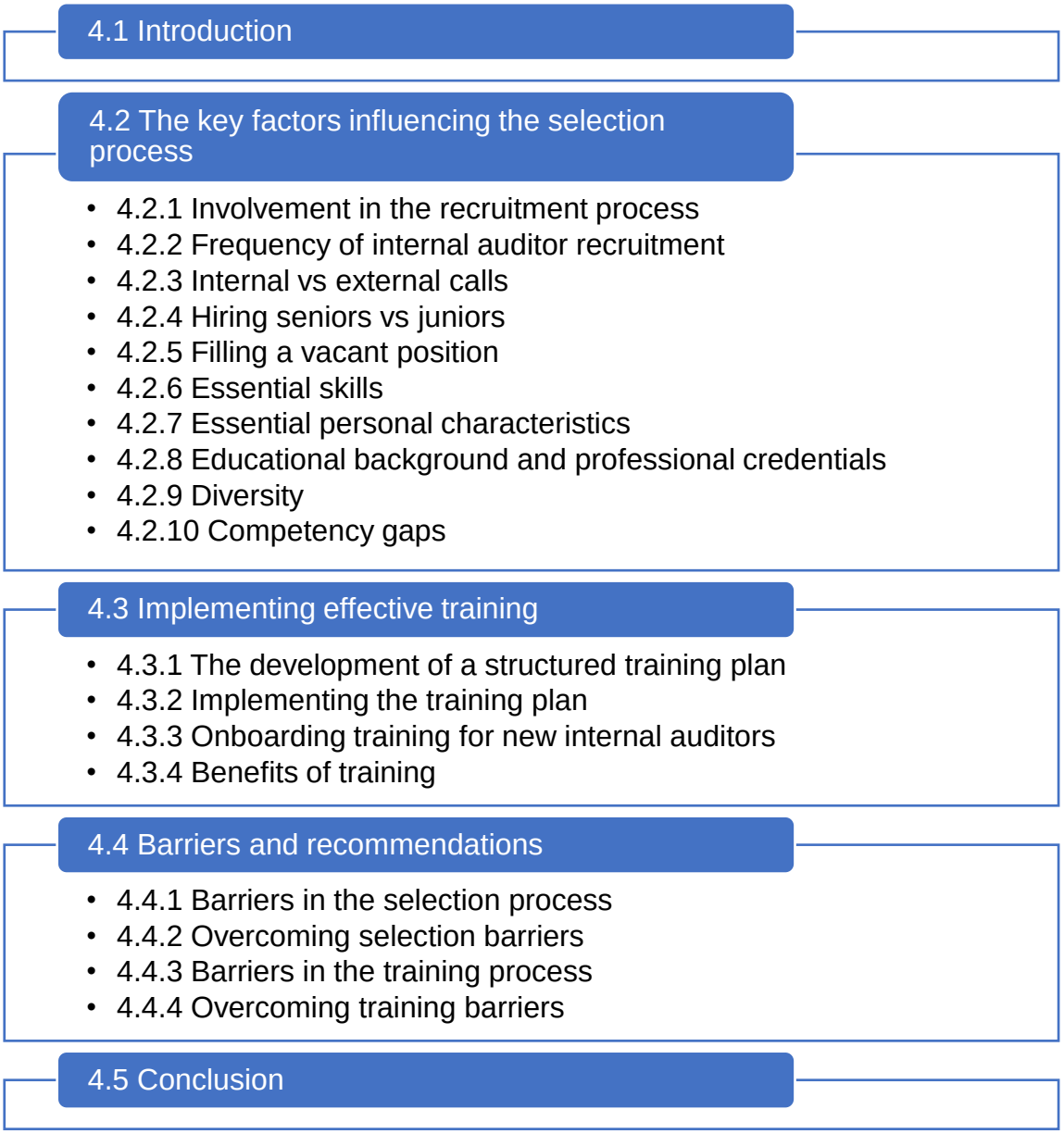

Figure 4.1: Outline of Chapter 4

4.2 The key factors influencing the selection process

This part analyses twelve interview questions[4] and also five related survey questions[5]. These questions were focused on the key factors that influence the selection process of IAors.

4.2.1 Involvement in the recruitment process

The first interview question[6] asked interviewees about the extent to which they were involved in the recruitment process for IAors. Interviewees*(14/14)* stated they were always involved*($\bar{x}$=4)*. Such involvement included the development of the recruitment objectives, job descriptions and assessment criteria, the review of CVs and the conduct of the shortlisting and interviewing processes.

Most interviewees*(10/14)* conducted two interviews, a few*(3/14)* relied solely on one interview, while one*(1/14)* described a three-stage process. Interviews were primarily question-and-answer based, aimed at assessing the applicant's personality and job expectations, with only two interviewees*(2/14)* adopting more complex techniques, such as case studies and intelligence quotient testing, to evaluate problem-solving abilities and technical competence. A few interviewees*(4/14)* noted that Malta lags behind in interview complexity, suggesting that entities should adopt more advanced assessment methods to improve candidate evaluation.

All interviewees*(14/14)* emphasised that the recruitment process was not a "*one-man job*", but a collaborative one with the inclusion of HR personnel*(14/14)*, senior IA managers*(3/14)*, the finance function*(3/14)*, the Board of Directors (BoD)*(2/14)*, the Chief Executive Officer*(2/14)*, and the Audit and Risk Committee*(2/14)*. One interviewee*(1/14)* emphasised that first a HR representative assessed whether the candidate's "*DNA"* fitted with that of the company while s/he, as CAE, would focus on the candidate's technical skills and expertise in IAing. This distinction

[4] Vide Q.1-12 p.A3.1
[5] Vide Q.1-5 p.A3.2
[6] Vide Q.1 p.A3.1-2

underscores the dual significance of cultural fit and technical competence in the recruitment process.

4.2.2 Frequency of internal auditor recruitment

The next question[7] asked interviewees how many times a year, on average, they initiated the recruitment process. Most interviewees*(10/14)* indicated that the recruitment process is not an annual process. A few*(3/14)* emphasised the importance of conducting a cost-benefit analysis to determine whether hiring or outsourcing specific audits is more viable.

Employee resignations*(13/14)* were the primary driver of recruitment, this suggesting that most IAUs adopt a reactive hiring approach, filling vacancies as needed rather than following any structured recruitment cycle. As stated in the literature[8], such practice may pose challenges in workforce stability, knowledge retention, and succession planning. Additionally, some interviewees*(6/14)* noted that recruitment was also influenced by resource capacity in relation to the upcoming audit plan.

4.2.3 Internal vs external calls

Interviewees were then asked[9] about the procedure adopted when issuing a call for applicants. Some interviewees*(5/14)* opt to first issue an internal call for applicants before advertising externally*(14/14)*. A few*(2/14)* demonstrated a clear preference for internal recruitment owing to existing familiarity with internal systems and processes, yet one interviewee*(1/14)* cautioned that internal hires may exhibit lower levels of professional scepticism because of the possibility of pre-existing relationships within the entity. For external recruitment, all interviewees*(14/14)* explained that the job vacancy is published on the entity's website and LinkedIn. Nearly half the interviewees*(6/14)* also engage recruitment agencies and actively search for candidates through direct outreach on LinkedIn, particularly when struggling to attract suitable applicants.

[7] Vide Q.2 p.A3.1-2
[8] Vide S.2.2.3 e.g. Bartlett, Kremin et al. (2016) and Opada, Ibrahim et al. (2024)
[9] Vide Q.3 p.A3.1-2

4.2.4 Hiring seniors vs juniors

In the first part of the next question, interviewees were asked[10] whether they sought more experienced IAors or junior IAors. Most*(8/14)* demonstrated flexibility in hiring both junior and senior auditors, with decisions primarily influenced by their audit strategy, workforce gaps and budget constraints. Two*(2/14)* explicitly stated that "*beggars can't be choosers*", highlighting the market challenge of finding ideal candidates. A few interviewees*(3/14)* expressed a clear preference for senior auditors, with one interviewee*(1/3)* completely excluding hiring juniors. Contrarily, a few interviewees*(4/14)* preferred juniors, this being owing to the lower salary costs. Despite these response variations, all interviewees*(14/14)* agreed that they would still aim to replace departing auditors with candidates of the same level, thus ensuring continuity within the IA team.

Furthermore, the second part of the question[11] asked interviewees about the minimum years of IA experience required when hiring senior and junior IAors. Interviewees disagreed about such a minimum when it related to seniors, giving a range of two to seven years. Notably, two interviewees*(2/14)* stated that they did not emphasise much on experience as such. Conversely, those interviewees open to hiring juniors*(13/14)* agreed that in their case no prior experience in IA was required. One interviewee*(1/14)* emphasised that, whenever s/he attempted to introduce any prior experience at this level, s/he received no applications.

4.2.5 Filling a vacant position

The first part of the next question[12] asked interviewees how long it typically took to fill a vacant IA position. Interviewees*(14/14)* agreed that the process is lengthy because of a persistent talent shortage in Malta. One interviewee*(1/14)* described the timeframe as "*forever*", while another noted that IA is "*a practice which no one wants to do*". BoD approvals*(3/14)*, notice periods*(2/14)*, visa processing*(2/14)*, health screenings*(1/14)* and candidates losing interest*(1/14)* were other factors that further extended the hiring process. Most interviewees*(9/14)* indicated a minimum of three

[10] Vide Q.4a p.A3.1-2
[11] Vide Q.4b p.A3.1-2
[12] Vide Q.5a p.A3.1-2

months to find a suitable candidate, while other interviewees*(5/14)* reported a timeframe of six months to one year.

The second part of the question[13] addressed the timeframe to inform candidates of a job offer or rejection post-final interview. Interviewees*(14/14)* recognised the importance of a short timeframe since this reduces the risk of candidates losing interest. Most*(12/14)* stated that the timeframe is around a week, while a few*(2/14)* mentioned that internal approvals could delay an offer by up to six months.

4.2.6 Essential skills

Interviewees were subsequently asked[14] to rate the importance of various skills. The mean rating scores obtained are shown in descending order of agreement in Table 4.1. As may be observed, significant differences were found among the scores*($p < 0.001$).*

Interviewees considered two skills*(2/7)* as highly important, most*(4/7)* as important, and the remainder*(1/7)* as neutral. Most interviewees*(11/14)* noted[15] that such skills are more important for seniors.

	Mean	Std Dev
ii. Communication	3.71	0.611
i. Analytical thinking	3.64	0.633
iv. Risk management assurance	3.07	0.730
v. IT	2.79	0.699
vi. Data mining and analytics	2.71	0.914
v. Industry-specific knowledge	2.57	1.016
iii. Accounting	2.36	1.008
Scale from 0 (not important at all) to 4 (highly important) *Number of interviewees = 14*	$X^2(5) = 32.034$, $p < 0.001$	

Table 4.1: Essential skills for IAors

Communication*($\bar{x}=3.71$)* and analytical thinking*($\bar{x}=3.64$)* were rated as the most important skills. Such ranking was closely aligned with the literature[16]. Some interviewees*(3/14)* emphasised that technical skills are ineffective without strong

[13] Vide Q.5b p.A3.1-2
[14] Vide Q.6a p.A3.1-2
[15] Vide Q.7 p.A3.1-3
[16] Vide S.2.2.6 e.g. Rose (2016)

communication skills since IAors need to convey clear audit findings. Notably regarding analytical thinking, a few interviewees*(3/14)* noted that university graduates possessed stronger analytical thinking skills; however, in their opinion a recent decline in graduate quality was evident.

Risk management assurance*($\bar{x}$=3.07)* was rated as an important skill for IAors, with many interviewees*(7/14)* favouring candidates with formal education in this area.

IT skills*($\bar{x}$=2.79)* were considered important but not critical unless hiring an IT IAor. Many interviewees*(10/14)* emphasised the increasing reliance on outsourcing, especially for IT audits, as IAors cannot be expected to be jacks of all trades. However, a basic understanding of IT concepts and relevant software (e.g., Excel, PowerPoint) was still valued. Similarly, data mining and analytics*($\bar{x}$=2.71)* were acknowledged as increasingly important.

In addition, while industry-specific knowledge*($\bar{x}$=2.57)* is an important skill, it is believed*(3/14)* that it can be learnt on the job.

Interestingly, interviewees demonstrated overall neutrality to accounting skills*($\bar{x}$=2.36)*. While some*(6/14)* deemed it to be an important skill, most*(8/14)* were neutral or disagreed. A few interviewees*(4/14)* expressed that it is sufficient for solely one IAor within the IAU to possess strong accounting skills.

Other skills stated as important by interviewees were presentation and reporting skills*(2/14)*, project management*(2/14)* and strong knowledge of the GIAS*(1/14).*

4.2.7 Essential personal characteristics

Interviewees were also asked[17] to rate the importance of various PCs. As shown in descending order of agreement in Table 4.2, interviewees considered two PCs*(2/7)* as highly important, most as important*(4/7)*, and the remainder as neutral*(1/7)*. Significant differences among the mean rating scores were again observed*($p < 0.001$).*

[17] Vide Q.6b p.A3.1-3

	Mean	Std Dev
i. Honesty	4.00	0
ii. Team player	3.79	0.426
v. Fitting with entity culture and values	3.43	0.514
iii. Adaptability	3.36	0.633
iv. Motivation	3.29	0.611
vii. Conscientiousness	3.29	0.611
vi. Appearance	2.43	0.938
Scale from 0 (not important at all) to 4 (highly important) *Number of interviewees = 14*	$X^2(5) = 42.819$, $p < 0.001$	

Table 4.2: Essential personal characteristics for IAors

Being honest*(x̄=4)* and a team player*(x̄=3.79)* were rated the most important PCs. Fitting with entity culture and values*(x̄=3.43)* was rated important since this creates team harmonisation. Yet, a few*(2/14)* noted that fitting with specific IAU culture and values was more important. One*(1/14)* stated that understanding a candidate's hobbies helps to indicate how well the candidate will fit with the team.

Motivation*(x̄=3.29)* was also an important PC, yet some interviewees*(3/14)* deemed it difficult to determine this in interviews, with one*(1/14)* stating that candidates can be "*very good actors*". Another interviewee*(1/14)* described unmotivated individuals as the "*weakest link*".

Interviewees were neutral as to appearance*(x̄=2.43)*. A few interviewees*(2/14)* emphasised that the basis of IA is credibility, and appearance plays a role in this. One interviewee*(1/14)* stressed the importance of tolerance, noting that one's appearance should rarely impact their chances of securing a job.

Other PCs stated as important by CAEs were professional scepticism*(2/14)*, the courage to challenge*(1/14)*, politeness and manners*(1/14)*, maturity*(1/14)* and thinking outside of the box*(1/14)*.

Interviewees*(14/14)* emphasised that an expert in IA with weak PCs would never be offered the job. Additionally, most interviewees*(12/14)* sought the same PCs regardless of the position level offered[18].

[18] Vide Q.7 p.A3.1-3

4.2.8 Educational background and professional credentials

Interviewees were subsequently asked[19] to explain the expected educational background of candidates. Most*(11/14)* emphasised that education and competency are positively correlated[20], yet a few*(3/14)* prioritised practical experience over education.

Most interviewees*(10/14)* expected senior candidates to hold a tertiary degree, while the others*(4/14)* stated that relevant IA work experience is by itself sufficient. Some interviewees*(5/14)* considered post-secondary education alone to be sufficient for junior positions.

The specific tertiary degrees considered ideal varied. Half*(7/14)* indicated preference for candidates with an accountancy background. Surveyresps[21] confirmed that an accountancy background*(17/33)* was indeed the most common among IAors. Additionally, candidates with risk management*(7/14)*, industry-specific knowledge*(7/14)* and IT backgrounds*(4/14)* were frequently prioritised. Many interviewees*(6/14)* stated that tertiary degrees in unrelated fields such as engineering were weighted lower, while a few*(4/14)* stressed that candidates with such backgrounds were not considered at all.

Postgraduate degrees were seen as an added benefit although not a requirement by nearly all interviewees*(12/14)*. While one interviewee*(1/14)* stressed the importance of IAors holding a Master in Accountancy degree, another*(1/14)* cautioned against hiring over-qualified individuals as they may be insufficiently motivated.

Credentials such as the CIA and CISA are widely regarded as valuable by most interviewees*(11/14)* since they demonstrate a strong commitment to an IA career and strengthen technical expertise. However, they are not essential for securing a vacant position. One interviewee*(1/14)* emphasised their value, stating that candidates holding such credentials are *"extremely portable"*. Contrarily, a few

[19] Vide Q.8 p.A3.1-3
[20] Vide Q.9 p.A3.1-3
[21] Vide Q.1 p.A3.2-2

interviewees*(3/14)* stated that these certifications are not sought after. One interviewee*(1/14)* argued that they "*lead you nowhere*", while another interviewee*(1/14)* was unfamiliar with them, this highlighting an awareness gap.

Interview[22] and survey[23] results, found in Table 4.3 below, indicate that such credentials are underrepresented locally, with a very limited pool of CAEs and IAors holding them. This suggests a potential skills gap in Malta, which could impact the long-term professionalism within the IA field. Despite these results, surveyresps indicated[24] that entities encouraged their employees to enhance their proficiency by obtaining additional certifications*($\bar{x}$=3.27)*.

IA Credential	Interviewed CAEs (n=14)	%	Surveyed IAors (n=33)	%
CIA	5	36%	3	9%
CISA	3	21%	6	18%
Other	2	14%	3	9%
None	7	50%	21	64%

Table 4.3: Credentials held by CAEs and IAors

4.2.9 Diversity

Interviewees[25] and surveyresps[26] were subsequently asked to rate their extent of agreement with statements focusing on IAU diversity, with significant differences among the mean rating scores observed in both cases. As shown in descending order of agreement in Table 4.4 below, CAEs and IAors agreed with most statements*(5/6)*, this indicating common perceptions.

[22] Vide Q.27a p.A3.1-10
[23] Vide Q.2 p.A3.2-2
[24] Vide Q.3 p.A3.2-2
[25] Vide Q.10 p.A3.1-3
[26] Vide Q.4 p.A3.2-2

	CAEs		IAors	
	Mean	Std Dev	Mean	Std Dev
b. For optimal performance, internal audit units require not only professionals with strong financial expertise but also individuals skilled in other relevant areas.	3.43	0.646	3.24	1.173
a. Internal Audit Units need to be composed of individuals with diverse educational and professional backgrounds.	3.14	0.663	3.21	1.219
e. My internal audit unit reflects sufficient diversity in educational backgrounds, professional backgrounds, gender, and nationality.	3.07	0.917	2.82	1.158
d. Diversity within internal audit units enhances overall performance.	2.57	0.852	2.70	1.132
c. Internal audit units need to be composed of individuals representing diverse genders and nationalities.	*1.43*	*1.089*	2.45	0.905
Scale from 0 (strongly disagree) to 4 (strongly agree) *Number of interviewees = 14* *Number of surveyresps = 33*	$X^2(3) = 31.192$, $p < 0.001$		$X^2(3) = 25.055$, $p < 0.001$	

Table 4.4: CAEs and IAors perception on diversity

Interviewees agreed with Statement 'b'*(3.43)*, this indicating that diversity in skills is crucial for IAU effectiveness. Yet, a few interviewees*(2/14)* stated that strong financial expertise is unnecessary for IAing, with one*(1/2)* emphasising that *"one should not consider IA as accounting"*.

Interviewees also agreed with Statement 'a'*($\bar{x}$=3.14).* However, some*(2/14)* emphasised that the local pool of talent is limited, and hence, while diversity in educational and professional background is ideal, it is difficult to achieve it in practice.

Notwithstanding this, interviewees agreed with Statement 'e'*($\bar{x}$=3.07)* that their IAU reflects sufficient diversity and Statement 'd'*($\bar{x}$=2.57)* that diversity enhances overall performance.

On the other hand, and in contrast to the literature[27], interviewees disagreed with Statement 'c'*(x̄=1.43)* arguing that gender and nationality do not affect the quality of work. A few*(2/14)* emphasised that nationality and gender diversity are relevant for the composition of boards and not for that of IAUs. Some interviewees*(3/14)* highlighted that diversity brings about operational challenges, with two*(2/14)* emphasising that diversity in nationalities complicates matters especially in family-controlled entities.

4.2.10 Competency gaps

Interviewees were next asked[28] to rate the level of competence of their IAU in various areas. As shown in Table 4.5 in descending order of agreement, interviewees rated competence as being high in most*(7/8)* areas, with one area*(1/8)* rated as moderate. Hence, in comparison with their foreign counterparts[29], Maltese CAEs appear to perceive their IAUs as more competent, although this could not be clearly established to be so. One interviewee*(1/14)* highlighted the importance of assessing competency gaps when an employee resigns to ensure that the IAU continues to operate effectively.

Surveyresps were asked[30] to rate their personal competence levels in the same areas. They rated all areas*(6/8)* as high except for two areas, these being 'b'*(x̄=2.48)* and 'h'*(x̄=2.27)* as moderate. Notably, all surveyresps*(33/33)* provided a rating for agile auditing methodologies*(x̄=2.62)*, yet some interviewees*(5/14)* declared that this technique was not used internally. This raises questions as to whether IAors are aware of what agile auditing methodologies truly are.

[27] Vide S.2.2.4 e.g. Bonrath, Eulerich (2024)
[28] Vide Q.11 p.A3.1-4
[29] Vide S.2.2.8 e.g. The Internal Audit Foundation, Deloitte (2021)
[30] Vide Q.5 p.A3.2-3

	Mean	Std Dev
c. Soft skills	3.29	0.469
e. Security and privacy	3.29	0.994
d. Risk Management	3.14	0.663
b. Fraud investigation	2.93	0.616
a. Agile auditing methodologies	2.79	0.699
g. IT control frameworks	2.86	0.864
f. Data analytics	2.64	0.842
h. Critical technologies, emerging risks and innovative knowledge areas	2.07	0.730
Scale from 0 (very low competence) to 4 (very high competence) *Number of interviewees = 14*	$X^2(6) = 26.426$, $p < 0.001$	

Table 4.5: CAEs perceptions on competency levels

As indicated by the table, interviewees rated soft skill competences as high*(x̄=3.29)*, yet some*(2/14)* flagged issues in terms of report writing and presentation skills, with one interviewee*(1/14)* noting that presentation skill gaps are evidently larger with local IAors than the gaps of those abroad. Similarly, interviewees rated competency in risk management as high*(x̄=3.29)*, with a few*(2/14)* mentioning the importance of continually leveraging risk management techniques.

Interviewees were subsequently asked[31] for their perception of the competency gaps present in Maltese IAUs in general. Surprisingly, in contrast to the ratings they had just provided, many interviewees*(10/14)* emphasised significant gaps in complex technological areas such as IT, AI, data analytics and cybersecurity and highlighted the difficulty in finding IT auditors leading to such audits being outsourced. One interviewee*(1/14)* argued that, unlike the situation abroad, Malta has not yet transformed completely digitally and consequently IAors are less exposed to digital tools, which further widens the gap. One interviewee*(1/14)* also mentioned the lack of strong Excel skills which hinders IAor efficiency.

One interviewee*(1/14)* mentioned competency gaps in change management, advisory capabilities, and audit perspective. Limited exposure to international auditing practices and diverse regulatory environments restricts their ability to adapt. The focus remains on inspection and compliance rather than risk-based

[31] Vide Q.12 p.A3.1-5

auditing and strategic recommendations. Additionally, IAUs lack a strong advisory element, with IAors rarely assessing the cost-benefit of recommendations or providing insights beyond procedural adherence.

Other gaps mentioned include cloud technology*(1/14)*, financial analysis*(1/14)*, continuous auditing*(1/14)*, lack of ability to think outside the box*(1/14)* and no strict adherence to IA standards*(1/14)*.

4.3 Implementing effective training

This part analyses eight interview questions[32] and also seven related survey questions[33]. These questions were mainly focused on the training plan for IAors.

4.3.1 The development of a structured training plan

The first question[34] of this Section asked interviewees whether their training plan is structured and documented. Many interviewees*(9/14)* most of whom belonging to the smaller IAUs not exceeding six employees, indicated that no formal training plan existed. The remaining interviewees*(5/14)* stated that they implement a formalised plan.

Interviewees*(9/14)* not implementing such a plan agreed that their small team size eliminated the need for formal processes since the CAE is well aware of each IAors needs, strengths, and weaknesses, which is discussed informally on an ongoing basis. In this context[35], surveyresps also agreed*($\bar{x}$ =3.18)* that their CAEs were aware of any skill gaps and provided the necessary training to address them. Additionally[36], they also agreed*($\bar{x}$=3.06)* that the purpose of training and how it contributed to their development was clearly communicated.

[32] Vide Q.13-20 p.A3.1
[33] Vide Q.6-12 p.A3.2
[34] Vide Q.13 p.A3.1-6
[35] Vide Q.6b p.A3.2-4
[36] Vide Q.6d p.A3.2-4

4.3.2 Implementing the training plan

The first part of the second question[37] asked interviewees to describe the steps undertaken in the development of the training plan.

Needs assessment and training planning

Interviewees*(14/14)* emphasised that the first step in the development of the training plan was to conduct needs assessment to determine skill gaps and training requirements, though the approaches for this varied.

Half the interviewees*(7/14)* used structured, annual performance appraisals to assess competences, thus ensuring the alignment of training with both individual and entity needs. The others*(7/14)* based their training requirements on their IA plan for the following year. Additionally, one interviewee*(1/14)* highlighted that, alongside performance appraisals, they also considered the requirements outlined in the GIAS, while another*(1/14)* incorporated self-assessment questionnaires, requiring IAors to evaluate their confidence in various areas.

When asked[38] whether the training needs are reviewed periodically, some interviewees*(5/14)* noted that they carry out semi-annual/quarterly assessments, yet most*(9/14)* do not. Moreover, some interviewees*(3/14)* representing small IAUs, emphasised that formal periodic need assessments are unnecessary, as ongoing informal conversations are sufficient to identify training needs throughout the year.

Training methodologies

All interviewees*(14/14)* used a mix of external and internal training, combining online and in-person methods.

External training included the attendance of conferences commonly delivered by the local IIA, the Big Four firms and the Malta Institute of Accountants (MIA). A few interviewees*(3/14)* also send IAors abroad for training. However, this approach is not widely favoured owing to budget constraints and the availability of local

[37] Vide Q.14a p.A3.1-6
[38] Vide Q.15 p.A3.1-6

training. Two interviewees*(2/14)* argued that the recent Covid-19 pandemic has strengthened the use of online platforms, this decreasing the need to rely on training abroad.

While most interviewees*(10/14)* believe that Malta is a well-oiled machine in terms of IA training provided by external service providers, a few*(4/14)* argued that such specific training on IA is limited. One interviewee*(1/14)* further highlighted that most external training sessions are heavily tailored to the banking industry, offering limited value for professionals in other sectors. As a result, this interviewee*(1/14)* relies solely on external training for general skills while conducting all IA-specific training in-house.

Across IAUs, internal training commonly consisted of on-the-job training and e-learning. On-the-job training was typically informal, where senior IAors mentor junior employees through hands-on guidance and knowledge sharing. One interviewee*(1/14)* explained that their team also conducted an annual departmental training programme on a specific topic, delivered by an experienced foreign trainer through multiple sessions over the year. E-learning was also widely used, with all IAUs*(14/14)* leveraging the flexibility of online platforms for CPD. Some interviewees*(6/14)* noted that despite being efficient, e-learning alone was insufficient owing to its lack of effectiveness. Moreover, a few interviewees*(4/14)* described obligatory e-learning sessions mandated by the company for all employees regardless of their role as "*boring*" and "*ineffective*". One interviewee*(1/14)* mentioned that sometimes e-learning included information which was not applicable to Malta, this requiring IAors to stay alert.

Effectiveness of training methodologies

Interviewees were asked[39] to rate the effectiveness of different training methodologies. The mean rating scores are shown in Table 4.6 in descending order of effectiveness. They indicate that on-the job training*($\bar{x}$=4)* was the most effective methodology, followed by attending and participating in professional

[39] Vide Q.16 p.A3.1-6

conferences and seminars*(x̄=3.57)* and receiving mentoring*(x̄=3.50)*. As may be observed, significant differences were found among the mean scores*(p< 0.001)*.

	Mean	Std Dev
a. On-the-job training	4	0
c. Attending and participating in professional conferences and seminars	3.57	0.514
e. Receiving mentoring	3.50	0.650
g. Pursuing professional certifications	3.21	0.802
b. E-learning	2.64	0.842
d. Engaging in directed reading and self-study programmes	2.57	0.646
f. Conducting training audits and research projects	1.93	1.207
Scale from 0 (very low effectiveness) to 4 (very high effectiveness) *Number of interviewees = 14*	$X^2(5) = 45.422, p < 0.001$	

Table 4.6: Effectiveness of training methodologies

Some*(4/14)* interviewees mentioned that training is less effective when lengthy and purely theoretical, stressing the importance of interactivity and examples. While most*(12/14)* agreed that in-person training is more effective than online, two interviewees*(2/14)* noted no difference. Three*(3/14)* suggested adding trigger questions and assessments to online training for better focus, and one*(1/14)* proposed podcasts for flexible, self-paced learning.

Surveyresps[40] were also asked for their perceptions about the effectiveness of training methodologies, with CAEs and IAors showing similar views. On-the-job training was again ranked most effective*(12/33)*, followed by attending and participating in professional conferences and seminars*(11/33)*, receiving mentoring*(4/33)*, e-learning and attending online seminars*(4/33)* and finally pursuing professional certifications*(1/33)*. A notable proportion of surveyresps*(7/33)* emphasised the value of a mixed methodology.

E-learning*(14/33)* was widely regarded as low in effectiveness by surveyresps owing to its lack of structured knowledge testing and self-paced nature, this leading to distractions and a lack of interactivity. It was described as a mere "*tick-the-box*" exercise, carried out solely to fulfil training hours. Engaging in directed

[40] Vide Q.7 and Q.8 p.A3.2-5

reading and self-study programmes was deemed less effective by several surveyresps*(7/33),* mainly owing to the lack of mentoring and the risk of incomplete understanding despite training completion. Some surveyresps*(5/33)* highlighted that attendance and participation in conferences may also be ineffective particularly in instances where the content lacks direct practical relevance to IAors' work. Additionally, one surveyresp*(1/33)* commented that a drawback of attending conferences is their inflexible nature, as they cannot be postponed when higher-priority tasks arise.

Selecting the training session

The process of selecting the external training topic and provider differed among IAUs, but was always based on a needs assessment. In some cases*(4/14)*, the CAE and senior management fully controlled training decisions, yet they were open to IAors suggestions. Conversely, most IAUs*(10/14)* implement a bottom-up flexible strategy, empowering employees to take charge of their professional growth by selecting most training opportunities which align with their own learning styles, competency gaps, interests and goals, in addition to a few other sessions chosen by senior leadership.

A few interviewees*(3/14)* emphasised the importance of including IAors themselves in the training selection process, as otherwise employees will "*dread*" the training. Surveyresps stated[41] that they in fact do feel involved*($\bar{x}$=3.09)* in the development of the training plan. In addition, interviewees*(14/14)* explained that some training sessions are attended by all IAU employees, while others are attended based on one's individual needs. One interviewee*(1/14)* stressed the importance and economy of not training all IAors in the same topic, but enabling a few to receive specialised training in a particular area.

Despite differing selection methods, interviewees[42]*(14/14)* agreed that training generally takes into account employees' backgrounds, experience, preferences, and career goals. Surveyresps[43] also agreed*($\bar{x}$=3.24)* to this.

[41] Vide Q.6a p.A3.2-4
[42] Vide Q.14d p.A3.1-6
[43] Vide Q.6c p.A3.2-4

Training hours and content

Interviewees were asked[44] about the number of training hours IAors were expected to complete each year. The responses varied significantly, ranging from 25 to 100 hours. The mean training hours was 51*(x̄=51)*, while the mode was 30 hours*(4/14)*.

The training content was diverse, encompassing a combination of technical IA training, soft skills, compliance, industry-specific knowledge, and internal systems and processes. Although the overall number of training hours was relatively high, interviewees*(14/14)* noted that there was no fixed allocation of hours dedicated specifically to professional IA topics. In fact, one interviewee*(1/14)* highlighted that out of the 30 expected hours, only around 10% were focused on professional IAing. Similarly, another interviewee mentioned that no training was provided when the IAor him/herself believed that no competency gaps were present. Furthermore, another interviewee*(1/14)* highlighted that training was carried out primarily to meet Continuing Professional Education accounting requirements, and therefore tended to be more accounting rather than IA-focused. This lack of dedicated IA-focused training hours raises concerns about the adequacy of professional development for IAors in the field.

Additionally, a few interviewees*(3/14)* mentioned that the training hours may be undertaken at the discretion of the IAors themselves as long as they are completed by the year-end. Smith (2017)[45] argued against this approach, suggesting that training should take place on a monthly basis.

Training sponsorship

When asked[46], interviewees*(14/14)* stated that training is generally completely sponsored by the entity. However, two*(2/14)* noted that when an IAor pursues an expensive training course or certification, the expenses involved may not be completely reimbursed. Another two interviewees*(2/14)* explained that the entity

[44] Vide Q.14b p.A3.1-6
[45] Vide S.2.3.2
[46] Vide Q.14c p.A3.1-6

reimburses the individual only after the whole course is completed, on condition that they remain engaged with the entity for an agreed number of years.

Assessment and feedback on training

Post-training assessment and feedback mechanisms[47] varied widely across IAUs. Most interviewees*(8/14)* indicated that there was no structured assessment or feedback mechanism in place. Instead, training effectiveness was assessed informally through discussions and IAors were evaluated over time based on their performance and ability to apply newly acquired skills on the job. Despite this, surveyresps[48] indicated that CAEs adequately*($\bar{x}$=2.93)* sought feedback following training sessions and that these sessions are generally interactive and effective[49]*($\bar{x}$=2.82)*. However, opinions[50] on the use of quizzes to assess content retention were mixed, resulting in a neutral*($\bar{x}$=2.30)* overall rating, suggesting a potential area for improvement in formal evaluation methods.

Some interviewees*(4/14)* mentioned that feedback on training was requested during semi-annual/quarterly assessments. Only a few interviewees*(2/14)* have a formalised evaluation process, requiring IAors to assess relevance, quality, and applicability of the training they attended immediately after. One interviewee*(1/14)* further explained that IAors must also provide feedback on the cost-effectiveness of the training. Additionally, in some IAUs*(2/14)*, IAors are required to conduct knowledge-sharing sessions after completing training, this reinforcing key concepts while improving their presentation skills.

When asked[51] about how training effectiveness is ensured, one interviewee*(1/14)* described it as a "*leap of faith*" and emphasised the importance of not enrolling all IAors in the same session. The interviewee also recommended building familiarity with trainers by in so far as possible not changing them over time. S/he also advised against investing initially in overly expensive training, particularly with currently emerging topics.

[47] Vide Q.14a p.A3.1-6
[48] Vide Q.6e p.A3.2-4
[49] Vide Q.9 p.A3.2-5
[50] Vide Q.6f p.A3.2-5
[51] Vide Q.17 p.A3.1-7

4.3.3 Onboarding training for new internal auditors

In the first part of the next question[52], interviewees were asked about the training provided to new IAors, with results showing significant differences in duration, structure and delivery methods across IAUs.

The duration of onboarding training ranged widely, from just a few hours to 120 hours. Two interviewees*(2/14)* emphasised that more experienced recruits receive less training, as they are expected to integrate quickly.

Some interviewees*(6/14)* reported implementing a structured onboarding program, yet the training focused more on operational issues and entity structure rather than IA itself. Instead, IA is mastered over time on the job. When asked[53], these interviewees*(6/14)* also noted that training is adapted to employees' background and experience. Surveyresps[54] also agreed*($\bar{x}$=2.66)* to this. In contrast, half the interviewees*(7/14)* explained that there was no structured onboarding program in place.

One interviewee*(1/14)* stated that, while new recruits received onboarding training, this was carried out months later, as all new recruits across departments are grouped together for a one-day seminar. This interviewee acknowledged that such approach is flawed and required change.

Additionally, the delivery method for onboarding training varied across IAUs, with some providing classroom-style inductions, including workshops and departmental presentations. One interviewee*(1/14)* criticised this method arguing that it results in *"information overload and the inability of the new recruits to retain key points*". Instead, this interviewee*(1/14)* emphasised the importance of immersive training, whereby new recruits witness the process first-hand, ensuring that IAors experience different aspects of the business before engaging in audits. Another interviewee*(1/14)* explained that an IA handbook had recently been

[52] Vide Q.18a p.A3.1-7
[53] Vide Q.18b p.A3.1-7
[54] Vide Q.10 p.A3.2-5

developed assisting new recruits to accustom themselves to the job following onboarding.

4.3.4 Benefits of training

Interviewees[55] and surveyresps[56] were subsequently asked to rate their level of agreement with various statements focused on training benefits. As shown in descending order of agreement in Table 4.7, interviewees strongly agreed with one statement*(1/7)*, agreed with five of the others*(5/7)* and were neutral to one*(1/7)*. On their part, surveyresps also strongly agreed*($\bar{x}$=3.58)* with the same statement and agreed with all the others. Additionally, significant differences were found in the mean rating scores assigned to the statements by CAEs and IAors, respectively*(p< 0.001)*.

	Mean	Std Dev
a. In the current, rapidly changing business environment training is increasingly becoming essential.	3.57	0.514
d. Training equips employees with the necessary information, skill sets and competences to perform tasks at the maximum potential, thus reducing the room for errors and mistakes.	3.29	0.914
f. There is a positive correlation between effective training programmes and employee productivity.	3.29	0.726
b. Prolonged deficits in training, talent development, and staffing may hinder the entity's ability to evolve.	3.21	0.975
e. Training involves sharpening employee thinking and creativity, this resulting in increased productivity levels.	3.14	1.027
c. When employees recognise the entity's investment in their development, they become more motivated to work harder and perform better.	3.00	1.038
g. Effective training reduces employee turnover.	1.71	0.914
Scale from 0 (strongly disagree) to 4 (strongly agree) *Number of interviewees = 14*	$X^2(5) = 38.440, p < 0.001$	

Table 4.7: Benefits of training

Statement 'a' was the one that interviewees strongly agreed to*($\bar{x}$=3.57)*. This statement highlights that training is essential in today's rapidly evolving business landscape. A few interviewees*(4/14)* emphasised that without continuous training,

[55] Vide Q.19 p.A3.1-7
[56] Vide Q.11 p.A3.2-5

employees struggled to keep pace with industry advancements, regulatory changes and technological developments.

Interviewees agreed with Statement 'd'$_{(\bar{x}=3.29)}$ that training equips employees with the necessary tools to avoid errors and mistakes. However, one interviewee$_{(1/14)}$ was sceptical and argued that there is "*no direct link*" between training and competency levels since individuals may struggle to apply concepts despite extensive training. Others$_{(3/14)}$ stated that training alone does not make an individual an expert.

They also agreed with Statement 'f'$_{(\bar{x}=3.29)}$ about correlation between training and productivity. Yet, a few interviewees$_{(4/14)}$ cautioned that the effectiveness of training depends on the individual's willingness to learn and the extent to which the training method is tailored to suit different learning preferences.

Interviewees also agreed with Statement 'b'$_{(\bar{x}=3.21)}$ that deficits in training, talent development and staffing hinder the IAU. However, one$_{(1/14)}$ argued that training does not need to be provided by IAUs. Instead IAors should proactively and independently engage in further learning.

Similarly, while interviewees agreed with Statement 'e'$_{(\bar{x}=3.14)}$ about training sharpening employee thinking and creativity and thus enhancing productivity, three$_{(3/14)}$ argued that training does not necessarily result in such enhancement. One interviewee$_{(1/14)}$ pointed out that experience is the primary driver of mastering skills and suggested that training needs to be supplemented with hands-on-experience.

Moreover, interviewees agreed with Statement 'c'$_{(\bar{x}=3.00)}$ that investing in employee development motivates employees to work harder and perform better. However, two$_{(2/14)}$ highlighted concerns about the diminished commitment and loyalty, particularly among younger generations, both of which render it harder to be sure that such motivation is realised. Additionally, four interviewees$_{(4/14)}$ highlighted that the extent of such motivation varies with each individual, with one interviewee$_{(1/14)}$ adding that motivation is mostly enhanced by bonuses and promotion prospects.

In contrast to literature[57], interviewees were neutral, verging on disagreement to Statement 'g' *($\bar{x}$=1.71)* that training reduces employee turnover. Most *(9/14)* argued that investing in an individual through training is a double-edged sword and may have an inverse effect, with employees becoming more portable owing to their enhanced skills. One interviewee *(1/14)* stated that "*as the industry is evolving employee turnover is high*" and stressed the importance of selecting individuals with the appropriate PCs during the selection process. Moreover, one interviewee *(1/14)* suggested that entities should implement retention clauses to prevent immediate turnover such as mandatory service periods following sponsored training. Additionally, a few interviewees *(2/14)* also mentioned that monetary incentives, flexibility, the possibility of working from home and career progression opportunities play a far more significant role in retaining employees than training.

Interviewees were then asked[58] about the additional benefits of training. Two interviewees *(2/14)* emphasised that training supports lifelong learning, which is essential for CPD. Another three *(3/14)* highlighted that in-person training strengthens team cohesion within the IAU, facilitates knowledge-sharing, and helps develop external professional networks. One interviewee *(1/14)* stated that "*effective training increases knowledge, which in turn boosts confidence, motivation, and overall dedication to the entity*." Additionally, another interviewee *(1/14)* noted that training broadens perspectives by exposing individuals to new concepts and areas they may have initially found uninteresting, only to later discover their relevance.

Surveyresps were also asked[59] to provide their perceptions on any additional benefits of training. Many *(12/33)* stated that the most prominent benefit of training was that it provided new insights, knowledge and skills to conduct accurate, efficient and compliant audits and also to adapt to industry changes and improve overall audit quality. Other respondents *(6/33)* mentioned that training enhances one's confidence resulting in personal development and improved performance

[57] Vide S.2.3.4 e.g. Elnaga, Imran (2013)
[58] Vide Q.20 p.A3.1-8
[59] Vide Q.12 p.A3.2-6

of tasks. Similar to the CAEs, a few surveyresps*(5/33)* noted the added benefit of networking and of keeping in touch with the industry, besides enhancing job satisfaction and motivation.

4.4 Barriers and recommendations

This part analyses two interview questions[60] and also two identical survey questions[61]. These questions explored the barriers in the selection and training processes, along with potential recommendations to address these challenges.

4.4.1 Barriers in the selection process

When asked[62], half the interviewees*(7/14)* highlighted internal barriers in the selection process, yet, all*(14/14)* emphasised that the biggest were external.

Internal Barriers

A few interviewees*(4/14)* indicated that their internal selection process was lengthy owing to rigid approval processes which must be adhered to. Such inflexible, bureaucratic processes were more common in larger entities. To make matters worse, the market is agile and hence, the potential of losing a candidate to a competitor is increased. When asked[63] for their opinion on selection barriers, a few surveyresps*(3/33)* also commented that the selection process was indeed lengthy.

Interestingly, one interviewee*(1/14)* noted that the lack of strong marketing campaigns for vacant positions combined with overreliance on recruitment agencies acted as a barrier.

Other interviewees*(4/14)* noted that they set high criteria and seek experienced candidates who in turn expect competitive salaries, yet offer low salary packages and are not prepared to negotiate. Moreover, they emphasised that competitors may offer higher packages this resulting in the loss of candidates and the *"time-consuming"* and "*frustrating*" reinitiation of the recruitment process. Many

[60] Vide Q.21-22 p.A3.1
[61] Vide Q.13-14 p.A3.2
[62] Vide Q.21a p.A3.1-9
[63] Vide Q.13a p.A3.2-7

surveyresps*(9/33)* confirmed this and emphasised that often the expected qualification requirements are high, while the financial packages offered are not sufficiently alluring.

External Barriers

Interviewees*(14/14)* agreed that the most prominent barrier was the shortage of local talent. This was also confirmed by some surveyresps*(7/33)*. Moreover, some interviewees*(2/14)* observed a decline in candidate quality, highlighting gaps in skills, competences, commitment, and attitude. A few interviewees*(2/14)* highlighted that the relocation process for foreigners is complex and discourages them from coming to Malta. This is owing to the fact that the Family Reunification Regulations (S.L. 217.06 2007) prevent family members of third-country nationals from joining them in Malta in their first year.

Additionally, a few interviewees*(4/14)* noted that the IA profession is not deemed to be attractive potentially owing to the perception gaps arising from the lack of awareness about the role of IAors. Other interviewees*(2/14)* emphasised that the profession is undervalued in comparison to the external audit (EA) profession. This is further impacted by IAing not being a statutory requirement in most large entities.

4.4.2 Overcoming selection barriers

Interviewees[64] and surveyresps[65] were subsequently asked to provide their recommendations on how the aforementioned barriers can be eliminated, or at least mitigated.

Nearly all interviewees*(13/14)* mentioned recruiting IAors from overseas to address the limited local talent pool. This suggestion was also mentioned by a number of surveyresps*(3/33)*. Yet, most interviewees*(10/14)* explained that foreign candidates would be expected to relocate to Malta owing to the nature of IA work necessitating effective communications and strong team synergy. Only a few

[64] Vide Q.21c p.A3.1-9
[65] Vide Q.13b p.A3.2-7

interviewees*(3/14)* were open to remote working. One interviewee*(1/14)* indicated preference for Maltese IAors, citing local culture as a key factor.

One interviewee*(1/14)* and a few surveyresps*(4/33)* proposed an alternative approach. This would involve the prioritisation of internal recruitment and increased investment in training and development to build talent from within the entities themselves.

Additionally, half of the interviewees*(7/14)* and one surveyresp*(1/33)* recommended introducing more extensive study programmes at the University of Malta thus responding to the current talent shortage. One interviewee*(1/14)* noted that weak educational foundations create a significant disconnect between academia and industry, which neither the CIA certification nor training alone can bridge.

Some surveyresps*(5/33)* recommended placing less weight on qualifications alone, and instead better balancing qualifications and relevant experience. Others stressed the importance of enhancing the salary packages for IAors*(4/33)*; the need to launch effective marketing campaigns across multiple channels when issuing vacancies*(2/33)* and to better utilise recruitment agencies*(2/33)*. Notably, one surveyresp*(1/33)* suggested creating internship programs to build a pipeline of future talent.

4.4.3 Barriers in the training process

The second question[66] asked interviewees about the barriers in developing strong training programmes. Most interviewees*(9/14)* stated that no significant barriers exist, emphasising that locally a sufficient mix of online and in-person training is available. The remaining interviewees*(5/14)* highlighted a number of barriers including financial budgets*(4/14)*; the limited IA-specific training available locally*(3/14)*; extensive focus on the banking industry*(1/14)*; overloaded work schedules which limit time for training*(1/14)* and the limited availability of government sponsorships and schemes*(1/14)*.

[66] Vide Q.22a p.A3.1-9

When surveyresps were asked[67] the same question, a number*(13/33)* of them believed that no significant barriers exist, with the others highlighting barriers. The most prominent one was the limited allocated budget*(7/33)* with one surveyresp*(1/33)* noting that in his/her IAU "*the training budget was slashed in half over the past two years*". Other barriers mentioned included not enough time being dedicated to training owing to tight deadlines and work overload*(5/33)*; training with limited focus on IA*(2/33)*; inadequate follow up post training sessions*(1/33)*; no active approach on training*(1/33)* and no tailored training*(1/33).*

4.4.4 Overcoming training barriers

Interviewees were finally asked[68] whether they had any additional comments on how the training barriers could be overcome. Two interviewees*(2/14)* proposed looking beyond training in Malta and considering international training in terms of conferences and online courses. Additionally, it was recommended*(1/14)* not to enrol all IAors in identical courses, retaining the same trainers insofar as possible when found effective and not using expensive training in the first instance.

Similarly, surveyresps[69] provided a few recommendations including discussions with management to enhance the training budget*(3/33)*; dedicating time to searching for free training courses on IA*(2/33)*; placing greater focus on in-house training specialised on currently emerging topics*(2/33)*; permitting each member of the audit team to physically attend regular conferences more frequently*(1/33)*; one-to-one development meetings*(1/33)*; off-the job training in order to permit disconnection from the workplace*(1/33)* and the allocation of sufficient time for training which does not coincide with other deliverables*(1/33)*.

4.5 Conclusion

This Chapter presented an overview of the results obtained from the interviews and surveys. The subsequent Chapter will discuss the key findings.

[67] Vide Q.14a p.A3.2-7
[68] Vide Q.22c p.A3.1-9
[69] Vide Q.14b p.A3.2-7

CHAPTER 5

DISCUSSION OF FINDINGS

5.1 Introduction

This Chapter analyses the research findings presented in Chapter 4 in relation to the literature to date. As illustrated in Figure 5.1, S.5.2 discusses the selection process of IAors, while S.5.3 discusses their training process. Subsequently, S.5.4 discusses barriers encountered in both processes and considers strategies to overcome them. S.5.5 concludes the Chapter.

The selection and training processes of IAors, along with the barriers faced and recommendations is analogous to the world of Formula 1, where selecting the right drivers, equipping them with meticulous training and managing pit stops efficiently are all critical to achieving peak performance.

5.1 Introduction

5.2 The qualifying lap: selecting competent internal auditors

- 5.2.1 Would adopting more advanced interview assessment methods improve candidate evaluation in local entities?
- 5.2.2 When evaluating candidates, are the Global Internal Audit Standards being given sufficient importance?
- 5.2.3 Has the traditional view that the most effective internal auditors are those with accountancy backgrounds really become outdated?
- 5.2.4 How is the profession to advance when most internal auditors are unqualified?
- 5.2.5 Are there gaps in Maltese internal audit units relating to competency in technological areas?

5.3 Fuelling performance: training as the engine of internal audit excellence

- 5.3.1 Is there really no need for a formal training plan in smaller internal audit units?
- 5.3.2 Is present E-learning for internal auditors sufficiently effective and relevant?
- 5.3.3 Are the training sessions focusing on technical internal audit topics adequately available, relevant and cost-effective?
- 5.3.4 Should a structured onboarding training plan be developed?
- 5.3.5 Should the post training mechanism and feedback be more formally addressed?

5.4 Clearing the pit lane: overcoming barriers in internal auditing

- 5.4.1 How may the current shortage of local talent be successfully tackled?
- 5.4.2 Are there ways budget limitations may be overcome?

5.5 Conclusion

Figure 5.1: Outline of Chapter 5

5.2 The qualifying lap: selecting competent internal auditors

5.2.1 Would adopting more advanced interview assessment methods improve candidate evaluation in local entities?

The findings[70] reveal that the interviewing process within Maltese IAUs typically follows the traditional question-and-answer based model. While practical and familiar, this approach may fall short of a deep analysis and according to Wang (2024)[71] is subject to inherent vulnerabilities.

As stated in literature[72], adopting more structured and advanced interview assessment methods such as behavioural interviews and AVIs may enhance the candidate evaluation process by offering a more holistic view of their competences and personality. Such approach also counters the candidate's ability to fake answers in interviews, an issue that was inferred in the findings[73]. However, the practicality of implementing such approaches in smaller, resource-constrained environments, such as many Maltese IAUs, remains questionable.

While Torres and Mejia (2017)[74] suggested integrating AI tools within AVIs, this level of technological sophistication may be unattainable for smaller entities. A more feasible option would be employing AI tools on a smaller, more limited scale. This could include the automatic screening of CVs through keyword detection and the analysis of employment patterns such as the frequency of job changes. Perhaps, a future study examining the cost-benefit analysis of adopting more advanced interview assessments may be warranted to expand on this aspect.

5.2.2 When evaluating candidates, are the Global Internal Audit Standards being given sufficient importance?

As stressed in the literature[75], knowledge of and adherence to the GIAS is pivotal for ensuring that IAors consistently deliver effective audits in a prompt and cost-

[70] Vide S.4.2.1
[71] Vide S.2.2.2
[72] Vide S.2.2.2 e.g. Charles, Florah (2021), Rose (2016), Torres, Mejia (2017) and Lukacik, Bourdage et al. (2022)
[73] Vide S.4.2.7
[74] Vide S.2.2.2
[75] Vide S.2.2.6 e.g IIA (n.d) and Cohen, Sayag (2010)

effective way. Yet, the findings[76] indicate that the IA standards are not being given sufficient importance when evaluating candidates in Maltese IAUs, with only one CAE highlighting placing weight on knowledge of such standards in the recruitment process. A contributing factor may be that adherence to the standards is not legally mandated, this resulting in such adherence not being considered a requirement.

Prior work experience and a strong educational background were more commonly prioritised in the selection process, this implying that mere reliance on such aspects is taken as proof of standard proficiency. This is concerning and calls for a shift in mindset within the profession. CAEs may adopt a more proactive approach by embedding standard proficiency as part of the engagement requirements. This can be achieved by integrating questions related to the standards in interviews and developing standard-related assessment criteria.

Nonetheless, given the evident[77] shortage of IAors in Malta, increasing recruitment requirements may risk deterring applicants and further prolonging the already lengthy timeframe to fill vacant positions. Should the current approach be maintained, it is essential that any new recruits receive effective and timely training on the standards once onboarded.

5.2.3 Has the traditional view that the most effective internal auditors are those with accountancy backgrounds really become outdated?

Literature[78] has shed light upon the growing significance of broader educational and professional diversity within IAUs to meet the increasingly complex demands of the business environment. As the scope of IAing continues to expand, it is becoming evident that a team composed solely or even mostly of individuals with accountancy skills may no longer suffice.

[76] Vide S.4.2.6
[77] Vide S.4.2.5
[78] Vide S.2.2.4 e.g. Rose (2016), Chambers (2023) and Bonrath, Eulerich (2024)

Although the findings[79] indicate that Maltese CAEs do recognise the need for a wide-range of competences in IAUs – such recognition being evidenced by accountancy being rated as the least important skill from the list of skills provided - a more conservative outlook still appears to prevail. In fact, candidates with an accountancy background were clearly preferred by interviewees and the most common educational background among IAors within Maltese IAUs was indeed accountancy. In line with this, qualifications in unrelated fields were generally considered to be less valuable. Such contradiction clearly illustrates a mismatch between what is acknowledged as necessary and what is actually practised in the recruitment process.

This trend is in itself a reflection of Malta's current stage of professional development within the IA field. The findings[80] also revealed that most local IAUs are small, this indicating that they may not have the operational scale or audit scope to justify hiring from other fields beyond accountancy and thus obtaining more skill-set diversity.

In this context, one CAE noted that, despite his/her IAU not placing any strict requirement for an accountancy degree, most applicants typically held one, with very few applications being received from individuals holding other degrees. This points to the reluctance to date of personnel skilled in other specialisations to apply for IA positions. Another CAE pointed out that this is another reason that, while skill-set diversity would now be enriching for all IAUs, it is as yet hardly practicable except possibly in a few larger foreign-owned entities.

5.2.4 How is the profession to advance when most internal auditors are unqualified?

Clearly[81], as also highlighted in the literature[82], a persistent skills shortage exists in the IA profession, with most IAors practicing without holding professional IA

[79] Vide S.4.2.6 and S.4.2.9
[80] Vide S.4.3.1
[81] Vide S.4.2.5 and S.4.2.8
[82] Vide S.2.2.5 e.g. Deloitte (2021) and Bartlett, Kremin et al. (2016)

certifications. Tsintzas (2016)[83] observed that globally, only around 30% of IAors hold the CIA certification. Alarmingly, the local context reflects an even more severe gap, with findings[84] revealing that just 9% of IAors in Maltese IAUs possess this designation. This deficiency threatens the credibility of the IAors as to whether they are sufficiently equipped with the necessary skills and competences to deliver high-quality audits.

One contributing factor appears to be the lack of IA specialised study programmes offered in tertiary institutions including the University of Malta, this resulting in little, if any, ongoing output of IA-skilled professionals. Another possible contributor to the shortage is the perception that the CIA qualification is not essential for securing or retaining a role in local IAUs. In fact, while the findings[85] revealed that most IAUs informally encourage their staff to pursue such a qualification, the lack of its formal recognition as a basis for promotion by many IAUs suggests that such encouragement is not translating into meaningful action.

Furthermore, unlike the EA profession, IAing lacks statutory minimum educational requirements or any warrant system. This prompts the question: should the CIA credential become a legal requirement to practice? Yet, such a move could act as a double-edged sword, strengthening competencies while potentially deterring individuals from entering the field and exacerbating the skills gap. A further study may be warranted to deem the viability and potential consequences of such a reform in the Maltese context.

5.2.5 Are there gaps in Maltese internal audit units relating to the competency in technological areas?

Literature[86] underscores the importance of IAUs being collectively competent across a wide range of areas, as this positively impacts effectiveness. However, both literature[87] and findings[88] indicate that competency gaps persist among

[83] Vide S.2.2.5
[84] Vide S.4.2.8
[85] Vide S.4.2.8
[86] Vide S.2.2.1 e.g. Harrington (2004), Oxner and Oxner (2006) and IIA (2024b)
[87] Vide S.2.2.8 e.g. The Internal Audit Foundation, Deloitte (2021)
[88] Vide S.4.2.10

IAors particularly in technology-related areas. Considering the growing scope of IA, which increasingly includes such areas, such gaps pose risks as to the reliability of the audit opinions provided.

A contradiction emerged in the findings[89] between some Likert scale ratings provided by Maltese CAEs and their subsequent deeper comments. While IAU competency in data analytics, IT control frameworks, critical technologies, emerging risks and innovative knowledge areas were rated as high or neutral, their remarks implied a different reality, highlighting seriously existing gaps and the need for enhanced technological competences. The low level of IAors and CAEs holding the CISA credential or IT-related certifications, and - as observed in the findings[90], one CAE even declaring s/he was completely unaware of the CISA credential – is an issue that calls for immediate attention especially in larger IAUs.

The recently updated GIAS[91] now include recommendations for utilising data analytics, AI, and other technology advancements to improve audit effectiveness and efficiency. These stricter standards should help to narrow, if not close, the existing gaps. Of course, this implies more investment by IAUs in targeted training. Professional institutions and entities such as the local IIA branch, the MIA, and the Big Four firms could play a key role by offering practical and timely courses tailored to these continuously evolving demands.

5.3 Fuelling performance: training as the engine of internal audit excellence

5.3.1 Is there really no need for a formal training plan in smaller internal audit units?

The perception among Maltese CAEs in smaller IAUs seems to be that a formal training plan is unnecessary owing to their ability to informally monitor and

[89] Vide S.4.2.10
[90] Vide S.4.2.8
[91] Vide S.2.2.6 e.g. Whitington (2024)

respond to team needs. However, as Tung-Chun (2021)[92] emphasised, a formal training plan remains essential regardless of entity size. This is because, while the close-knit nature of such teams may facilitate ongoing dialogue about training and development needs, the absence of a structured and documented plan may easily leave space for inefficiencies and blind spots.

Structured plans do not only act as a developmental tool but also as a strategic mechanism to monitor training allocation, track budget utilisation, and ensure that the training budget is distributed fairly among IAors. Despite possible perceptions that such plans are resource-intensive, they may be implemented in a simple, cost-effective format, such as a shared digital spreadsheet. Such a sheet can record training needs, preferred learning methods, feedback on past courses, and planned future sessions, thereby offering a structured yet flexible approach suited to smaller teams.

As seen earlier, Smith (2017)[93] suggested that the formulation of training plans should begin with a needs assessment. However, the findings[94] indicate that self-assessment practices, encouraged by IIA Standard 3.1 - Competency[95], are rarely adopted in Malta. A basic self-assessment tool would help identify skill gaps more systematically, particularly when informal assessments may overlook emerging competences or development goals. Furthermore, documenting learning preferences may assist CAEs in selecting tailored training programmes, improving engagement and effectiveness.

The findings[96] reveal that budget constraints are a recurring local barrier, this being consistent with the findings of Tsintzas (2016)[97]. In this context, a formal training plan can enhance financial accountability by comparing projected and actual spending, thus helping to ensure that resources are used efficiently.

[92] Vide S.2.3.2
[93] Vide S.2.3.2
[94] Vide S.4.3.2
[95] Vide S.2.3.1 e.g. IIA (2024b)
[96] Vide S.4.4.3
[97] Vide S.2.3.2

Moreover, structured documentation provides a birds-eye view of the training hours and content undertaken by each IAor. The findings[98] reveal that Maltese IAors receive fewer training hours focused on technical IA topics than the average in the EU, where, as stated earlier[99], most IAors receive more than 40 training hours specifically on such topics. Furthermore, a formal plan would provide a platform for recording and reviewing feedback on training content and delivery, enriching other team members with insights prior to enrolling in a training programme.

Hence, when scaled appropriately, formalisation can offer both strategic and operational benefits even in smaller IAUs.

5.3.2 Is present e-learning for internal auditors sufficiently effective and relevant?

Despite its widespread use across all IAUs, e-learning is evidently[100] not being perceived as particularly engaging or effective by Maltese CAEs and IAors. This is a matter that raises concern because, as stated in the literature[101], it offers flexibility and cost-efficiency. In fact, e-learning was described as "*boring*," "*ineffective*, "*irrelevant*", and a *"tick-the-box"* exercise especially because its content often lacks local applicability or is not tailored to the needs of IAors. However, in line with the literature[102], it needs to be ensured that the pre-packaged nature and delivery of e-learning does not lack interactivity, clarity, and relevance.

Even though some studies[103] suggest no significant difference between online and in-person training effectiveness, the findings[104] support the study by Smith (2017)[105], highlighting that in-person training is more effective than e-learning. This raises concerns about whether current e-learning training supports

[98] Vide S.4.3.2
[99] Vide S.2.3.2
[100] Vide S.4.3.2
[101] Vide S.2.3.2 e.g. Shabha (2004), Zhang, Zhao et al. (2004) and Lean, Ming et al. (2018)
[102] Vide S.2.3.2 e.g. Smith (2017), Fabito, Trillanes et al. (2021) and Baber (2022)
[103] Vide S.2.3.2 e.g. Lean, Ming et al. (2018) and Wang, Ma et al. (2019)
[104] Vide S.4.3.2
[105] Vide S.2.3.2

meaningful skills development. If e-learning is to play a continued role in IA training, it may need to be updated to include localised and practical content and interactive features like assessments, trigger questions and discussion forums.

Given the growing reliance on online training methodologies, it must be ensured that e-learning is not just present, but effective. Perhaps, a future study examining in more detail the factors influencing the effectiveness of e-learning may be warranted to expand on this aspect.

5.3.3 Are the training sessions focusing on technical internal audit topics adequately available, relevant and cost-effective?

While the findings[106] indicate that there is sufficiently available training in Malta, there appears to be an absence of external training sessions specifically focusing on technical IA topics. Sending IAors abroad to fill this gap is rarely considered viable owing to budget constraints, this leaving IAUs reliant on local training that may not fully address their specialised technical needs. This shortfall risks creating skills gaps that internal resources alone cannot bridge.

Most IAUs reported a relatively high number of annual training hours, yet these are often dispersed across a wide range of topics, many of which fall outside the scope of technical IA work. In this regard, one CAE stated that IAors in his/her team receive an annual average of only three hours of formal training on technical IA topics, this being clearly far from sufficient. The absence of any formal requirement for a reasonable minimum portion of training to be allocated to such technical IA topics brings further into question the continuing professionalism of the Maltese IAor. Furthermore, the findings[107] also revealed that tight deadlines and overloaded work schedules are a main source of pressure limiting the training hours of IAors, this implying that training is not as yet being perceived as an essential component of professional development.

Owing to size and resource constraints, most Maltese IAUs are further hindered from providing specialist in-house training on technical areas. A potential

[106] Vide S.4.3.2
[107] Vide S.4.4.3

improvement in this regard could be inter-IAU collaboration, which at present seems as yet underutilised, if carried out at all. By jointly identifying their training needs, IAUs could cost-share in their engagements of foreign trainers or more easily co-request tailored sessions from the local IIA branch, thus also minimising duplication of efforts, and enabling their access to more specific, relevant content.

Surprisingly, the findings[108] imply that cost-effective training methodologies are not a primary consideration in Maltese IAU training strategies, despite their critical importance in the literature[109]. In fact, only one CAE explicitly mentioned the importance of evaluating the cost-effectiveness of training, this being indicative that such evaluation is often merely an after-thought, if effected at all. As observed by Burke and Salvador et al. (2011)[110] and Booth (2007)[111] more interactive and participative methods yield better knowledge retention, and while these may be costlier upfront, they could prove more effective in the long run. Yet, the findings[112] imply that the present lack of structured training plans is resulting in minimal feedback being gathered on both the value-for-money and long-term impact of the training being carried out, this potentially leading to the application of tightly-allocated budgets on training that may be yielding unsatisfactory results.

5.3.4 Should a structured onboarding training plan be developed?

Literature[113] also underscores the importance of implementing a structured onboarding training plan because such implementation equips new recruits with the knowledge, entity understanding and technical skills necessary to perform effectively in their roles. Despite this, the findings[114] revealed that such plans are not commonly found in Maltese entities, a pattern also consistent in entities in other countries according to the literature[115]. The absence of structured training

[108] Vide S.4.3.2
[109] Vide S.2.3.2 e.g. Abhishek, Senthilkumar et al. (2018) and Kennedy (2009)
[110] Vide S.2.3.2
[111] Vide S.2.3.2
[112] Vide S.4.3.2
[113] Vide S.2.3.3 e.g. Dickson, Isaiah (2024), Klein, Weaver (2000) and Meyer, Bartels (2017)
[114] Vide S.4.3.3
[115] Vide S.2.3.3 e.g. Kirchner, Stull (2021)

plans further challenges the adequacy of current practices and their effectiveness in supporting in particular the CPD of new recruits.

One may also note that the reliance of CAEs in smaller IAUs on informal methods to recognise their IAU skill gaps may easily lead to a misalignment between current training practices and performance expectations. In this respect, the literature[116] highlighted that a robust formal onboarding plan should integrate both operational knowledge and technical skills. Unfortunately, the findings[117] indicate that current onboarding training tends to focus primarily on operational aspects and relatively neglects the technical IA skills. This imbalance points to a potential oversight in preparing IAors for the challenges which they will have to face as regulatory demands and business complexity grow, this further impacting the profession's long-term effectiveness and credibility.

As stated earlier, Hommey, Ma et al. (2020)[118] noted a correlation between the lack of structured onboarding training and increased employee resignations, a concern particularly relevant in the Maltese context where recruitment is often prolonged owing to the limited talent pool. Notably, survey findings[119] support the notion that effective onboarding training contributes to employee retention, this suggesting that such training is not only a mere human development tool but also a strategic measure to mitigate turnover and ensure continuity within IAUs.

5.3.5 Should the post training mechanism and feedback be more formally addressed?

Post-training assessment and feedback plays a crucial role in maximising the value of training efforts, yet the findings[120] indicate that this area remains largely underdeveloped within most Maltese IAUs. Many units rely on informal feedback, with structured post-training evaluation mechanisms being the exception rather than the norm. Additionally, feedback on training is occasionally gathered during

[116] Vide S.2.3.3 e.g. Applegate (2004)
[117] Vide S.4.3.3
[118] Vide S.2.3.3
[119] Vide S.4.3.4
[120] Vide S.4.3.2

quarterly or semi-annual assessments. However, the time gap between the training and feedback may result in inaccurate information being provided and in the retention of similar courses despite a possible negative experience.

Literature sources[121] support the idea that formal feedback and assessment are integral components of a successful training plan. Structured mechanisms, such as quizzes and post-training performance observations are not only important for content retention but also for refining future training content and delivery. The absence of such mechanisms, as evident from the findings[122], risks reducing training to merely passive exercises, hindering the CPD of IAors and questioning the relevance of future training sessions.

In the light of such findings, the need for more formal and consistent post-training assessment mechanisms becomes clear. Introducing standardised evaluation forms, retention quizzes, and peer-sharing could enhance accountability, engagement, and overall training value.

5.4 Clearing the pit lane: overcoming barriers in internal audit

5.4.1 How may the current shortage of local talent be successfully tackled?

As referenced in the literature[123], IAUs must be resourced with skilled and competent professionals to ensure audit quality and efficiency. Despite this, both the findings[124] and literature[125] stress the significantly lengthy time period needed to fill vacant positions owing to the persistent shortage of IA talent.

As indicated in the findings[126], such shortage appears to stem from a mix of factors, this including the requirement for foreign nationals to relocate to Malta despite the strict provisions of S.L. 217.06, as well as widespread perception

[121] Vide S.2.3.2 e.g. Smith (2017) and Farooq, Khan (2011)
[122] Vide S.4.3.2
[123] Vide S.2.2.1 e.g. IIA (2024b)
[124] Vide S.4.2.5
[125] Vide S.2.2.3
[126] Vide S.4.4.1 e.g. Chambers (2023)

gaps that render the IA profession less attractive and more undervalued than the EA profession.

The limited talent pool raises concerns as to whether IAors in Maltese IAUs are overburdened with responsibilities and whether IAUs, as a whole, are collectively competent as required by IIA Standard 3.1 – Competency[127]. These concerns are reinforced by CAEs who indicated that increased resourcing would be ideal to meet current demands.

To address these barriers, Maltese CAEs and IAors proposed a mix of short-term and long-term strategies. As a short-term win-win, the use of recruitment agencies, which is a tool already used by some IAUs, may be intensified, in order for IAUs to take more advantage of their technical expertise and wide candidate networks. Additionally, improving the visibility and appeal of IA vacancies through stronger marketing campaigns could attract more applicants. The findings[128] revealed that benefits associated with vacancies are increasingly gaining importance. Therefore, focusing on such benefits when issuing recruitment campaigns could further attract applicants. Given the reported decline in candidate quality and commitment, a follow-up study exploring the retention policies in IAUs and staff turnover implications may also prove beneficial.

Another possible long-term, yet promising approach includes that of complementing internal recruitment with extensive training programmes. An advantage of internal recruits is that they are typically already well-versed with the entity's operations and may bring with them new and wise perspectives from their personal backgrounds and experiences. Extensive training programmes on such individuals could therefore easily be a fruitful investment.

5.4.2 Are there ways budget limitations may be overcome?

A number of researchers[129] observed that frequency of training and job performance are positively correlated. Despite this, both the findings[130] and

[127] Vide S.2.2.1 e.g. IIA (2024b)
[128] Vide S.4.3.4
[129] Vide S.2.3.2 e.g. Kennedy (2009), Singh, Mohanty (2012) and Elnaga, Imran (2013)
[130] Vide S.4.4.3

literature[131] indicate that frequently limited training budgets act as strong deterrents reducing the number of training sessions provided and thereby hindering the professional growth of IAors.

Maltese CAEs and IAors brought forward different recommendations[132] on how budget limitations may be overcome, but the most viable approach appears to be that of fostering stronger communication between IAUs and the BoD or senior management. If CAEs better articulate the value that training provides, not solely in terms of upskilling, but in enhancing audit quality, strengthening internal controls and developing future IA managers, budget considerations may be revisited with more openness. Evidence-based justifications, such as the presentation of the number of errors pre-and-post training would further support the argument. Additionally, linking training outcomes to tangible entity improvements or cost savings can help reposition training not as a cost, but as a strategic investment.

If such efforts fail to result in sufficient change, an alternative solution could be to adopt the knowledge-sharing sessions approach, which the findings[133] imply is currently an underutilised strategy in Maltese IAUs. Such an approach involves IAors receiving training in specialised areas and subsequently presenting the gained knowledge to the other members of the IAU. This facilitates broader learning while more efficiently utilising the limited budget.

5.5 Conclusion

This Chapter discussed the main research findings. The following Chapter will conclude the dissertation.

[131] Vide S.2.3.2 e.g. Tsintzas (2016)
[132] Vide S.4.4.4
[133] Vide S.4.3.2

CHAPTER 6

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This Chapter concludes the dissertation. As illustrated in Figure 6.1, S.6.2 provides a summary of the research findings. Subsequently, S.6.3 outlines the conclusions reached. S.6.4 provides several recommendations, while S.6.5 proposes areas for further research. Finally, S.6.5 presents the concluding remarks.

Figure 6.1: Outline of Chapter 6

6.2 Summary

This study had three objectives. The first objective was to ascertain and assess the key factors that influence the selection of individuals forming the IAing teams in Maltese insourced IAUs. The second objective was to ascertain and assess the development of the training plan, including the onboarding and continuous training methodologies currently in place in insourced IAUs, and the effectiveness of such methodologies. The final objective was to provide recommendations on how any existing barriers relating to the aforementioned processes may be tackled so that such processes may become more effective.

To achieve these objectives, a mixed-method approach was deemed appropriate. This involved conducting semi-structured interviews with a total of 14 CAEs and distributing a survey to IAors, resulting in 33 completed responses.

The findings revealed that IA recruitment is predominantly reactive, with vacancies typically arising after resignations and filled after a long time owing to the limited talent pool in Malta. Moreover, the findings highlighted that CAEs are actively involved in the recruitment process, relying mainly on traditional interview methods, with only a few incorporating more advanced interview assessment techniques. Additionally, it emerged that CAEs deem communication and analytical thinking the most valuable skills for IAors, while honesty and teamwork are the most sought-after PCs. The findings also revealed that CAEs place weight on candidate's educational background and experience, with most IAors in Maltese IAUs having an accountancy background. This contradicts the weight placed on educational and professional diversity which CAEs noted as valuable. Additionally, it transpired that the GIAS are not actively sought after in the recruitment process. The study also found that there was a lack of uptake of credentials like CIA and CISA, this finding being further reinforced through the identified competency gaps in technological areas.

Regarding training, the findings revealed that training plans were mainly informal, with structured onboarding and post-training assessments being largely absent. Yet, IAors were found to be involved in the process for determining the training session. On-the-job training was considered the most effective training methodology. Contrarily, e-learning was not found to be highly effective owing to its low interactivity and relevance. The findings concluded that IAors receive a significant number of training hours, yet, these hardly focus on technical IA topics, this being so owing to the limited training offered on such topics in Malta and the lack of applicability. It also emerged that CAEs and IAors recognise the benefits associated with training. Finally, the findings revealed two primary barriers, the limited IA talent pool in Malta, which affects recruitment adversely, and budget constraints, which hinder training efforts.

6.3 Conclusions

The study concludes that the selection process of IAors is greatly hindered by the lack of IA talent. The recruitment process typically follows the traditional model and is usually initiated following resignations, this resulting in periods of resource and competency gaps in IAUs owing to the significant time required to fill vacant positions. During the selection process, CAEs place weight on the candidate's skills, PCs, educational background, and experience. Yet, while CAEs typically deem credentials like CIA and CISA valuable, they are not actively sought-after in the selection process. In fact, most IAors in Maltese IAUs practice without holding such credentials, this raising questions about the professionalism of the field. Furthermore, despite its relevance to audit quality, candidate knowledge of the GIAS does not seem to be a top priority for CAEs. Nevertheless, CAEs generally view IAors as competent in most areas, with notable gaps identified in technological expertise.

The study also concludes that Maltese IAUs do not typically implement structured onboarding and ongoing training plans, with more informal approaches being adopted owing to the small team sizes. IAUs adopt a mix of internal and external training methodologies. However, external training sessions specifically focusing on technical IA topics are limited in Malta, this thereby reducing the number of hours IAors dedicate to such specialised training, both upon onboarding and ongoing. On-the-job training is deemed the most effective training methodology, while IAor concerns relate to the effectiveness of e-learning owing to the limited interactivity and relevance.

Finally, this study concludes that while the selection and training processes for IAors are marginally functional, such processes could benefit from improvements. To tackle the barriers in the selection process arising from the talent shortage in the IA profession several measures may be implemented. This includes, but is not limited to, the prioritisation of internal recruitment complemented by increased investment in training to build talent from within and the introduction of IA study programmes in tertiary institutions. Additionally, fostering stronger communication between IAUs and the BoD and/or senior management about the value of training

and also encouraging knowledge-sharing sessions post-training could help mitigate the training budget barrier.

6.4 Recommendations

This study recommends that:

A. **CAEs embed GIAS competency as part of the engagement requirements in the recruitment process** *(S.5.2.2)*

   CAEs are encouraged to place higher weight on GIAS proficiency by integrating it into interview assessments to promote consistency with global best practices and enhance audit quality.

B. **study programmes specialising in IA are offered in tertiary institutions** *(S.5.2.4)*

   To address the IA talent shortage in Malta, tertiary education providers, such as the University of Malta, are encouraged to consider introducing specialised IA programmes. This would help bridge academic gaps and support the development of the profession.

C. **CAEs formally recognise the CIA credential as a basis for promotion** *(S.5.2.4)*

   Although CAEs already encourage the pursuit of certifications and qualifications, it is recommended that the CIA credential becomes formally acknowledged as a key criterion for promotion. This approach further incentivises professional development and supports the upskilling of IAors.

D. **professional institutions offer practical and timely courses focused on technology-related areas** *(S.5.2.5)*

   It is recommended that the local IIA branch, the MIA and the Big Four firms offer practical and timely courses focused on technology-related areas to develop stronger competences among IAors.

E. IAUs develop and implement formal training plans regardless of their size *(S.5.3.1)*

It is recommended that, regardless of their size, all IAUs establish formal training plans. These could be facilitated through simple, cost-effective shared digital spreadsheets that guide needs assessments, training methodologies and post-training assessment and feedback.

F. IAors receive more training hours focused on technical IA topics *(S.5.3.1 and S.5.3.3)*

It is recommended that IAors in Maltese IAUs receive additional training hours specifically focused on technical IA topics. This may be achieved by setting a minimum portion of training hours to cover such topics as part of the annual training plan.

G. IAUs consider the benefits of inter-IAU collaboration *(S.5.3.3)*

IAUs are encouraged to collaborate in identifying shared training needs, thus enabling cost-sharing in their engagements of trainers and facilitating the co-requesting of tailored sessions from professional institutions such as the local IIA branch.

H. the cost-effectiveness of training methodologies be evaluated *(S.5.3.3)*

It is recommended that Maltese IAUs place more importance on the evaluation of the cost-effectiveness of training methodologies. This ensures that the training budget is optimally utilised and allocated to high-impact, reasonably priced options.

I. IAUs develop and implement structured onboarding training plans *(S.5.3.4)*

Before engaging in audits, it is recommended that new IA recruits receive onboarding training following a structured onboarding plan. This ensures familiarity with internal processes and that competences are up-to-speed.

J. formal post-training mechanisms are implemented *(S.5.3.5)*

It is recommended that as part of the development and implementation of structured training plans, post-training content assessments and feedback systems are established to measure learning retention and the cost-effectiveness of training.

K. IAUs leverage the use of recruitment agencies and stronger marketing campaigns *(S.5.4.1)*

Although some IAUs already make use of recruitment agencies it is recommended that these efforts be extended to capitalise on their expertise and networks. Additionally, stronger marketing campaigns that focus on the benefits associated with the position should be developed.

L. CAEs focus on internal recruitment complemented by extensive training *(S.5.4.1)*

Given the significantly lengthy time period needed to fill vacant IA positions, CAEs are recommended to place greater efforts on internal recruitment. This approach must be backed with extensive technical IA training to ensure that the new recruit possesses the necessary skills and competences to deliver high quality audits.

M. IAUs and the BoD/senior management foster stronger communication aimed at tackling budget constraints *(S.5.4.2)*

To address the training budget limitation, it is recommended that IAUs foster stronger communications with the BoD and/or senior management that focus on the value and benefits of training. Evidence-based justifications are also crucial, since they further strengthen the argument.

N. IAUs implement knowledge-sharing sessions post-training sessions *(S.5.4.2)*

It is recommended that IAors are enrolled in different, specialised training courses and that they are subsequently required to deliver presentations

to share key insights with the other IAU team members. Such an approach not only utilises the limited allocated training budget more efficiently, but also enhances IAor learning and presentation skills.

6.5 Areas for further research

A. **Advanced Interview Assessment Techniques in Maltese Internal Audit Units and their Cost Benefit** *(S.5.2.1)*

Such a study would examine in more detail the implications of implementing more advanced interview assessment techniques, assessing whether the benefits would outweigh the costs in terms of improved recruitment accuracy and audit quality.

B. **Retention Policies in Maltese Internal Audit Units and their Staff Turnover Implications** (*S.5.4.1)*

Given the reported decline in candidate quality and commitment, a study focused on exploring IAU retention strategies and how these policies influence staff turnover, workforce stability and long-term IAU sustainability is recommended.

C. **Mandating the CIA Credential as a Legal Requirement for Practising Internal Auditing in Malta: A Study** *(S.5.2.4)*

Such a study would investigate the feasibility and the regulatory, professional and educational implications of mandating the CIA credential for IA practice. It would explore whether such a measure would enhance the quality and credibility of the profession, or whether it may unintentionally deepen the talent shortage by discouraging entry into the field.

D. **The Effectiveness of E-learning in Internal Auditing: A Study** *(S.5.3.2)*

Given that IAors deem e-learning efficient but often less effective, it would be interesting to identify the key internal and external factors which influence its effectiveness, particularly in delivering technical IA training.

6.6 Concluding remarks

The study has shown that the selection and training processes of IAors are critical drivers, not only shaping the effectiveness of the IAU, but also steering the overall success of the entity. These processes do not operate in isolation; rather, comprehensive training complements the selection process by ensuring that core competences are continually honed. While the current processes are marginally functional, the study suggests that targeted improvements could enhance their impact and effectiveness. Ultimately, as stated by one respondent, "*Selecting and training IAors is like preparing a Formula 1 driver - precision, timing, and guidance determine whether you simply race or truly win*."

REFERENCES

General

ABDULLAH, D., ONG, K. and ZAKARIA, R., 2013. Investigating Effective Ways to Maximize the Role of Recruitment Agencies. *Procedia - Social and Behavioral Sciences,* **107**, pp. 13–21.

ABHISHEK, G., SENTHILKUMAR, C.B. and NALLUSAMY, D., 2018. Study on Effectiveness of Internal and External Training to the Development of Employee in Corporate Sectors and Hospitals. *Indian Journal of Public Health Research & Development,* **9**, pp. 259.

ACTON, T. and GOLDEN, W., 2003. Training the knowledge worker: A descriptive study of training practices in Irish software companies. *Journal of European Industrial Training,* **27**, pp. 137–146.

AHMAD, K.Z., VEERAPANDIAN, K.A. and GHEE, W.Y., 2011. Person-environment fit: The missing link in the organisational culture-commitment relationship. *International Journal of Business and Management,* **6**(11), pp. 11.

APPLEGATE, D., 2004. Training New Auditors. *The Internal Auditor,* **61**(2), pp. 66–73.

AZAR, P., 2005. Put the Right Person in the Right Seat. *Target Marketing,* **28**(10).

BABER, H., 2022. Social interaction and effectiveness of the online learning – A moderating role of maintaining social distance during the pandemic COVID-19. *Asian Education and Development Studies,* **11**(1), pp. 159–171.

BADARA, M.S. and SAIDIN, S.Z., 2014. Empirical evidence of antecedents of internal audit effectiveness from Nigerian perspective. *Middle-East Journal of Scientific Research,* **19**(4), pp. 460–471.

BARTEL, A.P., 1991. *Productivity Gains From the Implementation of Employee Training Programs.* Cambridge: National Bureau of Economic Research, Inc.

BARTLETT, G.D., KREMIN, J., SAUNDERS, K.K. and WOOD, D.A., 2016. Attracting applicants for in-house and outsourced internal audit positions: Views from external auditors. *Accounting Horizons,* **30**(1), pp. 143–156.

BONRATH, A. and EULERICH, M., 2024. A Study of Diversity and Performance in Internal Audit Teams: Insights from Chief Audit Executives. *Journal of International Accounting Research,* 23(3), pp. 1–25.

BOOTH, A., 2007. In search of the information literacy training 'half-life'. *Health Information & Libraries Journal,* **24**(2).

BURKE, M.J., SALVADOR, R.O., SMITH-CROWE, K., CHAN-SERAFIN, S., SMITH, A. and SONESH, S., 2011. The dread factor: how hazards and safety training influence learning and performance. *Journal of applied psychology,* **96**(1), pp. 46.

CHAMBERS, R., 2023-last update, The Big Myth: Only Accountants Make Good Internal Auditors. Available: https://www.richardchambers.com/the-big-myth-only-accountants-make-good-internal-auditors/ [17/04, 2025].

CHARLES, B.K. and FLORAH, O.M., 2021. A critical review of literature on employment selection tests. *Journal of Human Resource and Sustainability Studies,* **9**(3), pp. 451–469.

COHEN, A. and SAYAG, G., 2010. The effectiveness of internal auditing: an empirical examination of its determinants in Israeli organisations. *Australian Accounting Review,* **20**(3), pp. 296–307.

DALTO, J., 2015. Adult Learning Principles for Safety Training. *Occupational health & safety (Waco, Tex.),* **84**(7), pp. 80, 82.

DANIELS, S., 2003. Employee training: a strategic approach to better return on investment. *Journal of business strategy,* **24**(5), pp. 39–42.

DEJONCKHEERE, M. and VAUGHN, L.M., 2019. Semistructured interviewing in primary care research: a balance of relationship and rigour. *Family medicine and community health,* **7**(2),. eCollection 2019.

DELOITTE, 2021-last update, Internal audit competencies and the gaps that exist.
Available: https://www2.deloitte.com/us/en/pages/advisory/articles/assessing-internal-audit-competency.html [02/03, 2024].

DEROUEN, C. and KLEINER, B.H., 1994. New developments in employee training. *Work Study,* **43**(2), pp. 13–16.

DIBEKULU, D., 2020. An Overview of Data Analysis and Interpretations in Research, pp. 1–27.

DICKSON, R.K. and ISAIAH, O.S., 2024. An Exploration Of Effective Onboarding On Employee Engagement And Retention In Work Organizations. **9,** pp. 1–20.

DOYLE, L., BRADY, A. and BYRNE, G., 2009. An overview of mixed methods research. *Journal of research in nursing,* **14**(2), pp. 175–185.

ELNAGA, A. and IMRAN, A., 2013. The effect of training on employee performance. *European journal of Business and Management,* **5**(4), pp. 137–147.

ENDAYA, K.A. and HANEFAH, M.M., 2016. Internal auditor characteristics, internal audit effectiveness, and moderating effect of senior management. *Journal of Economic and Administrative Sciences,* **32**(2).

EULERICH, A. and EULERICH, M., 2020. What is the value of internal auditing? – A literature review on qualitative and quantitative perspectives. *MAB ('s-Gravenhage.Online),* **94**(3), pp. 83–92.

FABITO, B., TRILLANES, A. and SARMIENTO, J., 2021. Barriers and Challenges of Computing Students in an Online Learning Environment: Insights from One Private University in the Philippines. *International Journal of Computing Sciences Research,* **5**, pp. 441–458.

FAROOQ, M. and KHAN, M.A., 2011. Impact of training and feedback on employee performance. *Far east journal of psychology and business,* **5**(1), pp. 23–33.

GESKUS, D., 2023-last update, The importance of an effective training plan. Available: https://www.learned.io/en/hr-dictionary/the-importance-of-an-effective-training-plan/ [12/04, 2025].

HARRINGTON, C., 2004. *Internal Audit's New Role.* New York: American Institute of Certified Public Accountants.

HAZZI, O. and MALDAON, I., 2015. A Pilot Study: Vital Methodological Issues. *Business: Theory and Practice / Verslas: Teorija ir Praktika,* **16**, pp. 53–62.

HENLINE-HALL, J., 2024. Introduction to Quantitative and Qualitative Research Methods. *Radiologic technology,* **96**(1), pp. 45.

HOMMEY, C., MA, J., ASAMANI, L. and HANSON, P., 2020. The moderating effect of acculturation strategies on the relationship between newcomer adjustment and employee behavior. *Frontiers in Psychology,* **11**, pp. 2117.

IIA, 2025-last update, The IIA Celebrates the Effective Date of the Global Internal Audit Standards. Available: https://www.theiia.org/en/content/communications/press-releases/2025/january/the-iia-celebrates-the-effective-date-of-the-global-internal-audit-standards/ [21/04, 2025].

IIA, 2024a. *Building an Effective Internal Audit Function in the Public Sector,* pp. 12–13. Florida: The Institute of Internal Auditors.

IIA, 2024b. *Global Internal Audit Standards.* Florida: The Institute of Internal Auditors.

IIA, 2024c. *2024 North American Pulse of Internal Audit.* Florida: The Institute of Internal Auditors.

IIA, 2019-last update, Introduction to the Code of Ethics. Available: https://www.theiia.org/en/standards/what-are-the-standards/mandatory-guidance/code-of-ethics/ [12/04, 2025].

IIA, 2018-last update, Staffing Considerations for Internal Audit Activity. Available: https://www.theiia.org/en/content/position-papers/2018/staffing-considerations-for-internal-audit-activity/ [02/03, 2024].

IIA, n.d, Why Standards Matter. Available: https://www.theiia.org/en/standards/2024-standards/global-internal-audit-standards/why-standards-matter [17/04, 2025].

ISACA NOW, 2023-last update, The Career-Elevating Impact of CISA. Available: https://www.isaca.org/resources/news-and-trends/isaca-now-blog/2023/the-career-elevating-impact-of-cisa [17/04, 2025].

JOSHI, P.L. and ACHARYA, S., 2022. The Changing Role of Internal Auditor as Assurer, Assessor and Advisor, Ch 3, pp. 33–81.

KABIR, S.M., 2016. METHODS OF DATA COLLECTION. In Basic Guidelines for Research: An Introductory Approach for All Disciplines. Bangladesh: Book Zone Publication, Ch 9, pp. 201–275.

KANDEL, B., 2020. Qualitative Versus Quantitative Research. *Marsyangdi Journal,* **1**, pp. 1–5.

KEDENBURG, G., 2025-last update, What is motivational fit and is it really important in hiring?. Available: https://talogy.com/en/blog/what-is-motivational-fit-and-is-it-really-important-in-hiring/ [20/04, 2025].

KENNEDY, J., 2009. *The impact of training and development on job performance (A case study of the Judicial Service of Ghana)*, Kwame Nkrumah University of Science and Technology.

KEYTON, J., 2023. *Communication research: Asking questions, finding answers.* 4 edn. New York: McGraw-Hill.

KIRCHNER, M. and STULL, F., 2021. Employee onboarding and satisfaction in US manufacturing companies. *Industrial and commercial training,* **54**(2), pp. 267–278.

KLEIN, H.J. and WEAVER, N.A., 2000. The effectiveness of an organizational-level orientation training program in the socialization of new hires. *Personnel Psychology,* **53**(1).

KRAMER, M.W., 2010. *Organizational socialization: Joining and leaving organizations.* Malden, MA 02148, USA: Polity Press.

LAKSHMAN, M., SINHA, L., BISWAS, M., CHARLES, M. and ARORA, N.K., 2000. Quantitative vs qualitative research methods. *The Indian Journal of Pediatrics,* **67**, pp. 369–377.

LATIF, F., 2012. An integrated model of training effectiveness and satisfaction with employee development interventions. *Industrial and Commercial Training,* **44**.

LEAN, Q.Y., MING, L.C., WONG, Y.Y., NEOH, C.F., FAROOQUI, M. and MUHSAIN, S., 2018. Validation of online learning in pharmacy education: Effectiveness and student insight. *Pharmacy Education,* **18**, pp. 135–142.

LITTLE, A.C. and CRAIG ROBERTS, S., 2012. Evolution, Appearance, and Occupational Success. *Evolutionary Psychology, 10(5), 782-801.*

LUKACIK, E., BOURDAGE, J.S. and ROULIN, N., 2022. Into the void: A conceptual model and research agenda for the design and use of asynchronous video interviews. *Human Resource Management Review,* **32**(1), pp. 100789.

MAZHAR, S.A., 2021. Methods of Data Collection: A Fundamental Tool of Research. *Journal of Integrated Community Health,* **10**, pp. 6–10.

MCGRATH, C., PALMGREN, P.J. and LILJEDAHL, M., 2019. Twelve tips for conducting qualitative research interviews. *Medical teacher,* **41**(9), pp. 1002–1006.

MCKIM, C.A., 2017. The Value of Mixed Methods Research: A Mixed Methods Study. *Journal of mixed methods research,* **11**(2), pp. 202–222.

MEYER, A.M. and BARTELS, L.K., 2017. The Impact of Onboarding Levels on Perceived Utility, Organizational Commitment, Organizational Support, and Job Satisfaction. *Journal of organizational psychology,* **17**(5), pp. 10–27.

MICALLEF, N., 2020. *Internal auditing: in-house, co-sourced, or outsourced? : a study*, University of Malta.

MONFARED, J.H. and DERAKHSHAN, H., 2015. The comparison qualitative and quantitative research. *indian journal of fundamental and applied life sciences,* **5**(2), pp. 1111–1117.

OPADA, F., IBRAHIM, M., IRAWAN, A., AKBAR, M. and RASYID, A., 2024. Talent Acquisition Strategies: A Comprehensive Examination of Recruitment Policies for Organizational Success. *Advances in Human Resource Management Research,* **2**.

OXNER, T. and OXNER, K., 2006. Boom time for internal audit professionals. *Internal Auditor,* **63**(3).

PICKETT, S., 2011. *The Essential Guide to Internal Auditing.* 2nd edn. Wiley.

PIKE, K.L., 2014. New employee onboarding programs and person-organization fit: An examination of socialization tactics. Schmidt Labor Research Center, University of Rhode Island. Seminar Research Paper Series, **24**.

ROSE, J., 2016. The Top 7 Skills CAEs Want. *Building the Right Mix of Talent for Your Organization*. Florida: The IIA Research Foundation, pp. 1-12.

SANDELOWSKI, M., 2000. Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in nursing & health,* **23**(3), pp. 246–255.

SAUNDERS, M., LEWIS, P. and THORNHILL, A., 2023. Research Methods for Business Students. 9 edn. Harlow: Pearson Education Limited.

SAVIĆ-TOT, T., RUNIĆ-RISTIĆ, M. and ADŽIĆ, S., 2021. The analysis of the employee selection process in organizations in Central Serbia. *Ekonomija.Teorija i praksa (Online),* **14**(2), pp. 57–77.

SEEK, 2024-last update, 15 personal attributes examples. Available: https://www.seek.com.au/career-advice/article/15-personal-attributes-examples [20/04, 2025].

SEOL, I. and SARKIS, J., 2005. A multi-attribute model for internal auditor selection. *Managerial auditing journal,* **20**(8), pp. 876–892.

SEOL, I., SARKIS, J. and ZHIHONG (RITA) WANG, 2017. A cross-cultural comparative study of internal auditor skills: UK vs Korea. *Journal of Applied Accounting Research,* **18**(3), pp. 341–355.

SHABHA, G., 2004. An assessment of the effectiveness of e-learning on university space planning and design. *Facilities,* **22**(3), pp. 79–86.

SHAFFER, J.A. and POSTLETHWAITE, B.E., 2013. The Validity of Conscientiousness for Predicting Job Performance: A meta-analytic test of two hypotheses. *International Journal of Selection and Assessment,* **21**(2), pp. 183–199.

SINGH, R. and MOHANTY, M., 2012. Impact of training practices on employee productivity: A comparative study. *Interscience Management Review (IMR),* **2**(2), pp. 74.

SMITH, S.P., 2017. Adult Learners: Effective Training Methods. *Professional safety,* **62**(12), pp. 22–25.

STEYN, B. and PLANT, K., 2009. Education and training considerations applicable to internal auditors in South Africa. African journal of business management, **3**.

SWART, J., BROWN, S. and MANN, C., 2005. Human Resource Development: Strategy and tactics. United States: Elsevier Science & Technology.

THE INTERNAL AUDIT FOUNDATION and DELOITTE, 2021. *Assessing Internal Audit Competency: Minding the Gaps to Maximise Insights.* Internal Audit Foundation.

TORRES, E.N. and MEJIA, C., 2017. Asynchronous video interviews in the hospitality industry: Considerations for virtual employee selection. *International Journal of Hospitality Management,* **61**, pp. 4–13.

TORRINGTON, D., HALL, L., TAYLOR, S. and ATKINSON, C., 2020. *Human Resource Management.* 11 edn. United Kingdom: Pearson Education Limited.

TSINTZAS, E., 2016. Lifelong Learning for Internal Auditors. **2**, pp. 20-21.

TUNG-CHUN, H., 2001. The relation of training practices and organizational performance in small and medium size enterprises. *Education & Training,* **43**(8/9).

WANG, Y., 2024. Exploring Interview Dynamics in Hiring Process: Structure, Response Bias, and Interviewee Experience. *Advances in Economics, Management and Political Sciences,* **86**, pp. 94–102.

WANG, Y., MA, J., KREMER, G.Ü and JACKSON, K., 2019. An investigation of effectiveness differences between in-class and online learning: an engineering drawing case study. *International Journal on Interactive Design and Manufacturing (IJIDeM),* **13**.

WHITINGTON, T., 2024-last update, The new global internal audit standards for 2025. Available: https://www.ideagen.com/thought-leadership/blog/new-global-internal-audit-standards-for-2025 [21/04, 2025].

YAMOAH, E.E., 2013. Employee training and empowerment: A conceptual model for achieving high job performance. *Journal of education and practice,* **4**(13), pp. 27–30.

ZAMPA PARTNERS, 2025-last update, The Importance of Selecting the Right Internal Auditor. Available: https://zampapartners.com/insights/the-importance-of-selecting-the-right-internal-auditor/ [20/04, 2025].

ZHANG, D., ZHAO, J., ZHOU, L. and JR, J., 2004. Can E-learning Replace Classroom Learning? *Communications of the ACM,* **47**, pp. 75–79.

Regulatory

S.L.217.06., 2007. FAMILY REUNIFICATION REGULATIONS. Malta. Available: https://legislation.mt/eli/sl/217.6/eng [17/04, 2025].

APPENDICES

Appendix 3.1 Interview Schedule

This appendix presents the interview schedule utilised during the data collection process for this dissertation. It also indicates the number of responses for each Likert scale question, shown in italics

Section 1: Developing a Proficient Internal Audit Unit

1. To what extent are you involved in the recruitment process for internal auditors? *(with 0 being never and 4 being always).*

2. On average, how many times a year do you initiate the recruitment process for internal auditors?

3. When a vacancy arises, is the call for applicants issued internally, externally or a combination of both?

4.
   a) Do you typically seek more experienced internal auditors, or are you more open to hiring junior internal auditors?

   b) What is the minimum number of years of internal audit experience you require for senior and junior internal auditors?

5. In your team, how long does it typically take to:
   a. fill a vacant internal audit position?
   b. inform a candidate about offering/refusing a job for an internal auditor position following the final interview?

6. How important do you rate the following aspects when evaluating candidates during the recruitment and selection process? (*with 0 being not important at all and 4 being highly important, and adding comments, if any):*

A - Skills						
		Number of Interviewees = 14				
		Not important at all	Not important	Neutral	Important	Highly important
i.	analytical thinking	*0*	*0*	*1*	*3*	*10*
ii.	communication	*0*	*0*	*1*	*2*	*11*
iii.	accounting	*0*	*3*	*5*	*4*	*2*
iv.	risk management assurance	*0*	*0*	*3*	*7*	*4*
v.	information technology	*0*	*0*	*5*	*7*	*2*
vi.	industry-specific knowledge	*0*	*2*	*5*	*4*	*3*

vii.	data mining and analytics	*0*	*1*	*5*	*5*	*3*

B – Personal Characteristics						
		Number of Interviewees = 14				
		Not important at all	Not important	Neutral	Important	Highly important
i.	honesty	*0*	*0*	*0*	*0*	*14*
ii.	team player	*0*	*0*	*0*	*3*	*11*
iii.	adaptability	*0*	*0*	*1*	*7*	*6*
iv.	motivation	*0*	*0*	*1*	*8*	*5*
v.	fitting with entity culture and values	*0*	*0*	*0*	*8*	*6*
vi.	appearance	*1*	*0*	*6*	*6*	*1*
vii.	conscientiousness	*0*	*0*	*1*	*8*	*5*

7. Do your ratings in Question 6 vary materially with the level of the position being offered? *If so, please specify.*

8. Can you please explain the ideal educational background of candidates?

9. In your experience, is there any correlation between the level of educational background/certifications and the competency levels of the internal auditors?

10. To what extent do you agree with the following statements? (*with 0 being strongly disagree and 4 being strongly agree, and adding comments, if any):*

		Number of Interviewees = 14				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a.	Internal Audit Units need to be composed of individuals with diverse educational and professional backgrounds.	*0*	*0*	*2*	*8*	*4*

b. For optimal performance, internal audit units require not only professionals with strong financial expertise but also individuals skilled in other relevant areas.	*0*	*0*	*1*	*6*	*7*
c. Internal audit units need to be composed of individuals representing diverse genders and nationalities.	*4*	*2*	*6*	*2*	*0*
d. Diversity within internal audit units enhances overall performance.	*0*	*1*	*6*	*5*	*2*
e. My internal audit unit reflects sufficient diversity in educational backgrounds, professional backgrounds, gender, and nationality.	*0*	*1*	*2*	*6*	*5*

11. Please rate the competency level of internal auditors within your internal audit unit in the following areas (*with 0 being very low and 4 being very high, and adding comments, if any):*

	Number of Interviewees = 14				
	Very low	Low	Moderate	High	Very high
a. Agile auditing methodologies	*0*	*0*	*5*	*7*	*2*
b. Fraud investigations	*0*	*0*	*3*	*9*	*2*
c. Soft skills	*0*	*0*	*0*	*10*	*4*
d. Risk management	*0*	*0*	*2*	*8*	*4*
e. Security and privacy	*0*	*1*	*2*	*3*	*8*
f. Data analytics	*0*	*1*	*5*	*6*	*2*

g.	IT control frameworks	*0*	*1*	*3*	*7*	*3*
h.	Critical technologies, emerging risks and innovate knowledge areas *(such as cloud, virtual computing environments and disruptive technologies)*	*1*	*0*	*10*	*3*	*0*

12. In general, what competency gaps do you think are present within Maltese internal audit units?

Section 2: Onboarding and Continuous Training of Internal Auditors

13. Is the training plan implemented in your entity a structured and documented *one* (*vide Def1)*?

14.
    a. Can you describe how, if in any way, the following steps are determined in the implementation of the internal auditor training plan?
        - Needs Assessment
        - Training Methodology
        - Content Assessment and Feedback
    b. On average, how many hours of training do internal auditors undergo every year?
    c. Is such training completely or partially sponsored by your entity?
    d. Does such training take into account the different employees' background, experience, preferences and career goals?

15. Are the skills and competences of internal auditors reviewed periodically to determine any additional training that may be needed?

16. How effective do you find the following training methodologies? (*with 0 being very low and 4 being very high, and adding comments, if any):*

	Number of Interviewees = 14				
	Very low	Low	Moderate	High	Very high
i. on-the-job training	*0*	*0*	*0*	*0*	*14*
ii. e-learning	*0*	*1*	*5*	*6*	*2*
iii. attending and participating in professional conferences and seminars	*0*	*0*	*0*	*6*	*8*
iv. engaging in directed reading and self-study programmes	*0*	*0*	*7*	*6*	*1*

v.	receiving mentoring	*0*	*0*	*1*	*5*	*8*
vi.	conducting training audits and research projects	*2*	*3*	*4*	*4*	*1*
vii.	pursuing professional certifications	*0*	*0*	*3*	*5*	*6*

17. How is it ensured that the training being provided is effective for improving internal auditor proficiency?

18.
    a. Is specific training given to new internal auditors when onboarded, and if so, how many hours are typically dedicated to such training?
    b. Does such training also take sufficiently into account the new employees' background and experience?

19. To what extent do you agree with the following statements? (*with 0 being strongly disagree and 4 being strongly agree, and adding comments, if any):*

	Number of Interviewees = 14				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. In the current, rapidly changing business environment training is increasingly becoming essential.	*0*	*0*	*0*	*6*	*8*
b. Prolonged deficits in training, talent development, and staffing may hinder the entity's ability to evolve.	*0*	*1*	*2*	*4*	*7*

c. When employees recognise the entity's investment in their development, they become more motivated to work harder and perform better.	*0*	*1*	*4*	*3*	*6*
d. Training equips employees with the necessary information, skill sets and competences to perform tasks at the maximum potential, thus reducing the room for errors and mistakes.	*0*	*1*	*1*	*5*	*7*
e. Training involves sharpening employee thinking and creativity, this resulting in increased productivity levels.	*0*	*1*	*3*	*3*	*7*
f. There is a positive correlation between effective training programmes and employee productivity.	*0*	*0*	*2*	*6*	*6*
g. Effective training reduces employee turnover.	*1*	*5*	*5*	*3*	*0*

20. What other benefits, if any, have you noticed that training provides?

Section 3: Barriers and Recommendations

21.

a. In your view, what barriers, if any, may relate to the selection process currently being implemented by your internal audit unit?
b. In particular:
    I. Does the current shortage of qualified internal auditors in Malta constitute a major selection barrier?
    II. If so, is recruiting internal auditors from overseas countries contributing in tackling such a barrier?
c. What do you recommend for the elimination, or at least mitigation of such barriers, if any?

22.

a. In your view, what barriers, if any, may relate to the training currently being implemented by your internal audit unit?
b. In particular:
    I. Is cost containment a typical major barrier?
    II. Are there any major barriers in rendering training both engaging and interactive?
c. What do you recommend for the elimination, or at least mitigation of such barriers, if any?

Section 4: Respondent Characteristics

23. What is your age?
    - □ 18-20
    - □ 21-30
    - □ 31-40
    - □ 41-50
    - □ 51-60
    - □ 61 and over

24. What is your gender?
    - □ Female
    - □ Male
    - □ Unspecified

25. What is your nationality?

26.
    a. Total years working as an internal auditor =
    b. Years in the present entity as an internal auditor =

27.
    a. Please specify what professional certifications and/or qualifications, if any, you hold relating to internal auditing?
    b. Please specify what professional certifications, if any, you hold in areas beyond internal auditing?

28.
    a. What is the total number of employees working within your internal audit unit?
    b. Please distinguish between operational and administration staff.

Section A1: Definitions

Def1 – A structured and documented training plan is an organised and documented plan that clearly outlines the schedule, specifies the hours allocated per session, and assigns responsibilities.

Section A2: Likert Scale

0	1	2	3	4
Not important at all	Not important	Neutral	Important	Highly important
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Very low	Low	Moderate	High	Very high

Appendix 3.2 Survey

This appendix presents the survey that was distributed to IAors for the purpose of this dissertation. The number of responses for each Likert scale question is also presented in italics.

Section 1: Developing a Proficient Internal Audit Unit

Section Objective: To ascertain and assess the key characteristics that influence the selection of individuals forming the internal auditing teams in Maltese insourced internal audit units.

1. What professional degree/s, if any, do you hold? *(eg. Master in Accountancy)*

2. What professional certification/s, if any, do you hold relating to internal auditing? *(Select all that apply):*

   - ☐ Certified Internal Auditor
   - ☐ Certified Information System Auditor
   - ☐ Certification in Control Self-Assessment
   - ☐ Certified Government Auditing Professional
   - ☐ Certified Financial Services Auditor
   - ☐ Qualification in Internal Audit Leadership
   - ☐ Other _____

3. Does your entity encourage you to enhance your proficiency by obtaining additional certifications? *(with 0 being strongly disagree and 4 being strongly agree):*

Number of Respondents = 33				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	*2*	*3*	*8*	*19*

4. To what extent do you agree with the following statements?

	Number of Respondents = 33				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. Internal Audit Units need to be composed of individuals with diverse educational and professional backgrounds.	*3*	*1*	*0*	*11*	*18*

b. For optimal performance, internal audit units require not only professionals with strong financial expertise but also individuals skilled in other relevant areas.	*3*	*0*	*1*	*11*	*18*
c. Internal audit units need to be composed of individuals representing diverse genders and nationalities.	*0*	*4*	*15*	*9*	*5*
d. Diversity within internal audit units enhances overall performance.	*2*	*3*	*6*	*14*	*8*
e. My internal audit unit reflects sufficient diversity in educational backgrounds, professional backgrounds, gender, and nationality.	*2*	*3*	*4*	*14*	*10*

5. Please rate your level of competency in the following areas.

	Number of Respondents = 33				
	Very low	Low	Moderate	High	Very high
a. Agile auditing methodologies	*0*	*0*	*11*	*17*	*5*
b. Fraud investigations	*0*	*2*	*14*	*16*	*1*
c. Soft skills	*0*	*0*	*5*	*23*	*5*
d. Risk management	*0*	*0*	*6*	*21*	*6*
e. Security and privacy	*0*	*1*	*5*	*15*	*12*
f. Data analytics	*0*	*1*	*14*	*13*	*5*
g. IT control frameworks	*0*	*3*	*16*	*8*	*6*
h. Critical technologies, emerging risks and innovate knowledge areas *(such as loud, virtual computing environments and disruptive technologies)*	*0*	*7*	*13*	*10*	*3*

Section 2: Onboarding and Continuous Training of Internal Auditors

Section Objective: To ascertain and assess the development of the training plan, including the onboarding and continuous training methodologies currently in place in Maltese insourced internal audit units and the effectiveness of such methodologies;

6. To what extent do you agree with the following statements?

	Number of Respondents = 33				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. I feel involved in the development of the training plan.	*0*	*3*	*3*	*15*	*12*
b. The Chief Audit Executive leading the internal audit is aware of my skill gaps and provides training to address them.	*0*	*2*	*3*	*15*	*13*
c. I believe that the training is tailored to align with my background, experience, preferences and career goals.	*0*	*1*	*4*	*14*	*14*
d. I believe that the purpose of the training is clearly communicated, along with how it contributes to both my professional growth and personal development.	*0*	*1*	*6*	*16*	*10*
e. The Chief Audit Executive seeks my feedback following the training and asks for suggestions on how it can be enhanced.	*0*	*2*	*9*	*9*	*13*

f. Following the training, the extent of content retention is assessed through the use of a quiz.	*4*	*5*	*4*	*16*	*4*

7. Which training methodology do you find most effective and why?

8. Conversely, which training methodology do you find least effective and why?

9. To what extent do you find the training sessions both engaging and interactive? *(with 0 being never and 4 being always):*

Number of Respondents = 33				
Never	Rarely	Sometimes	Frequently	Always
0	*2*	*6*	*21*	*4*

10. In your view, did the training you received when onboarded, if any, take sufficiently into account your background and previous experience? *(with 0 being strongly disagree and 4 being strongly agree):*

Number of Respondents = 33				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
0	*5*	*7*	*15*	*6*

11. To what extent do you agree with the following statements?

	Number of Respondents = 33				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. In the current, rapidly changing business environment training is increasingly becoming essential.	*0*	*0*	*0*	*14*	*19*
b. Prolonged deficits in training, talent development, and staffing may hinder the entity's ability to evolve.	*0*	*0*	*1*	*17*	*15*

c. When I recognise the entity's investment in my development, I become more motivated to work harder and perform better.	*0*	*0*	*3*	*15*	*15*
d. Training equips me with the necessary information, skill sets and competences to perform tasks at the maximum potential, thus reducing the room for errors and mistakes.	*0*	*0*	*1*	*18*	*14*
e. Training involves sharpening my thinking and creativity, this resulting in increased productivity levels.	*0*	*0*	*2*	*19*	*12*
f. There is a positive correlation between effective training programmes and employee productivity.	*0*	*0*	*4*	*22*	*7*
g. Effective training reduces employee turnover.	*0*	*4*	*9*	*14*	*6*

12. What other benefits, if any, have you noticed that training provides?

Section 3: Barriers and Recommendations

Section Objective: To recommend how any existing barriers relating to the selection and training processes of internal auditors may be tackled so that such processes may become more effective.

13.
   a. In your view, what barriers, if any, may relate to the selection process currently being implemented by your internal audit unit? *(Selection is an element that falls within the recruitment process).*
   b. In your view, how can such barriers be mitigated if not eliminated?

14.
   a. In your view, what barriers, if any, may relate to the training process of internal auditors currently being implemented by your internal audit unit?
   b. In your view, how can such barriers be mitigated if not eliminated?

Appendix 3.3 Statistical Data Analysis

Friedman Test

The Friedman test was used to compare the mean rating scores of Likert scale questions across several related statements. The mean rating scores ranged from 0 to 4, with the numbers corresponding to the terms presented in Tables 3.3 and 3.7 respectively.

The null hypothesis asserts that the mean rating scores assigned to the statements are comparable and is accepted when the p-value is greater than 0.05. Conversely, the alternative hypothesis indicates that there are significant differences among the mean rating scores and is accepted when the p-value is less than 0.05.

This appendix presents bar graphs that supplement the statistical tables in Chapter 4, offering visual representations of the differences, whether significant or not, in the level of agreement with the statements, as well as illustrates the results of the Friedman test.

The error bar graphs display a 95% confidence interval for the mean rating scores given to the statements, assuming the study included all 19 known insourced IAUs. If the confidence intervals overlap, it indicates that the mean rating scores are similar and no significant differences exist. Conversely, if there is no overlap or only a slight overlap, the mean rating scores are considered significantly different.

Interview Schedule

Figures A3.1, A3.2, A3.3, A3.4, A3.5 and A3.6 depict the interviewees' levels of agreement with the respective statements. In each case, it is evident that some error bars do not overlap, indicating significant differences in the mean rating scores assigned to the statements. These observations are supported by p-values below the 0.05 significance threshold across all cases. Wherever such significances were found, they were referred to in Chapter 4.

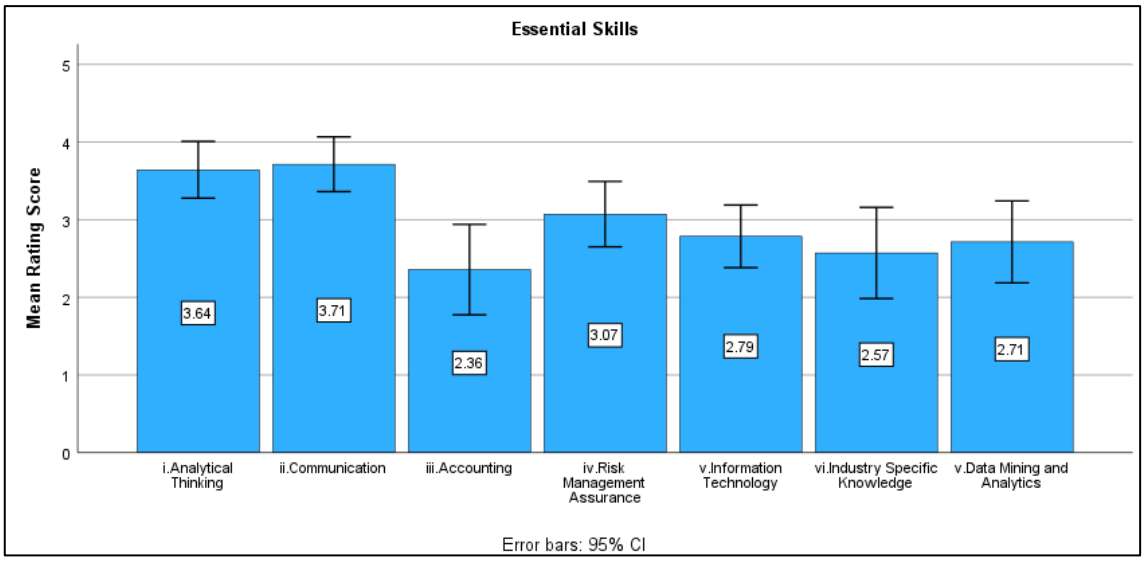

Figure A3.1: Essential skills

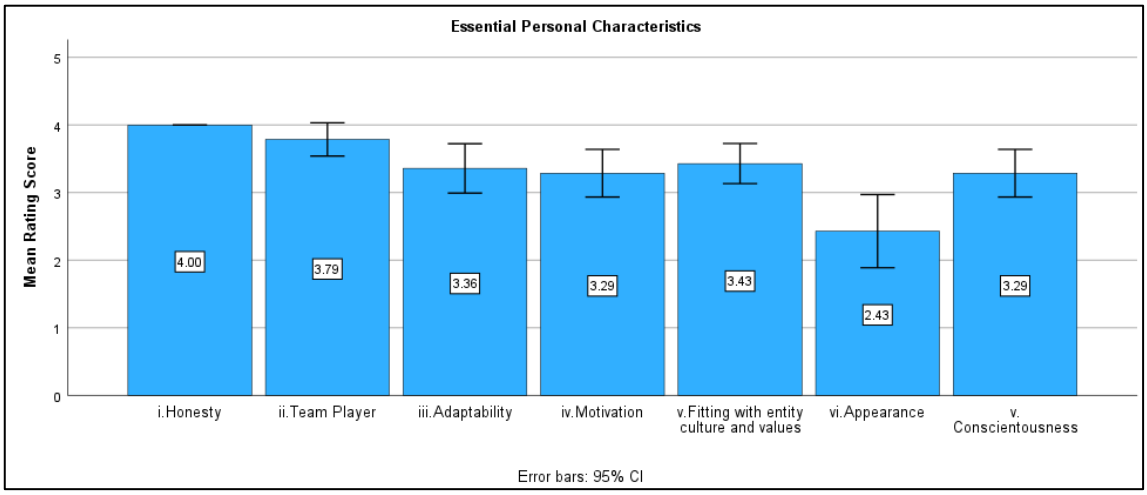

Figure A3.2: Essential personal characteristics

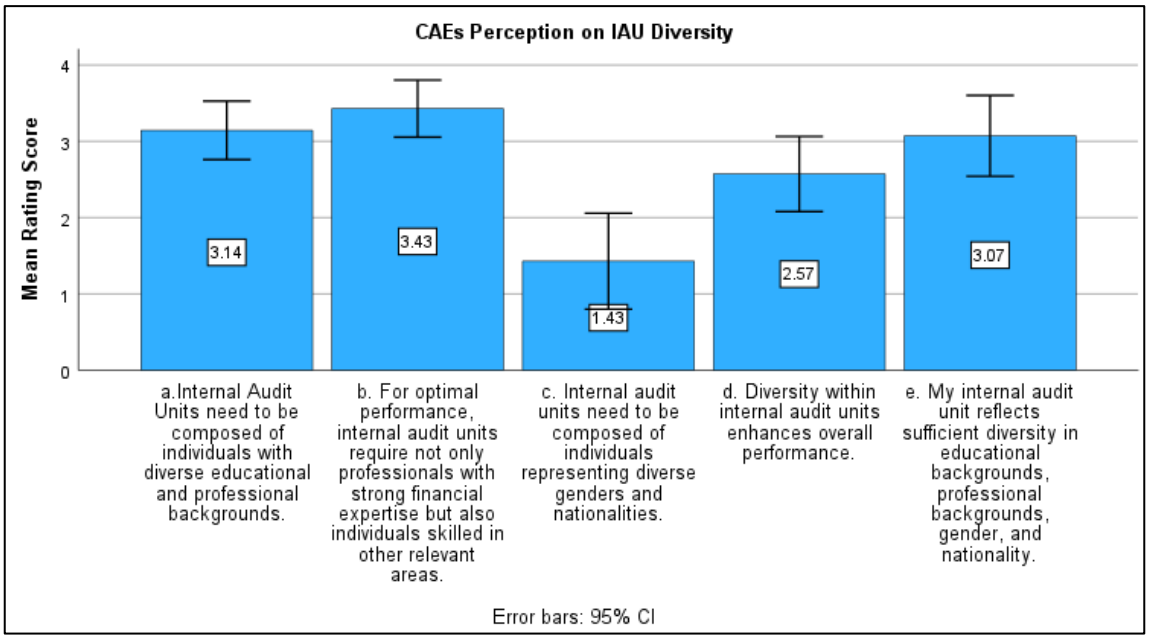

Figure A3.3: CAEs perception on IAU diversity

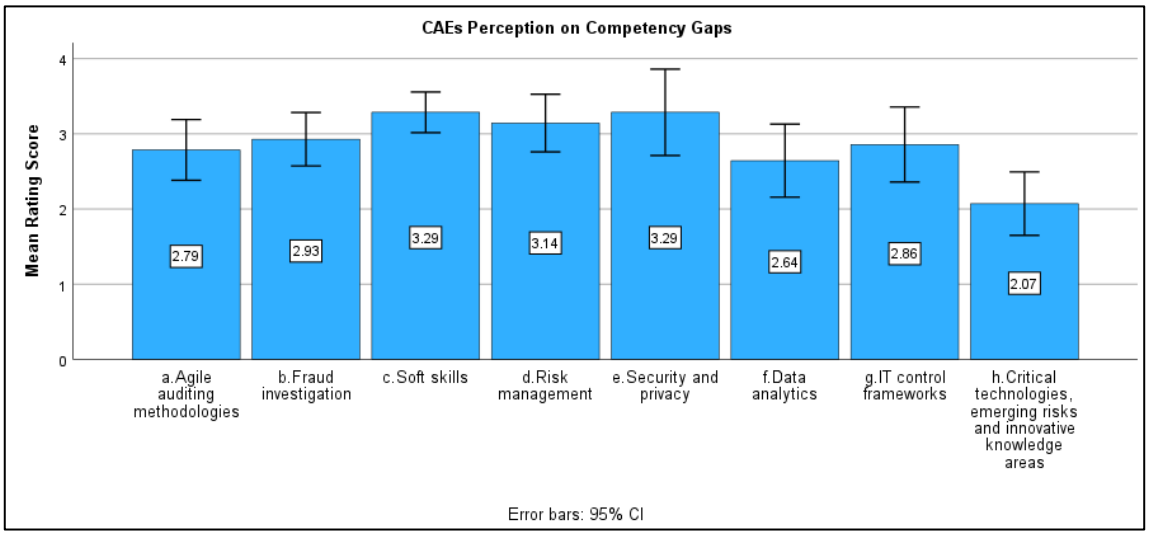

Figure A3.4: CAEs perception on IAU competency gaps

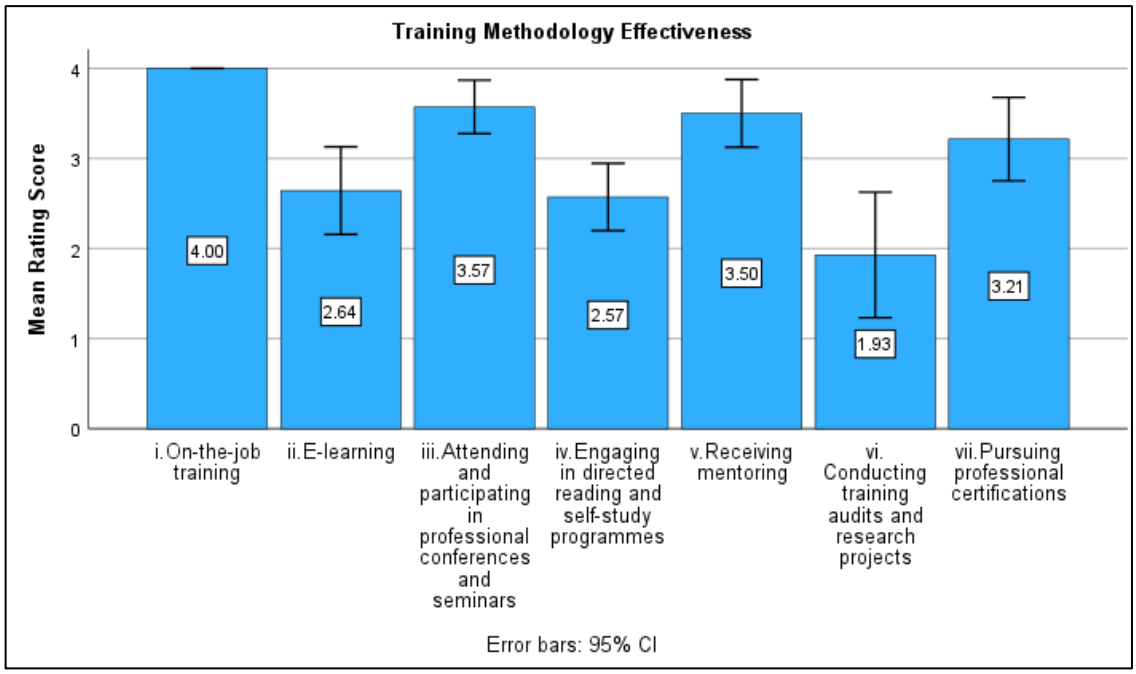

Figure A3.5: Training methodology effectiveness

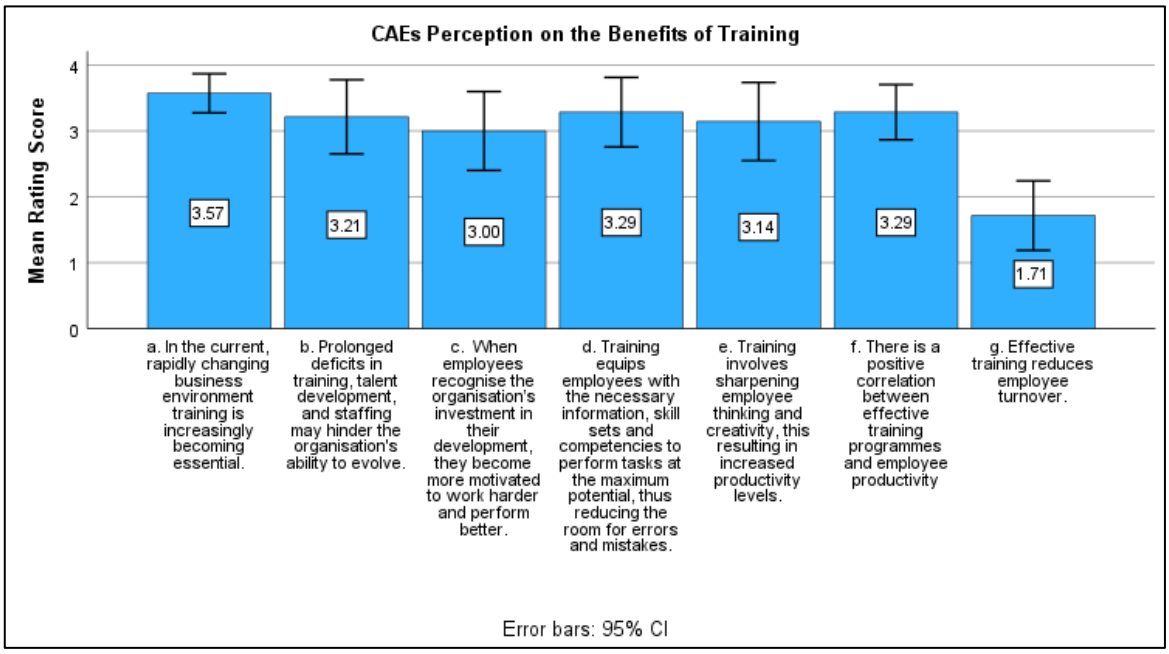

Figure A3.6: CAEs perception on the benefits of training

Survey

Figures A3.7, A3.8 and A3.9 depict the surveyresps' levels of agreement with the respective statements. In each case, it is evident that some error bars do not overlap, indicating significant differences in the mean rating scores assigned to the statements. These observations are supported by p-values below the 0.05 significance threshold across all cases.

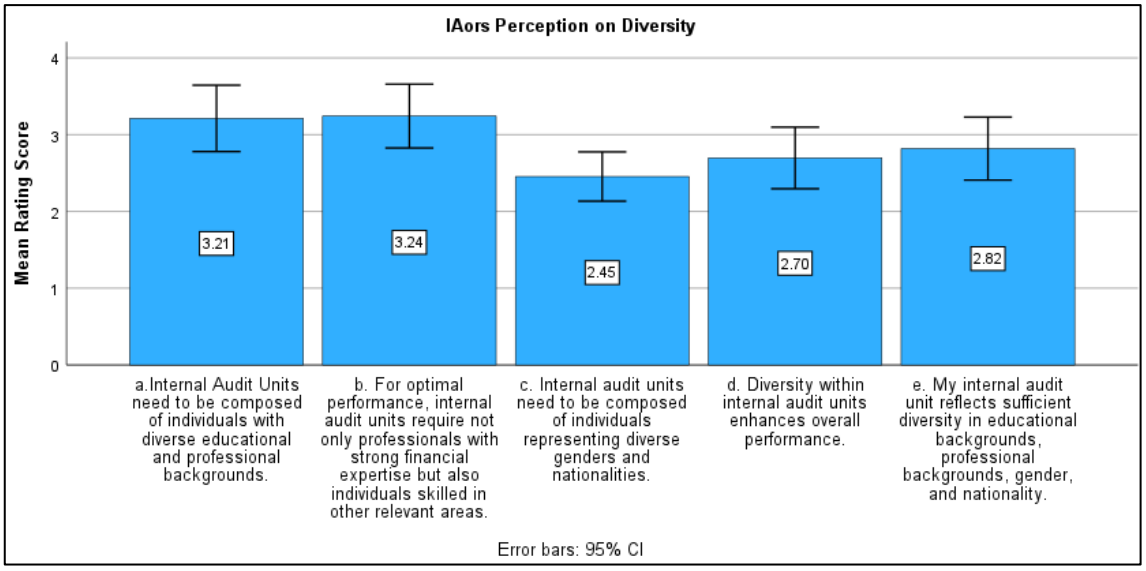

Figure A3.7: IAors perception on IAU diversity

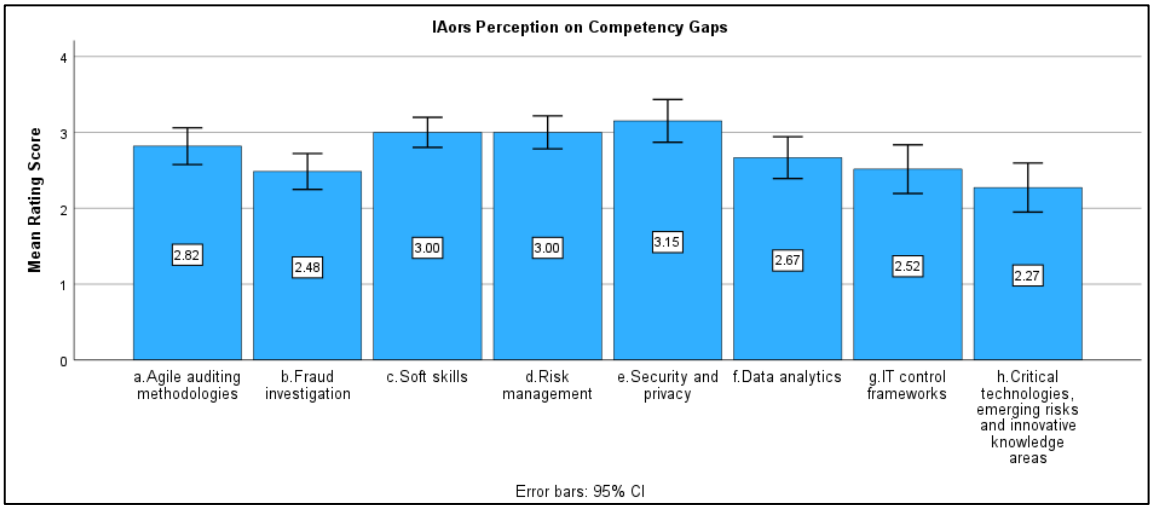

Figure A3.8: IAors perception on competency gaps

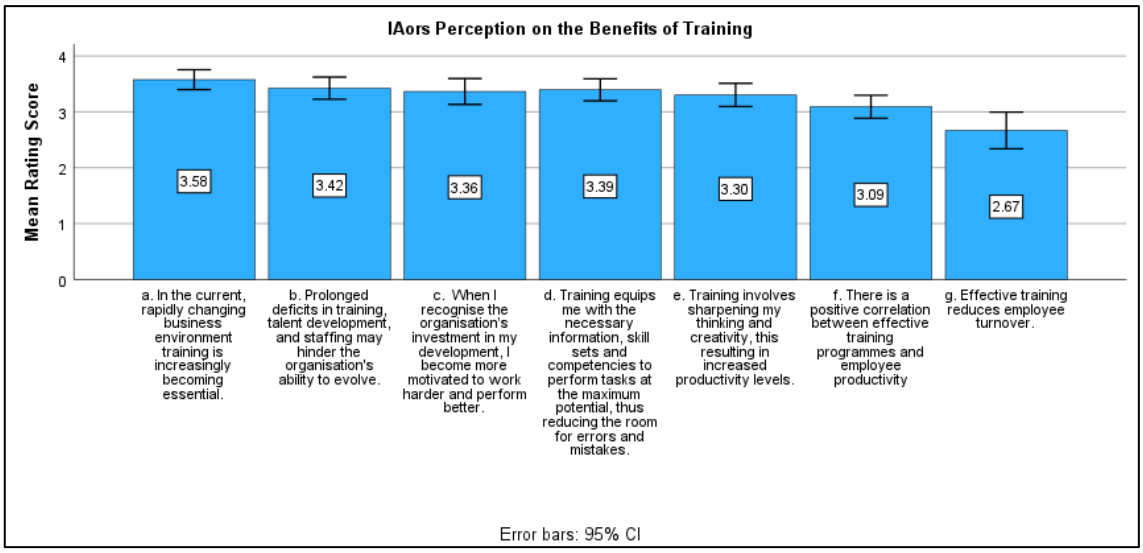

Figure A3.9: IAors perception on the benefits of training

Appendix 3.4 Letter of Introduction and Invitation to Participate

Figure A3.10 presents the Letter of Introduction and Invitation to Participate sent to interviewees.

L-Università ta' Malta

DEPARTMENT OF ACCOUNTANCY
Faculty of Economics, Management & Accountancy
University of Malta
Msida MSD 2080, Malta
Tel: +356 2340 2700
accountancy.fema@um.edu.mt
www.um.edu.mt/fema

LETTER OF INTRODUCTION AND INVITATION TO PARTICIPATE IN RESEARCH

23rd November 2023

Dear Sir / Madam,

This is to introduce Karla Naudi, a Master in Accountancy student at the Faculty of Economics, Management and Accountancy at the University of Malta.

The student is undertaking research within the Department of Accountancy regarding internal auditing. This research aims to explore *the selection and professional training of Maltese internal auditors*.

In this regard, the said student would like to invite you to contribute on this research project by participating in an interview covering aspects of this topic, providing relevant information and facilitating access to enable the delivery of surveys to employees within your organisation at your convenience.

This research is important and valuable in enhancing understanding of the subject area and helping practicing professionals and practitioners like yourself, as well as informing policy and support initiatives. The student would be happy to share with you general findings ensuing from this research.

The student is to ensure that any information provided will be treated in confidence, also in line with general Faculty research requirements and ethical obligations. A consent form will be separately provided. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions.

While I thank you beforehand for your consideration as well as your possible kind support and involvement in this important research, should you have any queries on this research please feel free to contact me via email at: accountancy.fema@um.edu.mt.

Yours sincerely,

Professsor Peter J Baldacchino
Department of Accountancy
FEMA, University of Malta

Figure A3.10: Letter of introduction and invitation to participate