

THE COMPETENCY AND AWARENESS LEVEL OF ANTI-MONEY LAUNDERING & COUNTER FINANCING TERRORISM (AML/CFT) RISK JUDGMENT AMONGST MALAYSIAN BANKING COMPLIANCE OFFICERS

Muhammad Nasrul Asyraf Azli¹, Rosmawati Haron^{2*}

¹Standard Chartered Bank,
Wisma Standard Chartered, Taman Teknologi Park, 57000, Malaysia

²Faculty of Accountancy, Universiti Teknologi MARA (UiTM),
Segamat Campus, 85000, Johor, Malaysia

*Corresponding Author

Email: ¹muhammadnasrulasyraf.azli@sc.com, ²Rosma741@uitm.edu.my,

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ABSTRACT

Literature studies unveiled a new issue about money laundering risk judgment, focusing on impaired decision-making to detect suspicious activities and the quality of suspicious transaction report (STR) submission to the Central Bank of Malaysia. To address this issue, the research aims to seek and to provide empirical evidence quantitatively on the different levels of competency and awareness amongst Malaysian banking compliance officers, factors that could significantly reflect their anti-money laundering and counter-financing of terrorism (AML/CFT) risk judgment outcome. The research also seeks to examine using the demographic profiles as the controlled variable to determine further the differences if demographic profiles could really play an important role in shaping AML/CFT risk judgment outcome. A series of questionnaires were distributed amongst Malaysian banking compliance officers using purposive and snowball sampling. 34 responses were returned within a month and were adequate to identify the suggested differences using non-parametric studies. The analyses of this research resulted in Malaysian banking compliance officers' competency and awareness levels being high and satisfactory. However, there were disparities amongst them derived from various demographic profiles, such as educational background which may lead to inconsistency of requirements in the compliance regulation. The limitation of this paper is that it only focuses on Malaysian banking compliance officers in view of their competency and awareness level. Future research should consider covering in much broader scope to address AML/CFT risk judgment issues and other factors that may cause poor AML/CFT risk judgment, such as the organisation's compliance program and corporate governance, training method, internal and external regulations which may lead to an impaired STR submission to the Central Bank of Malaysia.

Keywords: Anti-money Laundering, Awareness, Competency, Compliance Officers, Counter Financing of Terrorist, Risk Judgment

1.0 INTRODUCTION

Money laundering and terrorism financing are becoming serious issues and an increased threat due to the financial system's vulnerability. The money laundering issue is critical due to the effective operation of organized and transnational crime that affects a country's government, economy, and social well-being (McDowell & DAVIS, 2001). Similarly, terrorism

financing poses an even greater challenge due to terrorists' ability to use and purchase relevant weapons by transferring funds both legally and illegally through complex and innovative techniques (Acharya, 2009; Tofangfaz, 2012).

According to the Central Bank of Malaysia, money laundering converts funds such as cash and property from criminal activities to legitimize them. It is a process for cleaning 'dirty' money to disguise its criminal origin. The technique is similar to terrorist financing, where the terrorist laundered their gained assets through commercial and non-transparent trade (Forman, 2006). Both are for the commission of a crime in the future. This issue has been debated for decades on the severity of money laundering and terrorism financing that impacts the economy globally. The problem was highlighted in 1998 by the director of the International Monetary Fund (IMF), who presented the estimation that the total money being laundered was about two to five per cent of the Gross Domestic Product (GDP) (Camdessus, 1998).

The growing concerns over money laundering and terrorism financing resulted in the establishment of the Financial Action Task Force (FATF) by the G-71 summit, which was held in Paris in 1989. FATF were given the responsibilities to analyse money laundering and terrorism financing activities, proposing, measuring, and monitoring the anti-money laundering measures of its member countries and issued about forty recommendations to provide a comprehensive plan of action needed to fight against it (FATF, n.d.).

According to Isa et al. (2015), all banking institutions are now facing the vulnerability of money laundering and terrorism financing. Hence, Anti Money Laundering and Counter Financing Terrorism (AML/CFT) risk assessment is crucial, given that the bank would be exposed to a high level of risk due to the innate nature of banking operations. Ideally, a risk assessment involves making judgments about threats, vulnerabilities, and consequences; thus, appropriate judgment and balance are required in the conduct of money laundering and terrorism financing assessment (FATF, 2013). Therefore, a risk judgment is considered important to be part of its effectiveness.

Deloitte (2022) had stated that financial and credit institutions were fined almost USD 5 billion in 2022 for anti-money laundering (AML) issues, sanctions breaches, and deficiencies in their Know Your Customer (KYC) processes, bringing the total since the global financial crisis to almost USD 55 billion. Meanwhile, the U.S. Securities and Exchange Commission (SEC) has also mentioned in their press release in 2022 that they announced charges against Wells Fargo Advisors for failing to file at least 34 Suspicious Activity Reports (SARs) promptly between April 2017 and October 2021 – to which the Wells Fargo has agreed to pay USD 7 million to settle in their charges. Abdul Latif & Abdul-Rahman (2018) pointed out that two Islamic banks in Malaysia were compounded for MYR 1.05 million as the banks failed to comply with the Malaysian AMLA orders stated under Section 48 and Section 50. Based on these issues, part of the problem could be developed from the inadequacy in risk judgment conducted by the compliance officers, which may lead to an impaired STR filing and submission.

2.0 LITERATURE REVIEW & HYPOTHESES DEVELOPMENT

2.1 Compliance Officers & Suspicious Transaction Report (STR)

As defined by the Central Bank of Malaysia, a compliance officer is mainly responsible for ensuring that the reporting institution complies with AML/CFT requirements and is obliged to report STR and cash threshold reports (CTR) to the Central Bank. The Central Bank of Malaysia has stated that compliance officers are the reference point for anti-money laundering and counter-financing terrorism matters within the reporting institution and is legally required to submit STR on behalf of the reporting institution. The STR is a fundamental element of AML/CFT measures and the obligation to report it in Malaysia was introduced in 2002

(Rahman, 2013). According to Rahman (2013), it refers to a piece of information that would alert law enforcement to which the reported activity would be deemed to be suspicious which may indicate money laundering or terrorism financing.

Before submitting the STR, compliance officers require good risk judgment during AML/CFT assessment to detect suspicious activities. To achieve this, having the right competency and good awareness level are crucial. The recruitment functions play a significant role in enhancing the success of an organisational survival in competitive business environment (Dickson & Nusair, 2010). Besides, Human Resources (HR) are one of the important aspects in a company and Setyawati et al (2023) recommend on employee training for the job performance and satisfaction. As such, competent compliance officers may be hired and further be trained to match the requirement in the compliance sector, specifically for the anti-money laundering field.

The obligation to report suspicious transaction in Malaysia was highlighted in Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001 (Act 613) which provide the offense of money laundering and terrorism financing and the measures to be taken for its prevention. As the compliance officers are responsible to submit the STR, they need to be properly trained for their AML/CFT risk judgment. However, there could be a gap between the senior and the junior positions, experienced and inexperienced officers, and different background of the compliance officers.

Abdul Rani et al. (2022) mentioned that every bank must appoint a supervisory compliance officer whose authority, seniority, independence, and resources are guaranteed according to the FATF Recommendation 18. The compliance officer is also known as the Money Laundering Reporting Officer (MLRO) in international jurisdictions and is the key reference point of the business when it comes to AML/CFT (KPMG MALTA, 2023; Central Bank of Ireland, 2021).

To do so, these compliance officers generally require support from the compliance unit, which serves as the second line of defence, forming the second barrier in protecting their financial institutions. They are the financial crime compliance officers or anti-money laundering (AML) analyst and are often referred to as an investigator who works to investigate and to monitor suspicious activity (Abdul Rani et al., 2022). Their main duty is to identify red flags from the investigation and incorporate these findings into STR filing. Their role reflects duties imposed by The Central Bank of Malaysia but on a collective and smaller scale. Working with the bank's appointed compliance officer, the compliance unit officers are compelled to abide by AML/CFT policies, to understand the red flags, and to draft their findings in STR. The STR is then reviewed and approved by the appointed compliance officer, who will act as the general liaison of the bank toward The Central Bank of Malaysia.

However, according to Rahman (2013), it appears that the effectiveness of the STR system seriously depends on the professional knowledge and expertise of the compliance officer. This may include the expertise of the compliance unit officers. Tarmizi et al. (2022) highlighted that there is a significant gap between the senior management's and the junior's management's attitude regarding training received. While the attitude of senior management is generally positive, the junior staff has shown that anti-money laundering activities were difficult to them due to incomprehensive training (Ahmad Tarmizi et al, 2022; Simwayi & Guohua, 2011).

According to Tarmizi et al. (2022) in AML/CFT, competency requires a lot of experience and exposure. Even professional accountants might require more time before they can adequately detect money laundering activities. Regarding this, having lack of competency and awareness may threaten the compliance officer's risk judgment in detecting suspicious activities as their expertise may differ based on working experience, awareness, education

level, and the level of risk task. Therefore, this may impact their proficiency in determining a good judgment for money laundering and terrorism financing risk. Abdul Rani et al. (2022) stated that the financial crime compliance officers are responsible for related money laundering risk in their financial institutions. They should be well equipped with competencies, knowledge, and skills to evaluate AML/CFT risk assessment.

However, the Central Bank of Malaysia highlighted in the National Risk Assessment (NRA) 2017 that there are gaps in money laundering threat within the financial institutions in terms of their anti-money laundering compliance program concerning the quality of STR. In NRA 2020, banking institutions revealed to have a very high inherent risk for both money laundering and terrorism financing while the control measures for AML/CFT procedures are considered at an acceptable rate in Malaysia.

Nevertheless, the issue has been since a concern regarding the banking institutions anti-money laundering compliance program, due to significant gaps identified in the competencies between junior and senior compliance officers, therefore it may provide an impact to the compliance officers in their AML/CFT risk judgment for the quality of STR to be submitted. For this reason, this research attempts to find the gap amongst the overall Malaysian banking compliance officers in their AML/CFT risk judgment outcome by gauging their competency and awareness level.

2.2 AML/CFT Risk Judgment

Money laundering risk judgment is crucial for compliance officers to combat money laundering crime effectively, mainly using their ability (Jamil et al. 2022). The latter would be similar to counter terrorism financing risk judgment to combat terrorism financing. Nigam et al. (2018) stated that the word "risk judgment" is critical in avoiding errors based on the information assessed.

Compliance officers must have a good judgment to detect suspicious activities related to money laundering and terrorism financing. Their judgment will allow STR to be submitted in good quality. Such compliance officers must be "fit and proper" with purity, having personal integrity, and reputation criteria with decent competency, capability, and financial integrity (Central Bank of Malaysia, n.d.). Without having good judgment, the Malaysia's financial sector would be vulnerable to both money laundering and terrorism financing crime. Therefore, a good judgment is required as it deals with both certainty and uncertainty in the risk of decision-making. This would refer to judgment decision-making (JDM). As per Jamil et al. (2022), JDM in research area particularly in the banking industry is still having a significant gap and previous studies tend to concentrate on general money laundering case. As a result, the literature would have a greater demand for the concept of risk in decision making for banking institutions. Hence, it is concluded that AML/CFT risk judgment would be essential to the rule of decision making when it comes to assess both money laundering and terrorism financing risk.

To conduct an effective risk judgment, behavioural decision theory is one of the theories that can be used to formulate, to explain and to predict the judgment and decision-making phenomena. It is a widely divisible theory into those under certainty, uncertainty, and risk, including ignorance and ambiguity (Takemura, 2014). Behavioural decision theory could identify how compliance officers make their risk judgments and decision-making to report potential money laundering and terrorism financing activities. However, the main concern is whether their risk judgment and decision-making are accurate enough to address the possible arising of money laundering and terrorism financing activities when doing an AML/CFT investigation.

2.3 Competency

According to the National Institute of Health (NIH), competencies are the knowledge, skills, abilities, and behaviours contributing to individual and organizational performance. Earning competency may increase job market competitiveness opportunities (Yunos et al., 2023). It has been consistent with the finding from Vathanophas (2006) that job competency allows an individual to carry out a task effectively and is a set of behavioural patterns in a specific function or job.

As per Siddiqui et al. (2016), there are two types of competencies: behavioural and technical. Every job may include several of each. Technical competencies are easy to judge as these are related to knowledge and skills, thus known to others. Examples of technical competencies: able to troubleshoot problems, having analytical skill, safety compliant, and can fill out reports. On the other hand, behavioural competencies are related to attitude and traits, which are very difficult to estimate. Examples of behavioural competencies would be being courteous, motivating, having supervision ability, punctuality, and maintaining confidentiality. Both are essentials for AML/CFT risk judgment.

In banking institutions, competencies are usually important to detect money laundering activities in the first stage, mainly when onboarding the new clients, and to assess their risk level before writing the STR (Isa et al., 2015). When assessing the risk of money laundering, cognitive ability of banking institutions' officers is required to determine the red flags and cues that could indicate a person as a money launderer (Isa et al., 2015). This may be even harder for terrorism financing risk assessment as the proceeds of funds may derived from legal sources (Acharya, 2009; Tofangfaz, 2012). Competence is intrinsic as it may only be gathered through job and structured training.

Abdul Latif and Abdul-Rahman (2018) argued in their research that there are still barriers to implementing effective AMLA (Anti-Money Laundering Act) controls in banking institutions in Malaysia, such as the need for expert staff and budget allocation. Thus, this may mean the banking institutions in Malaysia are still lack of competencies in AML/CFT measures despite the report in NRA 2020 by the Central Bank of Malaysia that AML/CFT controls in Malaysian banking institutions are at an acceptable rate. When a compliance officer or an expert staff is hired, their demographic factors could play an important role in determining the AML/CFT risk judgment outcome, as it would impact the quality of STR submission.

Therefore, the research would like to assess whether Malaysian banking compliance officers have differences in their competency level which may significantly reflect their AML/CFT risk judgment outcome. The rationale that competency level is selected as the independent variable as these compliance officer's competencies may differ from each other, and each of them may produce different outcomes in decision-making, thus consistent with our proposed behavioural decision theory.

H₁: There is a difference in competency level amongst banking compliance officers in Malaysia that may significantly reflect their AML/CFT risk judgment outcome.

2.4 Awareness

Awareness is the perception and state or ability to perceive, to feel, or to be conscious of events, objects, or sensory patterns and is classified without necessarily implying understanding (Ghafoor, 2012). A risk assessment would involve judgment that involves

anchoring and adjusting heuristic rules of thumb; for example, self-own knowledge will be used as the anchor while other people's knowledge will be adjusted for perceived differences in the knowledge gap, resulting in awareness. (Presutti, 1995).

In term of AML/CFT, ACAMS stated AML/CFT awareness and compliance are integral to meeting regulatory requirements. Regulated entities should ensure their employees are aware of anti-money laundering practices to identify AML/CFT risks in their day-to-day roles. As money laundering and terrorism financing are continuously increasing and changing in its modus operandi, involves the risk extent, and poses a threat indefinitely, banking institutions' staff need to continuously adapt to new knowledge and skills when assessing money laundering risk (Isa et al. 2015).

In Malaysian context, Shanmugam & Thanasegaran (2008) stated that Malaysia recognizes the importance of the decree that the person involved in anti-money laundering activities in financial institutions are equipped with the necessary expertise and skill. They concluded that continuous training programs are conducted, which include AML/CFT investigative skills and awareness, forensic accounting, policy formulation, suspicious transactions analysis, asset forfeiture and mutual legal assistance for criminal matters.

Even so, this is inconsistent with the findings from Omar et al. (2015), which had stated that there is less much of awareness campaign by the Central Bank of Malaysia to educate the Designated Non-Financial Businesses and Professions (DNFBPs), which has led to inadequate knowledge in the accounting profession to submit the STR. These findings could be adversely applied to compliance officers and other professionals such as lawyers and auditors, which require their abilities to mitigate the potential of money laundering threats and submit the STR. The deputy governor of the Central Bank of Malaysia commented in The Star Malaysia newspaper (2023) that company secretaries from DNFBP's sectors only submitted an average of 11 STRs annually which is a concern as there are more than 4,000 company secretaries in Malaysia.

Regardless, Abdul Latif and Abdul-Rahman (2018) stated that the Malaysian banks compliance staff still yet to develop proper AML/CFT awareness and concluded the outcome of their qualitative research; that banks can collaborate with local media to increase public awareness and education regarding money laundering and terrorism financing to ensure that the public is aware of the effects and consequences if they are involved in financial crime. Secondly, the banks should also invest in employee training program to increase AML awareness and sufficient resources in the compliance unit. This is important as the current trend of money laundering and terrorism activities involves digital assets and cryptocurrencies, which now causes a new global concern and require a new kind of assessment and skills (Hossain, 2023). Thus, continuous awareness campaigns in AML/CFT must be conducted to ensure Malaysian banking compliance officers are adequately aware of multiple latest trends and could build their competencies and skills.

According to Tarmizi et al. (2023), in money laundering, knowledge of business, finance, and accounting will attract money launderers to approach professional accountants to assist them in money laundering activities. Money launderers opt for professionals like accountants and lawyers to facilitate their activities due to their comprehensive knowledge and awareness level to avoid being suspected of their financial crime activities. Sallaberry et al. (2023) mentioned that those from different backgrounds other than accounting may produce low awareness rates and continue to contribute to low STR reporting rates. In term of banking staffs, incompetencies hired in the bank's institutions may cause an impact in the Malaysian financial stability due to their low awareness in AML/CFT measures.

Therefore, the research would like to assess whether Malaysian banking compliance officers have differences in their awareness level which may significantly reflect their AML/CFT risk judgment outcome. The rationale awareness level was selected as the independent variable for this research as their awareness may differ from each other due to factors of exposure to AML/CFT risk and practices such as training, knowledge, and education. Each of them may produce different outcomes in decision-making. This supported our proposed behavioural decision theory to which the compliance officers may at least be aware of some training, knowledge, and education regarding AML/CFT field.

H₂: There is a difference in awareness level amongst banking compliance officers in Malaysia that may significantly reflect their AML/CFT risk judgement outcome.

3.0 METHODOLOGY

This research employs comparative quantitative method as it is appropriate to identify the differences in competency and awareness level amongst Malaysian banking compliance officers in their AML/CFT risk judgment. The objectives of this research are to examine both competency and awareness levels amongst the Malaysian banking compliance officers that could significantly reflect their AML/CFT risk judgment outcome and to explore the differences in their competency and awareness based on demographic factors such as gender, age, highest qualification, AML/CFT accreditation, working experience, educational background, and position.

A comparison is made among them to note the significance via the use of mathematical representation, including functional relations between variables. The research framework was then developed and solely focused on the competency and awareness level as the independent variables. These variables were chosen as they have a certain degree of relationship with AML/CFT risk judgment which is the dependent variable. The dependent variable would not have any measurement measured but the independent variables will be measured amongst the compliance officers as the result of significant differences may reflect the outcome of their AML/CFT risk judgment. Moreover, level was added to each independent variables to indicate a scale in them.

The demographic factors are also used and acted as the controlled variable in this research which are gender, age, highest qualification, educational background, AML/CFT Accreditation, work experience and position. The rationale of the demographic factors was selected as each could be compared within their respective groups to provide significant differences in competency and awareness that may reflect in AML/CFT risk judgment outcome. In the outcome of this research, both competency and awareness level will be measured along with demographic factors to note if demographic factors could play an important role to further determine and reflect AML/CFT risk judgment outcome.

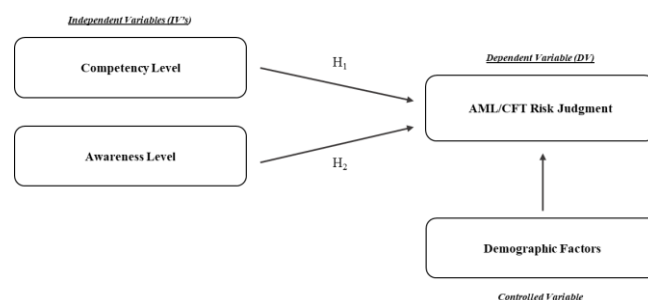


Fig 1. Research Framework

For data collection, the research was designed by having three sections in the measurement questionnaire. Section A covered the demographic profiles, Section B covered the Competency Level, and Section C covered the Awareness Level. There is no measurement for AML/CFT risk judgment as the result from competency and awareness level will significantly reflect the AML/CFT risk judgment outcome. The questionnaires contain 16 questions for competency level and 14 questions for awareness level instruments, resulting in 30 questions for both variables. The demographic profiles were also covered in ratio and categorical scale to identify groups among the bank's compliance officers via 7 sections which are gender, age, highest qualification, educational background, AML/CFT accreditation, working experience and position.

The set of instruments on competency and awareness were replicated and modified from Khan et al. (2021) and Omar et al. (2015) to suit the measurement better. Interval and 5 Likert scales (1-5) were utilized in the questionnaire for both independent variables. The compliance officers were asked to rate their responses based on a five-point Likert scale from 1-5 in which '1' indicates strongly disagree while '5' indicates strongly agree. The level of competency and awareness will be measured from 1-5 which '1' indicates as unacceptable, '2' indicates as weak, '3' indicates as normal, '4' indicates as satisfactory and '5' indicates as excellent. The questionnaires were distributed to 120 compliance officers between May-June 2023 and thirty-four responses were returned within a month. This sample size, however, is considered adequate based on the rule of thumb, focusing sample sizes of more than 30 and less than 500, which would be acceptable for most research (Roscoe, 1975; Omar et al., 2015).

4.0 RESULTS & DISCUSSIONS

Table 1 shows the demographic profiles of 34 respondents in this research. The respondent's gender was equal, having 17 counts for both male and female. For age, there are three definite age groups: 21-30 years old (14 counts, 41.2%), 31-40 years old (17 counts, 50%) and 41-50 years old (3 counts, 8.8%).

The highest qualification has four types: the Diploma, Bachelor's Degree, Master's Degree and Others. Diploma holders have 2 counts (5.9%) from the 34-sample size. Bachelor Degree holders have 20 counts (58.8%) of respondents, being the highest to participate in this research. Master's Degrees have 10 counts (29.4%), while another type of Highest Qualification has 2 counts (5.9%) to participate in this research. The result indicates that bank compliance officers in Malaysia were at least to have a Bachelor's Degree as their Highest Qualification to perform the job. The educational backgrounds have six types of fields: Accounting, Business & Management, Engineering, Media & Creative Arts, Medical & Healthcare and Others. Respondents with an Accounting background represent 3 counts (8.8%), while Business & Management has 10 counts of respondents (29.4%) in this 34-sample size. Each educational background in the Engineering, Media & Creative Arts and Medical Healthcare fields has only 1 respondent (2.9%). Surprisingly, Other types of education background were among the most, with 18 counts (52.9%) in total in the sample size. This could indicate that there is no requirement for specific educational background for bank's compliance officers in Malaysia to be hired to perform AML/CFT functions as opposed to Accounting and Business & Management fields which would be the most appropriate and relevant to the job sector.

Table 1. Demographic Profiles

		<u>Frequency (N)</u>	<u>Frequency (N %)</u>
Gender	Male	17	50.0%
	Female	17	50.0%
	Total	N: 34	
Age	21-30 years old	14	41.2%
	31-40 years old	17	50.0%
	41-50 years old	3	8.8%
	Total	N: 34	
Highest Qualification	Diploma	2	5.9%
	Bachelor's degree	20	58.8%
	Master's degree	10	29.4%
	Others	2	5.9%
	Total	N: 34	
Educational Background	Accounting	3	8.8%
	Business & Management	10	29.4%
	Engineering	1	2.9%
	Media & Creative Arts	1	2.9%
	Medical & Healthcare	1	2.9%
	Others	18	52.9%
	Total	N: 34	
AML/CFT Accreditation	CAMCO	5	14.7%
	ACAMS	2	5.9%
	AICB	7	20.6%
	None	20	58.8%
	Total	N: 34	
Work Experience	Below 1 year	1	2.9%
	1 to 2 years	4	11.8%
	3 to 5 years	9	26.5%
	6 to 10 years	17	50.0%
	Above 11 years	3	8.8%
	Total	N: 34	
Position	Senior Management	2	5.9%
	Middle Management	7	20.6%
	Senior Executive	14	41.2%
	Executive	10	29.4%
	Non-Executive	1	2.9%
	Total	N: 34	

N population

The same Table 1 shows AML/CFT Accreditation. Most compliance officers, 20 out of 34 (58.8%) in the sample size, have yet to complete any accreditations. 2 respondents (5.9%) have ACAMS, and 7 have AICB accreditation. Meanwhile, 5 respondents have CAMCO accreditations (14.7%).

For the demographic profile of working experience, 17 respondents (50%) have at least 6 to 10 years of working experience. 9 respondents (26.5%) have at least 3 to 5 years of working experience. 3 respondents (8.8%) have more than 11 years of working experience, while 1 respondent who participated in this research has below than 1 year of working experience.

Lastly, the final demographic profile covers for working positions of the bank's compliance officers. In contrast, the highest frequency is 14 counts (41.2%) of respondents being as senior executives, 10 counts (29.4%) of respondents are employed as executives, 7 respondents (20.6%) are involved in Middle Management and 2 (5.9%) are engaged in Senior

Management. There is also 1 respondent (2.9%) who holds the work position of a non-executive banking compliance officer in the 34-sample size.

Table 2. Descriptive Statistics for Competency Level

	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>
1. Identifying and verifying the identity of customers	34	1.00	5.00	4.5294	.82518
2. Monitoring customer transactions	34	1.00	5.00	4.6176	.85333
3. Considering suspicious transactions	34	1.00	5.00	4.6176	.81704
4. Preparing and submitting reports	34	1.00	5.00	4.5000	.86164
5. Risk-based approach during investigation	34	1.00	5.00	4.6176	.77907
6. Able to identify and mitigate risk	34	1.00	5.00	4.5588	.78591
7. Able to troubleshoot issues (case complexity, system issues, etc)	34	1.00	5.00	4.2059	.97792
8. Escalating AML/CFT cases to higher level	34	1.00	5.00	4.5588	.85957
9. Reviewing AML/CFT report	34	1.00	5.00	4.2941	.90552
10. Performing Quality Assurance on AML/CFT report	34	1.00	5.00	4.2647	.86371
11. Providing AML/CFT staff training and coaching	34	1.00	5.00	4.0882	1.21525
12. Participate in AML/CFT projects	34	2.00	5.00	4.1176	.91336
13. Setting up and maintaining AML/CFT reporting unit	34	1.00	5.00	3.8235	1.21781
14. Setting up and updating AML/CFT system	34	1.00	5.00	3.6765	1.27257
15. Setting up and updating policies and procedures	34	1.00	5.00	3.8235	1.26660
16. Setting up recommendation on work improvement	34	1.00	5.00	4.1765	1.05803

N population, M mean, SD standard deviation

The descriptive statistics for Table 2 shows for Competency Level as one of the independent variables. Question number 2 (monitoring customer transactions), 3 (considering suspicious transactions), and 5 (risk-based approach during investigation) have the highest similar mean value of 4.6176. The result implies that most banking compliance officers in the sample size of 34 agreed with the statements as these would be their main competency in conducting AML/CFT Risk Judgment, whereas they will also need to monitor their customer's transactions and consider whether the transactions are suspicious. The compliance officers must conduct a risk-based approach during an investigation suitable to the risk appetite when encountered. The second highest questions are number 6 (able to identify and mitigate risk) and 8 (escalating AML/CFT cases to a higher level), have a mean value of 4.5588. Being the second highest questions, the result indicates that the compliance officers can identify and can mitigate risks that present accordingly. At the same time, their job requires them to escalate AML/CFT cases to a higher level. This question suggests the risk their banks face, in which further action could be taken on a higher level, such as filing a STR. These questions were considered mandatory and indicated a requirement of competency for the compliance officers to justify the risk and decide the course of action for it as to whether to mitigate or to escalate it.

The lowest mean with a value of 3.6765 would be question number 14 (setting up and updating AML/CFT system), which indicates that the bank's compliance officers may have less competency in this question. This could be that the competency for this question would be related to the Information Technology supervisory role, which required the expertise of a data engineer, whereas not all compliance officers would have them. As the responses were more than '3', which means 'Neutral', they almost agreed on having the right knowledge about setting up and updating the AML/CFT system. The second lowest means with a value of 3.8235 would be question number 13 (setting up and maintaining AML/CFT reporting unit) and 15 (setting up and updating policies and procedures). The results suggest that both questions were related to managerial roles in which, based on the demographic profiles for work positions (middle and senior management), only a few of the banking compliance officers in

the sample size of 34 may have these competencies resulting slightly in agreeing more than '3' from 'Neutral'.

Table 3. Descriptive Statistics for Awareness Level

	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>
1. I am aware the definition of AML/CFT	34	2.00	5.00	4.7059	.62906
2. I am aware of AML/CFT typologies	34	2.00	5.00	4.5882	.65679
3. I am aware of AML/CFT trends	34	3.00	5.00	4.5882	.55692
4. I am aware of AML/CFT regulations (Internal & External)	34	2.00	5.00	4.4118	.82085
5. I am aware of meaningful, shared purpose and clearly understand my roles	34	2.00	5.00	4.5882	.70141
6. I am aware and know how to communicates effectively among the team and other business units	34	2.00	5.00	4.4706	.78760
7. I am aware and able to address issues between myself and team without involving the team leader	34	1.00	5.00	4.2647	.96323
8. I am aware and manages confidential and nonconfidential information appropriately	34	1.00	5.00	4.5588	.85957
9. I am aware of my working flexibility so that I can adapt to any changing needs	34	1.00	5.00	4.5294	.82518
10. I am aware my AML/CFT team has established trusting and supportive relationships with other business units	34	1.00	5.00	4.4412	.82356
11. The increase in AML/CFT complexity requirements resulted in myself being aware of multiple skills which can be applied to reviewing work. (i.e. analysis skill)	34	1.00	5.00	4.5588	.82356
12. AML/CFT training and quality assurance programs are regularly conducted to provide awareness of knowledge and skills to myself	34	1.00	5.00	4.5294	.86112
13. Training or participating any AML/CFT activities (seminars/webinars/etc) can expand my knowledge, skills, and professional competencies	34	1.00	5.00	4.4706	.82518
14. I am aware I need to understand the overall regulatory requirements, AML/CFT program and activities which allow myself to successfully perform an effective AML/CFT investigation.	34	2.00	5.00	4.5588	.66017

N Population, M mean, SD standard deviation

The descriptive statistics for Table 3 show another independent variable: the Awareness Level. The highest mean value for this independent variable would be question number 1 (I am aware of the definition of AML/CFT), with a score of 4.7059. This indicates that working as bank's compliance officers is one of the main areas of expertise in AML/CFT, the respondents most likely were aware of the definition of AML/CFT as this awareness would be the most required and mandatory knowledge for them to perform in their expertise. Hence, the selection was almost close to strongly agreeing with the question. The minimum value is '2', in which a respondent disagreed with knowing the definition of anti-money laundering and counter-terrorism financing, while the maximum value is '5', indicating strongly agree.

Secondly, the second highest question in the independent variable of Awareness Level with a mean value of 4.5882 would be item number 2 (I am aware of AML/CFT typologies), 3 (I am aware of AML/CFT trends) and 5 (I am aware of meaningful, shared purpose, and clearly understand my roles). The results strongly imply the correlation between the items that bank's compliance officers need at least to be knowledgeable in AML/CFT typologies and trends and include an understanding of their duties and functions so that they may perform an effective AML/CFT Risk Judgment. As such, resulting almost too strongly agree with their awareness level.

The lowest mean value for this independent variable would be question number 7 (I am aware and able to address issues between myself and the team without involving the team leader), with a score of 4.2647, to which the result implies at least an agreement of the statement. However, as this question resulted in being the lowest, it could also indicate that the bank’s compliance officers may need help to rectify issues among their team without involving the intervention of their leader. The second lowest mean value in Awareness Level would be instrument number 4 (I am aware of AML/CFT regulations (Internal & External)) with a score of 4.4118. As a result, it is the second lowest agreement of the statement, it could indicate that the understanding of AML/CFT regulations for both internal & external could be challenging.

Table 4. KMO, Bartlett's, Reliability & Normality Test

	KMO Test	Bartlett's Test	Cronbach Alpha	Normality Test		N of Items
				Kolmogorov-Smirnov	Shapiro Wilk	
Competency Level	.741	<.001	.935	.045	<.001	16
Awareness Level	.871	<.001	.980	<.001	<.001	14

Table 4 presented the KMO, Bartlett's, Reliability & Normality Test. The KMO Test for Competency and Awareness Level have result scores of .741 and .871 which are above > 0.5 as the rule of thumb for suitability of Factor Analysis. Bartlett's Test of Sphericity supports this with the significant result of <.001, further indicating a correlation matrix between the set of items that can be grouped independently. The Cronbach Alpha for Competency and Awareness Levels have scores of .935 and .980, respectively, to which all instruments were successfully constructed under a single concept in each variable.

Lastly, the tests of Normality conducted revealed a significant value of .045 for competency and <.001 for awareness level under the Kolmogorov-Smirnov normality test. Both Shapiro-Wilk tests revealed <.001 significant level. Based on a standard significant value of .05, the results of these Normality tests indicate the assumption for Parametric studies was not met. Hence non-parametric studies would be useful for this condition. As a result, the research will proceed with non-parametric testing for statistical and inferential analyses.

Table 5. Rotated Factor Matrix for Competency Level

	Factor		
	1 Process	2 Supervisory	3 Training
1. Identifying and verifying the identity of customers	.719		
2. Monitoring customer transactions	.880		
3. Considering suspicious transactions	.915		
4. Preparing and submitting reports	.836		
5. Risk-based approach during investigation	.908		
6. Able to identify and mitigate risk	.916		
7. Able to troubleshoot issues (case complexity, system issues, etc)	.724		
8. Escalating AML/CFT cases to higher level	.875		
9. Reviewing AML/CFT report	.726		
10. Performing Quality Assurance on AML/CFT report	.761		
11. Providing AML/CFT staff training and coaching			.861
12. Participate in AML/CFT projects		.623	
13. Setting up and maintaining AML/CFT reporting unit		.902	
14. Setting up and updating AML/CFT system		.835	
15. Setting up and updating policies and procedures		.836	
16. Setting up recommendation on work improvement		.710	

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Table 5 shows the Rotated Factor Matrix for Competency Level. A suppression of 0.5 was made to make the factors more distinguishable, and hence, three factors were formed and grouped as noted, which comprise process-based, supervisory, and training-based competencies. Based on the factors, process-based competencies mean the general routines of AML/CFT investigation for all bank’s compliance officers to perform in their duties, while supervisory-based competencies focus on the managerial level to handle a reporting unit, internal regulations, projects, and work improvement to streamline better the AML/CFT processes and workflows in an organisation. Lastly, it is also required to have training-based competency, so the bank’s compliance officers can conduct training for their peers or juniors accordingly. The factors generated from the instruments were above satisfactory, having higher values correlated with each other. Thus, the research concludes that Competency Level in this study was divided into the above respective factors.

Table 6. Rotated Factor Matrix for Awareness Level

	Factor	
	1	2
	Requirement of AML/CFT Tasks	Requirement of AML/CFT Knowledge
1. I am aware the definition of AML/CFT	.745	-.564
2. I am aware of AML/CFT typologies	-.536	.795
3. I am aware of AML/CFT trends		.920
4. I am aware of AML/CFT regulations (Internal & External)	.580	-.553
5. I am aware of meaningful, shared purpose and clearly understand my roles	.769	
6. I am aware and know how to communicates effectively among the team and other business units	.743	-.517
7. I am aware and able to address issues between myself and team without involving the team leader	.721	
8. I am aware and manages confidential and nonconfidential information appropriately	.861	
9. I am aware of my working flexibility so that I can adapt to any changing needs	.873	
10. I am aware my AML/CFT team has established trusting and supportive relationships with other business units	.786	
11. The increase in AML/CFT complexity requirements resulted in myself being aware of multiple skills which can be applied to reviewing work. (i.e., analysis skill)	.870	
12. AML/CFT training and quality assurance programs are regularly conducted to provide awareness of knowledge and skills to myself	.843	
13. Training or participating any AML/CFT activities (seminars/webinars/etc) can expand my knowledge, skills, and professional competencies	.711	
14. I am aware I need to understand the overall regulatory requirements, AML/CFT program and activities which allow myself to successfully perform an effective AML/CFT investigation.	.748	-.535

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

Table 6 shows the Rotated Factor Matrix for Awareness Level. A similar suppression of 0.5 was made, and factor loadings were fixed to two factors to make the factors more distinguishable and hence, two factors were formed and grouped as presented in the above table. The factors for Awareness Level comprise of ‘Requirement of AML/CFT Tasks and Knowledge’, respectively. Based on these factors, awareness in AML/CFT tasks are required for bank’s compliance officers to understand their roles and to know how to address issues while improving their work investigation. The requirement for AML/CFT knowledge indicates

a required knowledge for the bank’s compliance officers to perform well and assist in their duties. For example, by understanding AML/CFT typologies and trends, the bank’s compliance officer may be able to identify better suspicious transactions or unusual activities for a particular pattern or scenario during their work investigation. The factors generated from the instruments were above satisfactory, having higher values correlated with each other. Thus, the research concludes that Awareness Level in this study was divided into the above 2 respective factors.

Table 12. Correlations Analysis

		Competency Level	Awareness Level
Kendall's Tau_B	Competency Level	1	.541**
	Awareness Level	.541**	1
	N	34	34
Spearman's Rho	Competency Level	1	.680**
	Awareness Level		<.001
	N	34	34

** . Correlation is significant at the 0.01 level (2-tailed).

Table 12 shows the Correlation Analysis of this research. A Correlation Analysis is a method to establish a linear relationship between two continuous variables and can measure the strength and direction of linear relationship whereas the lower the value, the negative direction or relationship for the variables can be and vice versa.

The dependent variable AML/CFT risk judgment is not measured as it may reflect the competency and awareness level results. For both competency and awareness levels, Kendall’s Tau and Spearman’s Rho were deployed as non-parametric alternatives to analyse the correlation between the variables and had impressive outcomes. For Kendall’s Tau result, the correlation between competency and awareness level is significant, with a p-value of <.001. The correlation coefficient is .541 (two-tailed), which indicates a strong correlation amongst the two variables. Hence, there is a significant relationship between competency and awareness level based on Kendall’s Tau correlation analysis.

The finding is consistent with Spearman’s Rho correlation analysis, which reveals a similar significant p-value of <.001 with a slightly higher correlation coefficient of .680 (two-tailed) compared to Kendall’s Tau’s. As such, there is a significant relationship between competency and awareness level based on Spearman’s Rho correlation analysis. In summary, both correlation analyses were positively correlated in between both variables.

This highlights that in conjunction with competency level and awareness, both are strongly correlated and relevant to conduct an effective AML/CFT Risk Judgment amongst the compliance officers. Based on the rule of thumb of > + 0.9 or < - 0.9, both correlation scores are not higher than 0.9 > 1 which may not indicate a collinearity between the two variables.

Table 13. Non-Parametric Tests

Demographic Profiles	Statistical Method	Asymp. Sig. (2-tailed)	
		Competency Level	Awareness Level
Gender	Mann-Whitney U Test	.557	.698
Age	Kruskal Wallis Test	.806	.121
Highest Qualification	Kruskal Wallis Test	.442	.216
Educational Background	Kruskal Wallis Test	.244	.460
AML/CFT Accreditation	Kruskal Wallis Test	.921	.993
Work Experience	Kruskal Wallis Test	.844	.103
Position	Kruskal Wallis Test	.871	.042

Table 13 shows non-parametric tests used in this research for the demographic profiles, which served as the controlled variable in this study. Based on the results, Gender has a significant value of .557 and .698 for competency and awareness levels. As a result, there is no difference in Gender for both competency and awareness levels. The result implies that both genders can perform AML/CFT risk judgment without differences. Age has a significant value of .806 and .121 for competency and awareness levels. The result indicates no difference found in both variables for Age among the bank’s compliance officers. This could highlight that age does not matter in competency and awareness for AML/CFT risk judgment outcome. The highest Qualification has the significant value of .442 and .216 for competency and awareness level. The same result implies having the highest qualifications for competency and awareness is the same as producing AML/CFT risk judgment outcomes. Meanwhile, Educational Background has a significant value of .244 and .460, which, based on this result, implies no difference in competency and awareness level in AML/CFT risk judgment outcome. AML/CFT Accreditation has a significant value of .921 and .993. The result implies there are no differences in having AML/CFT Accreditation to produce AML/CFT risk judgment outcomes amongst the banking compliance officers.

For Work Experience, the significant value for competency level is .844 while the awareness level is .103. Both do not have differences in competency and awareness level to reflect in AML/CFT risk judgment outcome. Lastly, for Position, the significant value for competency level is .871 and .042 for awareness level, respectively. The result indicates no difference in competency level in bank compliance officers’ positions, as most have the competencies to perform AML/CFT risk judgment outcomes. However, the result for awareness level is significant based on a confidence interval of 95%, which highlights a difference in awareness level of work position to reflect an outcome in AML/CFT risk judgment. For further understanding, the research has conducted an additional analysis for Pairwise Comparisons of Position in appendices section. It shows bank’s compliance officers ranging from a non-executive towards a senior management may differ in their competency and awareness level, including the job position of an executive towards a senior executive position and a job position of an executive position towards a senior management position.

4.1 Hypotheses Result

Table 14 shows the Friedman Test on Ranks for both Competency and Awareness levels. Friedman Test was deployed to confirm the hypotheses' results to ascertain whether the hypotheses are accepted. It tests on multiple paired samples of repeated measures, factors, or conditions. In regard to this study, each of the demographic profiles of the bank’s compliance officers will be ranked and treated as different factors or conditions to assess for any differences in competency and awareness level, which are the independent variables in this study. The demographic profiles can also be justified as multiple paired samples of conditions toward the independent variables.

Table 14. Friedman Test Ranks and Statistics

	<i>M Rank</i>		
	Competency Level	Awareness Level	
Gender	6.25	6.56	
Age	2.00	2.00	
Highest Qualification	2.21	2.21	
Educational Background	3.56	3.54	
AML/CFT Accreditation	5.87	5.87	
Work Experience	6.34	6.25	
Position	5.37	5.15	
	4.41	4.43	
	Chi-square	df	Asymp. Sig.
Competency Level	129.904	7	<.001
Awareness Level	133.588	7	<.001

M mean

The same Table 14 also shows the Friedman Test result for both independent variables, the competency and awareness level. It has 7 degrees of freedom with chi-square value of 129.904 for competency level and 133.588 for awareness level. Based on a sample size of 34, both p-value are <.001. As such, based on the findings of the Friedman Test, the hypotheses for both competency and awareness level are supported as there is a difference found between them that originated from various demographic profiles, which may reflect in their AML/CFT risk judgment outcome. The Friedman test also indicated that banking compliance officers in this study were rated differently for their competency and awareness level.

Table 15. Hypotheses Table

Supported H₁:	Supported H₂:
<i>There is a difference in competency level amongst banking compliance officers in Malaysia that may significantly reflect their AML/CFT risk judgment outcome.</i>	<i>There is a difference in awareness level amongst banking compliance officers in Malaysia that may significantly reflect their AML/CFT risk judgment outcome.</i>

5.0 CONCLUSION

The research has revealed impressive outcomes that focused statistically amongst the Malaysian banking compliance officers for their competency and awareness levels that may significantly reflect AML/CFT risk judgment outcome. Based on the results, both hypotheses are supported as the study found significant differences in competency and awareness levels amongst each of the Malaysian banking compliance officers. Furthermore, competency and awareness levels were factored based on factor analysis results. It shows competency skills derived from process-based competencies, supervisory and training. At the same time, awareness is developed from the knowledge and tasks in AML/CFT. Based on the research objectives, the study examined and answered the Malaysian banking compliance officers' competency and awareness level in their AML/CFT risk judgment. Currently, the competency and awareness levels of the Malaysian banking compliance officers are at satisfactory rate to which they are able to perform proper AML/CFT risk judgment outcome and make the right decision in identifying suspicious activities. This is consistent in view of competency and awareness level reported in NRA 2020 that AML/CFT control measures in banking institutions are at acceptable rate.

However, a problem was found as they are originated from various backgrounds and demographic profiles, which may need to be revised in the requirement of the compliance sector for AML/CFT expertise. The research revealed that banking compliance officers in Malaysia came from various backgrounds and demographic profiles. This may imply that the requirement for compliance expertise in Malaysia's AML/CFT field is wider than just relevant educational background, such as accounting. The research found that demographic factors play an important role in competency and awareness levels that it may reflect the outcome of AML/CFT risk judgment. As such, this might impact anti-money laundering reporting to which the research would like to answer part of the reason low STR quality submitted to the Central Bank of Malaysia. Thus, it may provide an impact to the Malaysian financial stability due to suggested incompetencies hired in the bank's institutions for AML/CFT investigations.

Our research is also consistent with the findings from Jamil et al. (2024), who focused on the analysis of suspicious transaction reporting decisions for Malaysian money service businesses. It revealed that both training and knowledge are required for suspicious transaction reporting decisions. This may mean compliance officers would require both training and knowledge which would be part of competency and awareness to submit an effective STR decisions.

However, for the result of our findings, the research recommends a proper requirement for AML/CFT duties consistent with international standards. All AML/CFT staff may need to undergo a prerequisite condition as an appropriate qualification before serving their duties. We found various educational backgrounds, with most of the bank's compliance officers having nil AML/CFT accreditation. This could also indicate an issue within the human resources department, as no specific regulation was provided in the hiring sector. In conjunction to our findings, a stricter requirement may be required to hire the right talent to match the need in the compliance sector, specifically in the anti-money laundering field. In addition, the research also found multiple demographic profiles such as gender, age, highest qualification, educational background, AML/CFT accreditation and work experience have no significant differences in competency and awareness level among the compliance officers, as most could perform their duties perfectly.

However, there is a significant difference found in awareness level of the work position of the compliance officers. The finding suggests that the compliance officers in higher job positions would have better awareness levels in AML/CFT risk judgment than those in lower job positions. This may be due to the higher level of job position, the more responsibility required by the compliance officers in maintaining good oversight of an organization's AML/CFT governance and controls. Thus, having a very good awareness level to protect their banks or financial institutions and conduct good decision-making in filing STR. Therefore, the finding is consistent with Tarmizi et al. (2022) and Simwayi and Guohua (2011) that a significant gap exists between senior management's attitude and the juniors concerning anti-money laundering activities. This could be because the compliance officers in senior management roles would have more exposure than their juniors. This also indicates that the juniors would require more training and disclosure from their seniors to effectively produce a proper AML/CFT risk judgment outcome, including having a good knowledge of AML/CFT governance and controls.

As a result of this research, compliance officers in the Malaysian banking sector may reflect a good AML/CFT risk judgment outcome consistent with the behavioural decision theory mentioned in this research. Behavioural decision theory is important as it tells how the compliance officers assess a proper risk judgment in their decision-making of AML/CFT measures. It consists of how the compliance officers gather, utilize, and process the information to make the right AML/CFT risk judgment decisions.

6.0 SUGGESTION FOR FUTURE RESEARCH & LIMITATIONS

This research conducted a comparative research where future research may work in a more robust and holistic approach, including having causal analysis and qualitative approach to explore more of the AML/CFT risk judgment issues. More factors may be used in future research that include the mediation and moderation variables which may be utilised to study further of AML/CFT risk judgment outcome. Future research may consider including the human resources in this sector, internal and external regulations, compliance programs and training methods to understand more in the conduct of better AML/CFT risk judgment decision-making and outcome. The limitation of this research is that it only covers compliance officers in the banking sector of Malaysia. The sample size in this study was 34 under non-parametric testing, and a more extensive sampling and population might contribute to new empirical evidence. Other limitations may include our variables which are the competency and awareness level, the measurement, whereas certain perspectives, such as corporate governance, may be considered to answer the issues found in this study.

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APPENDICES

Table I. Pairwise Comparisons for Position

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. ^a
Non-Executive-Executive	10.000	10.199	.981	.327	1.000
Non-Executive-Middle Management	11.786	10.396	1.134	.257	1.000
Non-Executive-Senior Executive	18.536	10.066	1.842	.066	.655
Non-Executive-Senior Management	25.500	11.910	2.141	.032	.323
Executive-Middle Management	1.786	4.792	.373	.709	1.000
Executive-Senior Executive	8.536	4.026	2.120	.034	.340
Executive-Senior Management	15.500	7.532	2.058	.040	.396
Middle Management-Senior Executive	-6.750	4.501	-1.500	.134	1.000
Middle Management-Senior Management	13.714	7.797	1.759	.079	.786
Senior Executive-Senior Management	6.964	7.351	.947	.343	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Note: For the Boxplot figures below, the Y-axis represent the scale of competency and awareness level which '1' indicates as unacceptable, '2' indicates as weak, '3' as neutral, '4' as satisfactory and '5' indicates as excellent.

Fig I. Boxplot for Gender

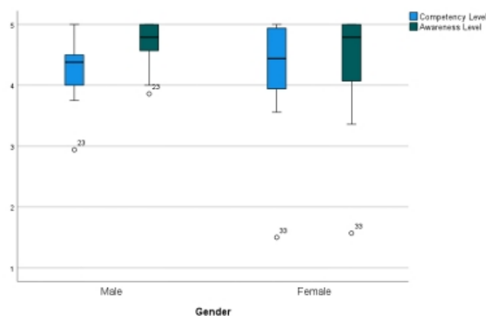


Fig III. Boxplot for Highest Qualification

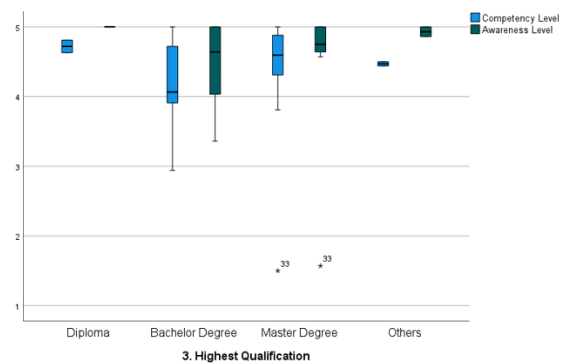


Fig II. Boxplot for Age

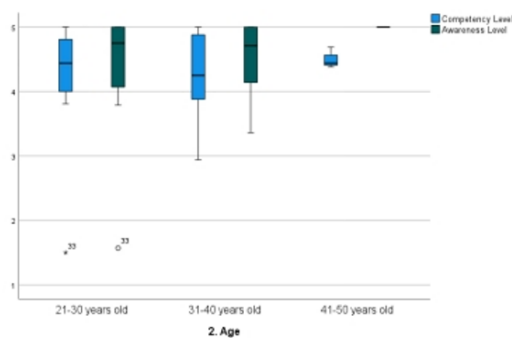


Fig IV. Boxplot for Educational Background (Competency Level)

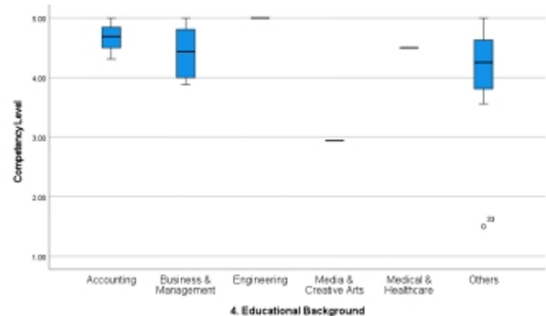


Fig V. Boxplot for Educational Background (Awareness Level)

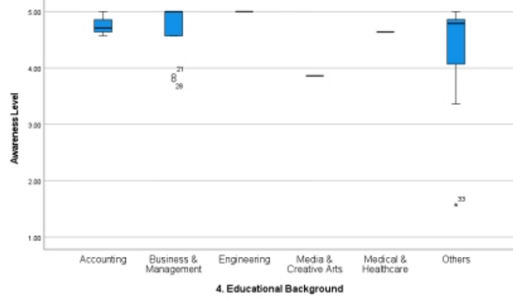


Fig VII. Boxplot for Work Experience

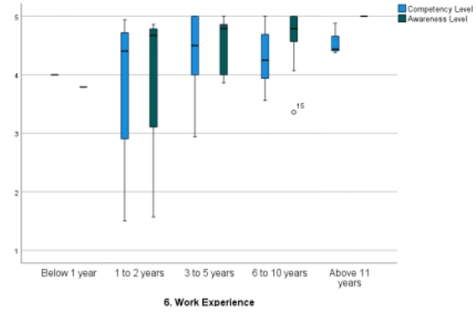


Fig VI. Boxplot for AML/CFT Accreditation

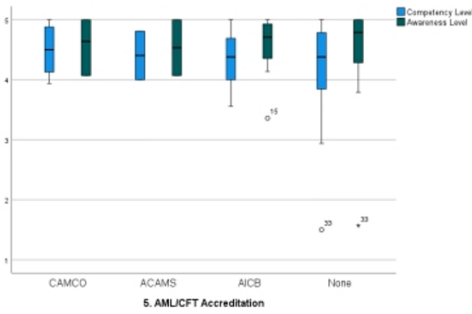


Fig VIII. Boxplot for Position

