ORGANISATIONAL CULTURE AND ATTITUDES TOWARDS FINANCIAL STATEMENTS: AN ANALYSIS

BY

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DECLARATION OF AUTHENTICITY

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ABSTRACT

Organisational Culture and Attitudes towards Financial Statements: An Analysis

By Thomas Zammit

PURPOSE: This study determined the levels of trust and reliance Maltese SMEs place on financial statements and established the organisational culture of such SMEs. Then, an analysis was carried out as to whether organisational culture is associated with different levels of trust and reliance on financial statements. Lastly, an evaluation was made on the results of the different categorisations of culture.

DESIGN: The objectives were achieved by using a quantitative methodology. A survey questionnaire was devised electronically and subsequently sent to directors of Maltese SMEs for self-administration (n = 127).

FINDINGS: The levels of trust and reliance on financial statements are moderately high in Maltese SMEs, where trust was found to be slightly higher than reliance. A positive correlation also exists between the two. The most common and strongest culture in Maltese SMEs is the Clan, while the Adhocracy is both the weakest and least common culture. In the other categorisations of culture, the Internal and Flexibility cultures prevailed. Maltese Clan SMEs rely on financial statements significantly more than Adhocracy SMEs do, however they have the same level of trust in financial statements. In two categorisations of culture, as the strength of the dominant culture increases, the trust in financial statements decreases. Furthermore, the Adhocracy strength is negatively related with reliance, while the Market strength is positively correlated with trust. More significant findings on attitudes towards financial statements are bound to result when organisational culture is segmented into more than two different cultures types.

CONCLUSIONS: It can be concluded that in certain instances, organisational culture is indeed associated with different attitudes towards financial statements. This has implications for the local accounting professionals, as their ability to contribute towards decision making can be affected by the employing SME's culture.

VALUE: This study is the first locally to bridge the areas of organisational culture and accounting. This research can aid the relevant entities in hosting information sessions on organisational culture and its effects, for both SME directors and accounting professional. Other areas of research also stem from this study.

KEYWORDS: Organisational Culture, Reliance, Trust, SMEs

To my parents.
To my brother and sister, and my dear nephew Liam Ray.
To my girlfriend Sylvienne.
Thank you for your unfaltering love and support.

ACKNOWLEDGEMENTS

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LIST OF ABBREVIATIONS

SMEs   Small and Medium Enterprises

MAS   Management Accounting System

CVF   Competing Values Framework

OCAI   Organisational Culture Assessment Instrument

DCS   Dominant Culture Strength

Chapter 1

Introduction

1.1 Introduction

This introductory chapter starts by providing some background information on the salient areas of this study. Sections 1.3 and 1.4 define the need for the study and the research objectives respectively, while section 1.5 outlines the study's scope and limitations. Lastly, section 1.6 provides an overview of the study.

1.2 Background Information

1.2.1 The Importance of SMEs

Small and medium enterprises (SMEs) are globally seen as the backbone of the economy. They contribute considerably to economic growth and GDP, while also promoting competitiveness and fostering innovation in products and services (Robu, 2013).

Class Size	Number of enterprises			Number of persons employed			Value added		
	Malta		EU-28	Malta		EU-28	Malta		EU-28
	Number	*Share*	*Share*	*Number*	*Share*	*Share*	*Billion €*	*Share*	*Share*
Micro	26,722	92.4%	93.1%	49,835	33.3%	29.4%	2.2	37.0%	20.7%
Small	1,812	6.3%	5.8%	37,329	25.0%	20.0%	1.5	25.5%	17.8%
Medium	329	1.1%	0.9%	33,781	22.6%	17.0%	1.1	18.5%	18.3%
SMEs	**28,863**	**99.8%**	**99.8%**	**120,945**	**80.9%**	**66.4%**	**4.8**	**81.0%**	**56.8%**
Large	59	0.2%	0.2%	28,524	19.1%	33.6%	1.1	19.0%	43.2%
Total	28,922	100.0%	100.0%	149,469	100.0%	100.0%	5.9	100.0%	100.0%

Table 1.1*: A profile of SMEs in Malta and Europe (Eurostat, 2018)*

As seen in table 1.1, 99.8% of Maltese companies are SMEs, with an employment contribution of 80.9% and a contribution of 81.0% to Maltese value added (Eurostat, 2018). It is also seen that both of these contributions are significantly higher than the respective EU average contributions. Furthermore, between 2013-2017 SME value added increased by 62.7% and employment in SMEs grew by 24.0% (Eurostat, 2018).

For the purposes of this dissertation, an SME will be defined as an entity which meets at least two of the three criteria in table 1.2, the same criteria as those found in Article 3 of Directive 2013/34/EU. These criteria were adopted as they enhance consistency with other studies in the area of SMEs, while also being consistent with EU law.

	Number of Employees	**Balance Sheet Total**	**Total Revenue**
Micro	Less than 10	Less than €350,000	Less than €700,000
Small	Less than 50	Less than €4,000,000	Less than €8,000,000
Medium	Less than 250	Less than €20,000,000	Less than €40,000,000

Table 1.2*: SME Criteria (Directive 2013/35/EU)*

1.2.2 Attitudes towards Financial Statements

Accounting can be defined as

> "the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by users of the information" (American Accounting Association, 1966 p.1; as quoted in Alexander and Knobes. 2010 p.4)

For the purposes of this study, the term 'financial statements' will include all types of accounting information produced by SMEs, including statutory financial statements, information produced by Management Accounting Systems (MAS) and any other type of financial information accessible to SME directors. Furthermore, the terms 'financial statements' and 'accounting information' will be used interchangeably.

To support a thorough analysis, the term 'attitudes' will be divided into 'trust' and 'reliance'. Therefore, the focus of this dissertation will be on SMEs' trust and reliance on financial statements, the latter being any form of accounting information.

1.2.3 Trust in Financial Statements

Trust can be defined as having the confidence in the realisation of one's expectations (Luhmann, 1979). Hence, it can be said that trusting financial statements increases the confidence of achieving positive results from decision making. However, this is just one definition of trust. In Chapter 2, various other definitions will be discussed and applied to financial statements, resulting in the formulation of a definition of trust applicable to this study. The focus in this study will be what is termed 'trust in accounting', meaning the level of trust which SMEs place in accounting information. This is as opposed to 'accounting for trust', which

refers to accounting information being an enabler of trust in building long term business relations (Kalafatis *et al.*, 2005; Seal and Vincent-Jones, 1997). Trust in financial statements exists when these are routinely used in decision making. Contrastingly, when financial statements are used in an ad hoc manner, less trust is present (Busco *et al.*, 2006). Furthermore, trust can be created when financial statements are used to find successful solutions in times of crisis (Busco *et al.*, 2006).

1.2.4 Reliance on Financial Statements

Reliance on financial statements in the process of decision making contributes towards reaching an organisation's strategic goals and improving decision-making capacity (Horngren *et al.*, 2009; Van Auken *et al.*, 2016). The use of financial statements also enables SME owners to assess the impact of their decisions (Breen *et al.*, 2004). Contrastingly, if decisions are made without concern to their financial impact, the risk of financial distress increases (Horngren *et al.*, 2009). This risk is especially high in SMEs, as is evidenced from the high failure rates experienced by small firms (Van Praag, 2003). The need to incorporate accounting information in the decision-making process is evident. Therefore, reliance on financial statements can be defined as the act of making use of financial statements when making decisions.

1.2.5 Organisational Culture

Organisational culture can be seen as the glue that binds together the organisation (Schein, 2004). The components which make up organisational culture include the organisation's work environment, mission and goals, management style, recruitment and employee development (Tohidi and Jabbari 2012). In some successful organisations, corporate culture plays a more

important role than corporate strategy, advancement in technologies, or market presence (Cameron and Quinn 2006). Agbejule (2011) proved that managers should be aware of the different organisational cultures before deciding on MASs, as the link between the two directly affects company performance. Furthermore, reliable performance was found to be more attainable with a strong organisational culture (Sorensen, 2002). A number of models have been developed to diagnose organisational culture, including the Competing Values Framework (Cameron and Quinn, 2006). One of the categorisations of culture under this model is organisational culture as Clan, Adhocracy, Market and Hierarchy. Chapter 2 includes a more detailed explanation on the CVF, as well as an explanation on two other categorisations of culture under the CVF.

1.3 Need for the Study

When reviewing past literature, a research gap was noted as no local study had previously linked organisational culture with SMEs' attitudes towards financial statements. Past studies in other countries (Agbejule, 2011; Sorensen, 2002) proved that organisational culture affects organisations' performance. In view of this significant effect, it is of great surprise that the attitudes towards financial statements by Maltese SMEs have not been studied under the light of organisational culture. This applies especially to SMEs, as regard to the financial impact of their decision making is a determinant of their survival (van Praag, 2003).

Furthermore, the findings from the study could be of importance for the local accounting professional. By understanding the organisational culture of an SME, the accountant can better understand his/her role in the organisation and whether the accountant is welcomed in decision making or whether he/she would be the source of conflict with directors. Therefore, the accounting professional can understand which type of information to deliver and also how to deliver it to SME directors, in a way that is in line with the cultural goals of the organisation. An SME with a particular culture and a positive attitude towards financial statements

would be more attractive to local accountants than an organisation with a negative attitude.

1.4 Research Objectives

The objectives of this study are:

1) To determine and analyse the levels of trust and reliance on financial statements by Maltese SMEs;
2) To establish the organisational cultural orientations of Maltese SMEs;
3) To determine whether different organisational cultures are associated with different attitudes towards financial statements;
4) To determine whether an association exists between the strength of organisational culture and attitudes towards financial statements; and
5) To analyse whether different categorisations of organisational culture have different associations between culture and attitudes towards financial statements.

1.5 Scope and Limitations

The findings from this study apply solely to Maltese SMEs as large entities were not within the scope of this research. As the questionnaire was addressed to SME directors, the findings are based on their perception of organisational culture and attitudes towards financial statements. Due to time constraints, it was not possible to study the perceptions of other persons employed within SMEs. It is probable that if the data collection period was extended, more responses could have been gathered. The information contained within this study reflects research carried out up to April 2019. Other limitations regarding the research methodology can be found in Chapter 3.

1.6 Overview of the Dissertation

Chapter 1 has presented an introduction to this study. Chapter 2 will discuss the literature focusing mainly on the areas of trust, reliance and organisational culture. Following this, Chapter 3 then provides an explanation of the research methodology adopted for this study. Chapter 4 contains the main findings with regards to the research objectives, while Chapter 5 presents a discussion on such findings. Lastly, Chapter 6 provides a brief summary of the main findings, as well as some recommendations and areas of further study.

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Research Methodology

Chapter 4: Research Findings

Chapter 5: Discussion

Chapter 6: Conclusion
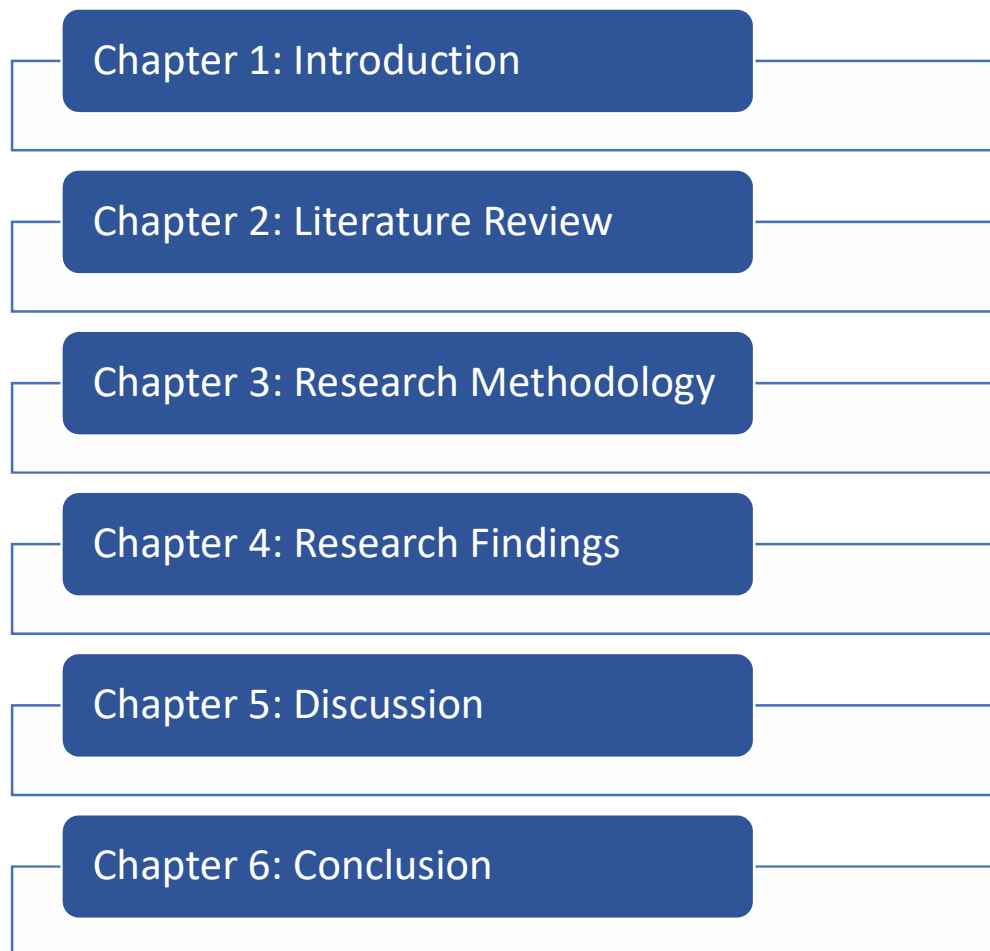
Figure 1.1: Dissertation Outline

Chapter 2

Literature Review

2.1 Introduction

This chapter provides a critical review of the literature on organisational culture, trust and reliance on financial statements. Due to the research gap discussed in section 1.3, the literature was reviewed on each separate area to gain an in-depth understanding of each subject. Sections 2.2, 2.3 and 2.4 examine the literature on trust, reliance and organisational culture respectively. Figure 2.1 illustrates the structure of this chapter.

2.2 Trust in Financial Statements

- 2.2.1 What is the definition of trust?
- 2.2.2 Towards a definition of trust in finanancial statements
- 2.2.3 How is trust created?

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- 2.3.1 Why should SMEs rely on financial statements?
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- 2.4.4 The categorisations of Organisational Culture

2.5 Conclusion

Figure 2.1: Chapter 2 Outline

2.2 Trust in Financial Statements

Numerous cases of accounting failures have resulted in a perceived incompatibility between the terms 'trust' and 'accounting' (Tan and Woodward, 2005). The impact of trust is mostly felt when there is a decline in trust, and a loss of trust in accounting commonly results in new regulation, as seen after the credit crisis of 2007-2009 (Baldvinsdottir *et al.*, 2011). Accounting increases trust in organisations and in systems, whilst trust in accounting is vital for the functionality of an accounting system (Van der Meer-kooistra and Vosselman, 2000).

2.2.1 What is the definition of trust?

An issue which is prevalent in the world of research is that there is no clear agreement upon the definition of trust. Definitions on the matter vary, with a number of common concepts being the only connecting factors (Baldvinsdottir *et al.*, 2011; Atkinson, 2007). Moreover, there has been no development of a paradigm in trust and accounting research. Baldvinsdottir *et al.* (2011) argue that the concept of trust is dependent on the context. The majority of the definitions of trust are in the context of interactions between social actors. This dissertation is concerned with trust in accounting systems, or *system trust*, rather than *personal trust* between persons. However, the definitions on personal trust will still be discussed in order to arrive at an exhaustive definition of system trust applicable for this dissertation.

Luhmann (1979; as cited in Tomkins, 2001) defines trust in a broad sense, by arguing that trust is having the confidence in the realisation of one's expectations. This definition can be applied to system trust (Tomkins, 2001), such as accounting systems, while also mentioning the word 'confidence'. Tan and Woodward (2005) also refer to confidence by arguing that trust is associated with an individual's confidence in others' intentions. Jones and Dugdale (2001; as cited in Baldvinsdottir *et al., 2011*) define trust as having confidence that a person or a system is reliable.

Another widely cited (Chenhall and Langfield-Smith, 2003; Lau and Tan, 2006; Lau *et al.*, 2008) definition of trust belongs to Rousseau *et al.* (1998, p.395), where trust is seen as

> "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another."

This definition brings into light the concepts of 'vulnerability', and 'positive expectations'. These words give a new perspective to trust in organisational relations and they are also prevalent in other definitions of trust (Emsley and Kidon, 2007; Mayer *et al.*, 1995; Vosselman and van der Meer-Kooistra). It is important to note that this definition refers to 'intentions'. While an accounting system is an inanimate object, and thus cannot have intentions or behaviours like social persons can, its intentions for the purposes of this dissertation may be taken to mean the supply of financial information upon which stakeholders can manage and better understand their organisation (Carraher and Van Auken, 2013).

Another perspective of trust can be gained from the definition by Cuganesan (2006), that of trust being an uncertainty reduction mechanism, which is in line with the definition by Busco *et al.* (2006), where trust is seen as a mechanism that can reduce uncertainty in instances of interaction. On the other hand, Tomkins (2001) argues that trust permits us to behave as if the uncertainty faced is reduced, but it does not actually reduce the uncertainty.

2.2.2 Towards a definition of trust in financial statements

The analysis of various definitions of trust resulted in the keywords 'vulnerability', 'positive expectations', and 'uncertainty reduction'. Thus, for the purposes of this dissertation, trust will be defined as *the willingness of a party to be vulnerable by expressing confidence in the reliability of financial statements, with the positive expectation of increased uncertainty reduction*. Vulnerability is a component of

trust since relying on financial systems involves a degree of risk. Financial statements do not automatically guarantee good decisions, especially if users do not have the necessary understanding required to use them effectively (Carraher and Van Auken, 2013). Also, risk is unavoidable when trusting a system with limited information available (Bachmann 2001). However, by accepting this risk and making use of financial statements, users expect the positive outcome of reduced uncertainty in decision making.

One can also argue that financial statements can be trusted in situations of little knowledge or experience. In fact, Jayasinghe and Thomas (2009) state that trust entails a leap of faith which goes beyond the cognitive level of action and experience. This 'leap of faith' implies taking a decision in a situation of extreme uncertainty, and therefore this strengthens the argument that reliance on financial statements entails vulnerability and risk. Furthermore, Busco *et al.* (2006) argue that the complexity of modern organisations necessitates decision makers to rely on systems in which they have limited technical expertise.

2.2.3 How is trust created?

After having defined trust, another area of importance is what actually creates trust. Butler (1991) even argues that knowing what creates trust is more important than its definitions. Under IFRS regulation, accounts have to be prepared in a fair presentation. Tan and Woodward (2005) raise the argument that users of statutory financial statements should be able to trust such financial statements under this requirement of fair presentation alone.

Busco *et al.* (2006) argue that when accounting is ingrained in organisational routines and as an accepted way of thinking, there is trust in accounting, and there is its acceptance in search for solutions in times of crises and decision making. On the contrary, when accounting is used in an ad hoc manner without rationale, it is more probable that it will be overlooked in decision making and it may even become the source of conflict in times of crisis (Busco *et al.*, 2006). Routines provide a feeling of predictability and stability, thereby aiding individuals

in dealing with uncertainty and complex situations (Bourdieu, 1990). It is interesting to note that in situations of crisis, a knowledge gap arises as individuals do not possess the knowledge required to manage the crisis. If a successful solution is found, it can in turn become ingrained in organisational routines and practice (Busco *et al.*, 2006), meaning it becomes a trusted system. Relevant to this dissertation, Busco *et al.* (2006) thus argue that trust in financial statements exists when they are incorporated in organisational routines, where such trust can increase when financial statements are used to take positive decisions in times of crises and uncertainty. Another important point is that there may exist an optimal level of trust, where the cost of trust balances the benefits derived from trust (Wicks *et al.*, 1999; Tomkins, 2001). Such a cost may be the cost of preparing financial statements, while the benefits could be the resulting positive decisions when such financial statements are trusted.

Another point of how trust in accounting information arises can be made by referring to the distinction between trust in individuals (*personal trust*) and trust in systems (*systems trust*), such as accounting systems. Bachmann (2001) argues that these two types of trust are interdependent, as individuals are often *access points* which introduce and win trust in the systems through face-to-face encounters. In fact, Busco *et al.* (2006) argue that it is very difficult to separate the trust placed in the individuals/access points representing the system, from the trust invested in the systems themselves. Hence, since contact with the accounting system occurs through interactions with accountants, the trust in the accounting system and in financial statements is equally dependent on the trustworthiness of the accountants themselves.

2.3 Reliance on Financial Statements

2.3.1 Why should SMEs place reliance on financial statements?

As outlined in section 1.2.2, various sources of financial information are used by SMEs in decision making. Financial statements are not only an important source of information for lenders and investors, but also for owners of SMEs and decision makers (Timmons and Spinelli, 2009; as cited in Van Auken *et al.*, 2016). Horngren *et al.* (2009) argue that reliance on financial statements supports the firm's strategic goals and operations. Furthermore, making decisions with no concern to their financial impact can lead to financial distress and lack of company focus (Horngren *et al.*, 2009). Busenitz *et al.* (2003) argue that the quality of decisions made by SMEs is often dependent on the analysis of information. Regard to the financial impact of decisions and financial management is especially important in SMEs, as evidenced from the high failure rates experienced by small firms (van Praag, 2003). Moreover, SMEs are more vulnerable to the effects of poor decisions, due to them enjoying less resources than large companies (Van Auken *et al.*, 2016). Notwithstanding these arguments for the use of financial statements, Mizzi (2009) found that nearly one third of owner-managers of small companies in Malta do not have the time to thoroughly analyse financial reports.

Despite the fact that the use of financial statements can aid in making better decisions, owners of SMEs often lack the skills required to understand and interpret such financial statements, let alone using them to support decision making (Van Auken, 2001). In such a case, even timely and reliable financial statements would be insufficient (Van Auken, 2005).

2.3.2 Why do SMEs have different levels of reliance on financial statements?

Cassar (2009) argues that owners with a strong accounting and finance background likely rely more on external accounts as they understand their value. Organisations that know what high-quality financial statements comprise of and how to incorporate them in decision making are better equipped to make positive decisions (Carraher and Van Auken, 2013). Therefore, assistance with using and interpreting financial statements might help owners of SMEs make more informed decisions (Breen *et al.*, 2004). This is mostly the case in Malta, as evidenced by Mizzi (2009), where 74.6% of respondent organisations admitted to asking for business advice from their internal/external accountant. Moreover, small companies employing an internal accountant on a full-time basis are more likely to seek business advice from their internal accountant than from other sources (Mizzi, 2009). Carraher and Van Auken (2013) also state that a reason for reliance on accountants by SMEs is for the explanation of financial information, as owners of SMEs perceive financial statements to be complex.

The use and interpretation of financial statements are also likely to be influenced by owners' perception of their organisation's financial position. Owners' over-optimism about their company's financial potential and position can lead to false assessments of liquidity, profitability and financial distress (Smith, 2011; Landier and Thesmar, 2009). Furthermore, entrepreneurs often use heuristics or biases to make decisions (Mitchell *et al.*, 2007), and this means making uninformed decisions that potentially result in financial distress (Van Auken *et al.*, 2016).

The next two sections will discuss a number of studies which examine the use of financial statements in decision making by small businesses.

2.3.2.1 Evidence from the local scenario

Mizzi (2009) researched the use of financial information in small companies operating in Malta. The primary goal in producing management accounting was

found to be the monitoring of current performance. 44.6% of respondents valued management accounting as extremely important, therefore implying that timely and relevant information is provided through management accounts. The profit and loss account, bank reconciliation statement, balance sheet and aged debtors report were found to be available within most companies in the sample. Mizzi's (2009) study also confirmed that information not required statutorily is likely to be prepared internally. The primary users of management accounts were found to be owner-managers/directors, where 49% of these admitted that the cost of producing annual financial statements is not a waste of money (Mizzi 2009).

2.3.2.2 Evidence from international studies

Carraher and Van Auken (2013) researched the factors which affect the use of financial statements by SMEs in decision making. Financial statements are used to take decisions when owners are more comfortable with their ability to interpret such financial statements, as opposed to owners who are less confident and so do not use financial statements. This statement links with Mizzi's (2009) finding that 54.7% of the sample of SME owner-managers in Malta expressed concern over their ability to understand financial reports, and 10.4% of the same respondents admitted that they do not understand the technical jargon used by accountants. Carraher and Van Auken (2013) also found that it is more likely that owners use financial statements in decision making if they have been prepared externally, rather than internally. Moreover, owners with higher education levels are more likely to use financial statements than owners with lower education levels, as they can better understand the financial information contained within them. Mizzi's (2009) findings show that 72.7% of owners in the sample held advanced level qualifications, a bachelor's degree or a trade qualification.

Van Auken *et al.* (2016) undertook a similar study more recently, assessing the use of financial statements in decision making by Turkish SMEs. This study produced three major findings: owners of SMEs who use financial statements in decision making

1) have more years of business experience,

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2) have more confidence in their financial statements and

3) are more knowledgeable about financial statements

than owners who do not use financial statements to make decisions (Van Auken *et al.*, 2016). These results were confirmed by Akhtar and Liu (2018), who reperformed the same study on SMEs in Pakistan.

2.4 Organisational Culture

Research on organisational culture only began in the early 1980s (Ouchi, 1981; Pascale and Athos, 1981; as cited in Cameron and Quinn, 2006), and it is one of the uncommon areas where managerial practice was led by research (Cameron and Quinn, 2006). Organisational culture can be formally defined as

> "a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 2004, p.17).

This definition is the same one originally devised in the 1980s by the same author, which has been subsequently used as the theoretical basis for numerous research studies (Busco and Scapens, 2011; Tidor *et al.*, 2012; Henri, 2006; Ogbonna, 1993; Sorensen; 2002; Napitupulu, 2018). An interesting point regarding organisational culture is that it constitutes of taken-for-granted assumptions and values (Cameron and Quinn, 2006; Busco & Scapens, 2011). In fact, Cameron and Quinn (2006) argue that individuals are unaware of their organisational culture until it is made clear through a model, until it is challenged or until a new culture is experienced. It is also interesting to note that organisational cultures are more organic and pronounced in SMEs than in large companies, and the main influencer in these types of companies is the owner

(Tidor *et al.*, 2012). It is also common for an organisation to have different unique cultures in different departments or subunits (Cameron and Quinn 2006). However, this dissertation will be mainly concerned with the cultural profile of the overall organisational.

2.4.1 Why does Organisational Culture matter?

After having defined what organisational culture is, one can now argue why it is important to be knowledgeable about organisational culture. Cameron and Quinn (2006) argue that for the most successful companies, such as Coca-Cola, Intel and Disney, having a distinct organisational culture supersedes corporate strategy, resource advantages and market presence. It is also recognised that organisational culture has a significant effect on the long-term effectiveness and performance of organisations (Cameron and Quinn, 2006; Agbejule, 2011). Furthermore, an organisation's performance is positively influenced by the 'strength' of the organisational culture, meaning the degree to which the cultural values are shared (Ogbonna and Harris, 2000). Quantitative studies have proved that firms with strong organisational cultures perform better than organisations with weak cultures (Gordon and DiTomaso, 1992; Burt *et al.*, 1994; Sorenson, 2002). Strong cultures enable the prediction of employee reaction to strategic decisions, thus reducing unfavourable outcomes from these decisions (Ogbonna, 1992). Organisational cultures emphasising adaptability are related to better financial performance (Gordon and DiTomaso, 1992). Sorenson (2002) found that reliable performance is more attainable by firms with a strong organisational culture, and also that these same firms experience a lower degree of performance variability in stable environments. More recently, Napitupulu (2018) found that organisational culture affects the quality of management accounting information systems in state owned enterprises. Cameron and Quinn (2006) state that a frequent cause for failures of reengineering and downsizing efforts is the neglect of the organisational culture. The effect of organisational culture on organisational performance is clear; in fact, it is highly impactful for something that isn't apparent until challenged.

2.4.2 Different models of Organisational Culture

A number of different models have been developed through research that can be used to diagnose organisational culture. These include the Organisational Culture Profile (O'Reilly *et al.*, 1991), the Organisational Culture Inventory (Cooke and Szumal, 2000), the Sociability-Solidarity Model (Goffee and Jones, 1996), the Six-Dimensional Model (Hofstede *et al.*, 1990) and the Competing Values Framework (CVF) (Cameron & Quinn, 2006). The CVF has been used as the theoretical foundation in several widely cited studies (Iriana *et al.*, 2013; Agbejule, 2011). Furthermore, the creators of the CVF also created the Organisational Culture Assessment Instrument (OCAI), which is an instrument used to diagnose organisational culture based on the CVF (Cameron and Quinn, 2006). Instructions on how to use both the CVF and the OCAI were published by the creators themselves (Cameron and Quinn, 2006). This CVF uses just four classifications of organisational culture, compared to the Organisational Culture Inventory (Cooke and Szumal, 2000) which uses twelve different classifications for culture, hence reducing unnecessary complexity. Furthermore, the OCAI does not use complicated wording and is also straight forward to fill in. For these reasons, the CVF and the OCAI will be used for the purposes of this dissertation. The book titled 'Diagnosing and Changing Organizational Culture' (Cameron and Quinn, 2006) was written by two of the original researchers who created the CVF. Notwithstanding the fact that the book was published almost two decades later, the CVF and OCAI are detailed and included in their original format. Further information regarding the statistical validity of the OCAI can be found in Chapter 3.

2.4.3 The Competing Values Framework
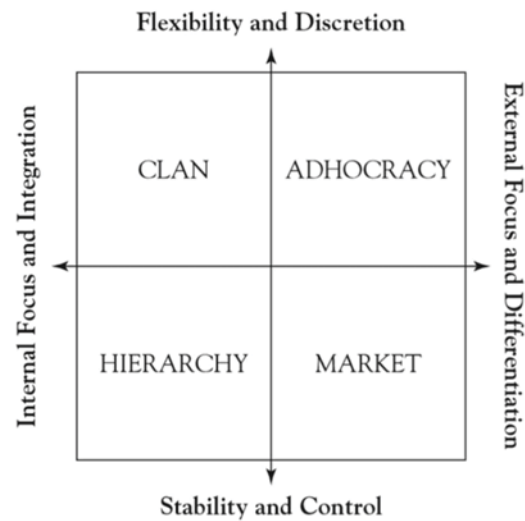
Figure 2.2: The CVF (Cameron and Quinn, 2006, p.35)

The CVF originates from research originally carried out on indicators of organisational effectiveness (Iriana *et al.*, 2013). Such research resulted in the development of a framework consisting of four quadrants along two dimensions, as seen in figure 2.2.

The two dimensions of the CVF are represented in figure 2.2 as horizontal and vertical axis, from which emerge the four quadrants, being *Clan*, *Adhocracy, Market* and *Hierarchy*. Each quadrant signifies an organisational culture type, representing different values, basic assumptions and orientations, as well as being characterised by the different combinations of organisational performance indicators (Cameron and Quinn, 2006). Hence, the primary use of the CVF, through the OCAI, is to diagnose the dominant organisational culture type, cultural strength and cultural congruence of an organisation. The CVF derives its name from the fact that the four quadrants are characterised by competing/opposite assumptions.

It is important to note that organisations exhibit qualities of more than one organisational culture; "In every organisation all four models exist" (Quinn, 1988, p.42; as quoted in Henri, 2006). However, there is always one culture that dominates over the others, and this is referred to as the *dominant culture* (Henri, 2006; Iriana *et al.*, 2013). Furthermore, the strengths of the cultures within an organisation change along its business life cycle (Cameron and Quinn, 2006).

2.4.3.1 The two dimensions of the CVF

The first dimension opposes internal orientation, integration and unity against external orientation, differentiation and rivalry (Cameron and Quinn, 2006; Iriana *et al.*, 2013). Effectiveness for some organisations necessitates internal cohesion and harmonious characteristics, while for others effectiveness is achieved through independence and external competition.

The second dimension sets flexibility, adaptability and discretion (organic) on one end of the spectrum and stability, control and order (mechanistic) on the other end (Cameron and Quinn, 2006; Iriana *et al.*, 2013). While some organisations operate effectively by being adaptable, for example not having a fixed product mix, other organisations are effective if they remain stable and predictable.

2.4.3.2 The Clan, Adhocracy, Market and Hierarchy cultures

The *Hierarchy Culture* is present in structured and formalised organisations, reflecting bureaucracy and stability (Cameron and Quinn, 2006; Henri, 2006). This culture is generally dominant in large organisations and government entities, where formal rules and procedures are in place to direct employees. Importance is given to maintaining smooth running operations and long run goals comprise of predictability, stability and efficiency. This culture is based on the study of bureaucratic government organisations, which emphasised authority and control as key success factors in stable environments (Cameron and Quinn, 2006). Cameron and Quinn (2006) use the example of a McDonald's restaurant where fast, smooth-flowing operations are key, employees enjoy little discretion, rules

such as the oil temperature are predetermined, and multiple hierarchical levels are present.

The *Market Culture* is present in organisations whose focus is on transacting with other external parties (suppliers, customers, regulators) to create competitive advantage (Cameron and Quinn, 2006). The primary objectives of these organisations are profitability, output, achievement of results, obtaining market share and brand equity (Agbejule, 2011; Henri, 2006). All this is achieved through aggressive competitiveness and productivity, while relying on control and external positioning. The taken-for-granted assumptions in market cultures are that the external environment is hostile and that profits are management's primary target, while the glue that binds together the organisation is an emphasis on winning (Cameron and Quinn, 2006).

Organisations with a *Clan Culture* are seen as extended families, where shared values, cohesion, teamwork and participation dominate (Agbejule, 2011; Cameron and Quinn, 2006). Cameron and Quinn (2006) state that the basic assumptions in this culture are that the development of employees and teamwork are necessary to manage the environment, customers are seen as partners and that management's primary task is securing employee commitment and motivation. The organisation is bound together by loyalty, where long-term employee benefit and development are given importance (Cameron and Quinn, 2006).

The *Adhocracy Culture* is prevalent in organisations associated with innovation, flexibility, entrepreneurship and creativity, making them responsive to fast-changing, hyper-turbulent conditions (Cameron and Quinn, 2006; Iriana *et al.*, 2013). The primary goal of an adhocracy is to foster flexibility and adaptability in an environment characterised by uncertainty and ambiguity. The basic assumption is that developing unique products and services is the key to success, and so people are not afraid to take risks and meet new challenges. The word *adhocracy* derives from the word *ad hoc*, meaning something temporary. Hence, it is common to find this culture in organisations operating in consultancy and

software development industries, as separate client demands are treated as independent projects with temporary project teams (Cameron and Quinn, 2006).

2.4.4 The categorisations of Organisational Culture

In order to give an exhaustive analysis of organisational culture, this dissertation will analyse three categorisations of culture, as defined in table 2.1 below. Furthermore, the strength of the dominant culture, the strength of the different cultures within the same organisation and the differences between dominant cultures will be analysed within each culture categorisation.

Table 2.1: Categorisations of Culture

Categorisation of Organisational Culture	Source
Culture as Clan, Adhocracy, Market or Hierarchy	Four Quadrants
Culture as Internal or External	First Dimension
Culture as Flexibility or Stability	Second Dimension

2.5 Conclusion

The detailed review of the literature on each area resulted in the necessary knowledge to be able to analyse the areas collectively and to devise the instrument for the collection of primary data. In addition, a number of organisational culture models were described, as well as the selection of the model to be used in this dissertation. The next chapter details the research methodology of this study.

Chapter 3

Research Methodology

3.1 Introduction

This chapter gives a detailed explanation of the research methodology utilised in this study. Sections 3.2 and 3.3 outline the research design and data collection aspects respectively, while section 3.4 provides an in-depth description of the survey questionnaire. Sections 3.5, 3.6 and 3.7 provide information regarding the pilot study, response rate and reliability testing. Lastly, the data analysis process and research limitations are provided in sections 3.8 and 3.9 respectively.

3.2 Research Design

- 3.2.1 Methodological Choice and Research Strategy

3.3 Data Collection

- 3.3.1 Secondary Data Collection
- 3.3.2 Primary Data Collection

3.4 The Survey Questionnaire

- 3.4.1 Questionnaire Design
- 3.4.2 Questionnaire Structure

3.5 Pilot Study

3.6 Response Rate and Margin of Error

3.7 Reliability of the Survey Questionnaire

3.8 Data Analysis

3.9 Limitations

- 3.9.1 Limitations of Quantitative Research
- 3.9.2 Non-Response Bias

3.10 Conclusion

Figure 3.1: Chapter 3 outline

3.2 Research Design

The research design is the action plan of how the research questions are answered (Saunders *et al.*, 2012). The following subsection details the research design, this being the methodological choice and the research strategy.

3.2.1 Methodological Choice and Research Strategy

Research can be undertaken using either a quantitative approach, a qualitative approach, or a combination of both approaches. Simply put, the quantitative method uses and generates numerical data, whilst the qualitative method makes use of non-numerical data (Saunders *et al.*, 2012). The quantitative method was chosen as the most appropriate for this study.

Yauch and Steudel (2003) explain that a major advantage of the quantitative approach is that data collection and analysis can be carried out in a short timeframe, while comparisons between organisations is facilitated through the analysis of numerical data. This contrasts with the fact that under the qualitative approach data collection and analysis are time consuming, hence only a limited number of SMEs' data would be analysed. In fact, Dieronitou (2014) argues that under the qualitative method data cannot be generalised due to the low proportion of research participants to the whole population.

The survey gathers quantitative data which can be analysed through statistical tests (Saunders *et al.*, 2012). This analysis can result in relationships between variables, and even identify reasons for such relationships. Furthermore, Saunders *et al.* (2012) continue to argue that findings generated from a sample can be representative of the whole population. Benoit *et al.* (2010) also explain that quantitative research studies assign numerical values to survey responses and that these numeric values can be analysed through computer software. Therefore, for the purposes of this study numeric values can be assigned to Organisational Culture, Trust and Reliance, through survey responses, which can

then be subjected to analysis through computer software. Hence, the survey questionnaire was selected to collect primary research under this study.

3.3 Data Collection

3.3.1 Secondary Data Collection

Collecting secondary data involved a comprehensive review of literature in the areas of Organisational Culture, Trust and Reliance on financial statements. Such review was essential as it resulted in an explanation of the different areas and also in formulating the research objectives. The findings from the literature review were also the foundation on which the survey questions were devised. Sources including journal articles, academic papers, books, reports and publications by various institutions and past dissertations were indispensable in conducting the literature review.

3.3.2 Primary Data Collection

As discussed in section 3.2, the self-completed survey questionnaire was selected as the most appropriate primary data collection technique. The next section will provide a detailed description of the questionnaire used in this study.

3.4 The Survey Questionnaire

3.4.1 Questionnaire Design

The questionnaire devised for this study was based on the literature discussed in Chapter 2, as well as on the original OCAI by Cameron and Quinn (2006). Eighteen questions were included in the questionnaire after careful consideration for entry by the researcher. The final questionnaire (Appendix 3.1) was electronically assembled using the online survey tool www.surveymonkey.com.

As the knowledge required to complete the questionnaire could only be found in top management positions in respondent SMEs, it was decided that only SME directors complete the questionnaire. This ensured further reliability in the data and consistency across all respondents. Close-ended questions were predominantly used in this study as opposed to open-ended questions, as to augment comparability of data and facilitate data analysis (Saunders *et al.*, 2012).

Lastly, special consideration went into writing the questions in short sentences and avoiding unnecessary technical language in order to avoid respondent fatigue. An email was sent to participants containing a brief description of the study, assurance of the questionnaire's anonymity, the survey link and an information sheet.

3.4.2 Questionnaire Structure

The questionnaire is divided into four sections, however there was no formal sectioning in the final questionnaire as sent to respondents. The reason behind this decision was to avoid respondents becoming fatigued partly through the questionnaire when they finish a section and realise that they have a number of other sections left to complete. The sections, as known only to the researcher, are demonstrated in table 3.1:

Section	Question number
Respondent Information	1 - 10
Organisational Culture	11 - 16
Trust in Financial Statements	17
Reliance on Financial Statements	18

Table 3.1: Questionnaire Structure

3.4.2.1 Respondent Information

This section included questions on the personal information of respondents including the director's age, years in the business and education. Moreover, questions on the SME's revenue, balance sheet totals and number of employees were also included in order to establish whether the respondent company is an SME or not.

3.4.2.2 Organisational Culture

The second section included six questions addressing organisational culture. These six questions are the same questions used in the OCAI (Cameron and Quinn, 2006), which is based on the CVF as discussed in Chapter 2. Each of the six questions in the OCAI ask respondents to distribute 100 points between statements A, B, C and D, depending on how similar the description is to their company; 100 would indicate great similarity and 0 would indicate very low similarity (Cameron and Quinn, 2006). Since this section had a potential to confuse respondents, an example was given which was not included in the original OCAI.

The four statements in each question represent the four cultures as identified in the CVF by Cameron and Quinn (2006), as illustrated in table 3.2:

Statement	Culture
A	Clan
B	Adhocracy
C	Market
D	Hierarchy

Table 3.2: Statement alternatives and the corresponding culture (Cameron and Quinn, 2006)

In order to diagnose the cultural profile for each SME, a mean score was generated for each cultural statement, with the total of all four mean scores always adding up to 100. For the Clan Culture the mean score would be calculated as follows:

$$Clan\ Culture\ mean\ score = \frac{(1A + 2A + 3A + 4A + 5A + 6A)}{6}$$

For each respondent, the culture with the highest mean score was selected as the dominant culture. The strength of the dominant culture is determined by the mean score, with a higher mean score indicating a stronger culture.

To determine whether a respondent SME exhibits a Flexibility or Stability dominant organisational culture, the following value scores were calculated:

$$Flexibility\ value\ score = Clan\ mean\ score + Adhocracy\ mean\ score$$

$$Stability\ value\ score = Hierarchy\ mean\ score + Market\ mean\ score$$

The Stability value score was then subtracted from the Flexibility value score for each respondent. A positive score conveyed a Flexibility dominant culture, while a negative score indicated a Stability dominant culture.

A similar process was repeated for each respondent to determine whether the respondent SME exhibits an Internally or Externally oriented organisational culture:

$$Internal\ value\ score = Clan\ mean\ score + Hierarchy\ mean\ score$$

$$External\ value\ score = Adhocracy\ mean\ score + Market\ mean\ score$$

For each respondent, the External value score was deducted from the Internal value score; a positive score indicated an Internally oriented culture while a negative score indicated an Externally oriented culture.

3.4.2.3 Trust in Financial Statements

Question 17 dealt exclusively with the respondents' trust in financial statements. Since previous studies have not measured trust in financial statements through a survey questionnaire, this section had to be created for the purposes of this dissertation. Eight statements were derived from the literature in Chapter 2 and applied to financial statements, ranging from the various definitions of trust to the factors creating trust. The statements were presented in question 17 with a 5-point Likert scale format, classified as strongly disagree, disagree, neutral, agree and strongly agree.

3.4.2.4 Reliance on Financial Statements

This section comprised solely of question 18 and dealt with respondents' reliance on financial statements. A total of six statements were extracted from the literature on financial statements reliance in Chapter 2 and were written in a 5-point Likert scale question, similar to question 17. The same format was used for both questions to enhance consistency and enable comparability between the answers (Saunders *et al.*, 2012). Questionnaires of previous studies were not used as these did not have a consistent format and so data analysis would have been problematic to perform using computer software.

3.5 Pilot Study

A pilot study was carried out in order to ascertain that the questionnaire was clear, concise and comprehensible. On 14th February 2019 the survey link was sent to fifteen SME directors who agreed to partake in the pilot study. Five out of the fifteen responses were incomplete. Following this feedback, all survey

questionnaires were fitted in one single page, as opposed to two pages as per the original questionnaire. This proved to be a fruitful decision as all subsequent responses were wholly completed. No other feedback was received.

3.6 Response Rate and Margin of Error

The entire Maltese SMEs population was included in the sampling frame for the purposes of this dissertation, as no other list of SMEs was available to the researcher. Access was granted to a Maltese company's client list to compile a database of local companies' email addresses. The database was further expanded by means of the website www.Maltabusinessbook.com. A final amount of 1,388 local companies were sent an email containing the survey link and two subsequent email reminders.

A total of 138 responses were collected by 13th April 2019. Unfortunately, 11 responses were considered invalid, as 6 of them did not satisfy the SME criteria and 5 responses were incomplete. Hence, a final total of 127 valid responses resulted in a response rate of 9.2%. This response rate is considerably lower than the 15%-25% range reported by similar studies researching organisational culture (Agbejule, 2011), however such a poor response rate was anticipated. As calculated in Appendix 3.3, given a sample size of 127 SMEs from a population of 28,863 (Eurostat, 2018), the maximum margin of error is 8.68%, assuming a 95% confidence level.

3.7 Reliability of the Survey Questionnaire

"Reliability refers to the extent to which your data collection techniques or analysis procedures will yield consistent findings" (Saunders *et al.*, 2012, p.156). One way to test reliability is testing for internal consistency through Cronbach's Alpha (Appendix 3.3). Since questions 17 and 18 were created specifically for the

purpose of this dissertation, the Cronbach's Alpha for each question was calculated and the results are illustrated in table 3.3:

Question number	Cronbach's Alpha
Question 17 original	0.456
Question 17 excluding statement 2	**0.652**
Question 18 original	0.543
Question 18 excluding statement 3	**0.650**

Table 3.3: Cronbach's Alpha for questions 17 and 18

The data of statement 2 was removed from question 17 and similarly the data of statement 3 was excluded from question 18 in calculating the trust and reliance scores. In so doing, the Cronbach's Alpha of both mean scores rounded up to 0.7, indicating good internal consistency. However, even though both statements were not included in the calculation of the mean trust and reliance scores, they were still tested individually for associations with other variables, as seen in section 4.6. No other statements were removed, as the marginal increase in Cronbach's Alpha did not justify the reduction in data. Furthermore, the trust score of one respondent had to be excluded from the statistical tests with regards to trust, as such trust score was deemed to be an outlier and significantly disrupted the outcome of test results.

For the section on organisational culture, testing for reliability was not necessary, as numerous previous studies reported Cronbach Alpha Coefficients of more than 0.7 in the OCAI (see Quinn and Spreitzer, 1991; Yeung *et al.*, 1991; Zammuto and Krakower, 1991; as cited in Cameron and Quinn, 2006).

3.8 Data Analysis

Data collected from the survey questionnaire was analysed through the use of the IBM Statistical Package for Social Sciences (IBM-SPSS) version 25. Mean scores for organisational culture were calculated for each respondent as set out in section 3.4.2. Data collected through the Likert scales was assigned a numerical value according to the response, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. A mean score was then calculated from the Likert scales, resulting in a mean score for trust from question 17 and a mean score for reliance from question 18.

Statistical significance tests are classified as either parametric or non-parametric, depending on the normality of data. When data is normally distributed, parametric tests are used. Conversely, when data is not normally distributed, non-parametric tests are utilised (Saunders *et al*., 2012). The following statistical significance tests were used in this study:

1) Independent Samples T-Test
2) Mann-Whitney Test
3) One-Way ANOVA
4) Kruskal-Wallis test
5) Spearman Correlation
6) Chi-Square Test
7) Friedman Test

Hypotheses were formulated prior to conducting each test, and significance was tested at the 0.05 level of significance for all of these tests. A detailed explanation of the tests can be found in Appendix 4.1.

3.9 Limitations

3.9.1 Limitations of Quantitative Research

Yauch and Steudel (2003) argue that a limitation inherent in quantitative research is that some participants may not be able to understand the survey questions. This was apparent in this research project, as some participants responded by saying that the survey questionnaire was too complex, even though efforts were made to devise it as simple as possible. Furthermore, one particular participant responded that the directors could not fill in the questionnaire as they do not make use of computers. Finally, some respondent fatigue might have arisen, even though the questionnaire was kept as concise as possible.

3.9.2 Non-Response Bias

Non-response bias is a non-sampling error which may arise when an individual in the sample does not respond to the questionnaire, since respondents may have different characteristics than non-respondents (Greener, 2008). A small number of SMEs in this study responded with their refusal to participate in the survey, either due to time constraints or otherwise due to company policy.

3.10 Conclusion

This chapter presented a detailed description of the methodological framework used to collect and analyse the data required to answer the research questions. The next chapter will focus on the findings of this study.

Chapter 4

Research Findings

4.1 Introduction

This chapter presents the results emanating from the primary data collected through the survey questionnaire. Section 4.2 provides information on the sample characteristics. Section 4.3 focuses on the separate areas of organisational culture, trust and reliance, thus addressing the first two research objectives. From section 4.4 onwards, tests for a potential association between organisational culture and attitudes towards financial statements are carried out, addressing the other three research objectives.

4.1 Introduction

4.2 Sample Characteristics

4.3 Trust, Reliance and Organisational Culture in Maltese SMEs

4.4 Different Organisational Cultures and their association with Financial Statements Trust and Reliance

4.5 The Effect of Organisational Culture Strength on Financial Statements Trust & Reliance

4.6 Organisational Culture and other aspects of Financial Statements

Figure 4.1: Chapter 4 outline

4.2 Sample Characteristics

Categorical percentages were calculated for the respondent directors' gender, age and years of business experience as illustrated in table 4.1. It is evident that respondents were predominantly male *(81.9%)*, with a female proportion of just 18.1%. Approximately one third of the population *(33.9%)* was aged between 41 to 50 years, followed by 27.6% being aged between 31 to 40 years. The sample exhibited respectable business experience, as 35.4% of respondents acknowledge to have 21 to 30 years' worth of business experience, while another 27.6% have business experience of 11 to 20 years, resulting in a combined 62.4% of respondents having 10 to 30 years of experience.

Gender	
Male	81.9%
Female	18.1%
	100%
Directors' Age	
Aged 30 years or less	7.1%
Aged 31 to 40 years	27.6%
Aged 41 to 50 years	33.9%
Aged 51 to 60 years	21.3%
Aged 61 to 70 years	10.2%
	100%
Directors' Business Experience	
1 to 10 years' business experience	26.0%
11 to 20 years' business experience	27.6%
21 to 30 years' business experience	35.4%
31 or more years' business experience	11.0%
	100%

Table 4.1: Gender, Age and Business Experience of directors in the sample
n = 127

The sample also exhibited high education levels achieved by respondent directors. As shown in figure 4.2, 62.2% of respondents possess a university degree or a professional qualification, while another 13.4% have a trade qualification. Contrastingly, figure 4.3 demonstrates that 40.9% of respondents do not have any education in accounting, while only 15% completed the ACCA/ACA or achieved a Master in Accountancy Degree. Another 4.7% responded to having accounting knowledge from achieving a Master in Business Administration Degree, or from the attainment of other Academic Degrees not focusing solely on Accounting.
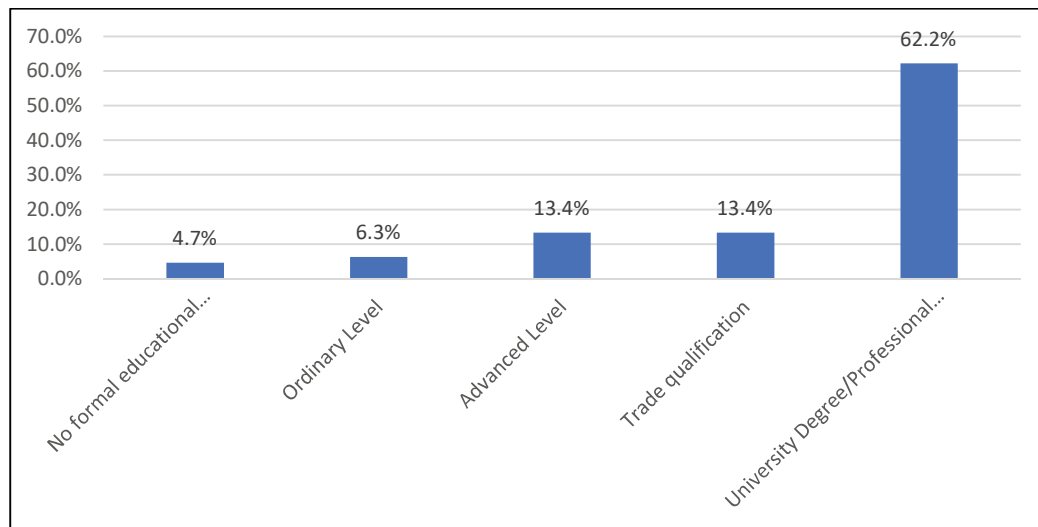
Figure 4.2: Level of Education of respondents
n = 127
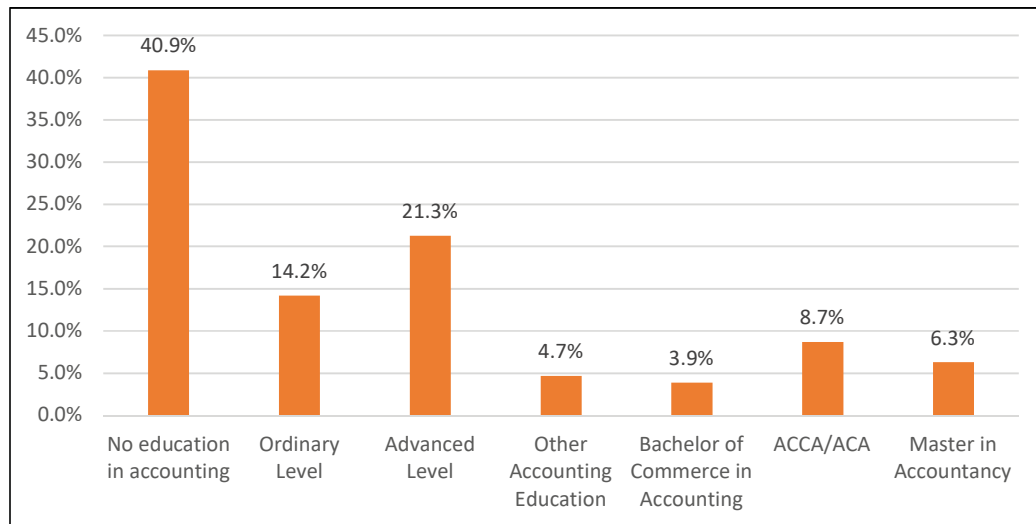
Figure 4.3: Level of Accounting Education of respondents
n = 127

Respondents were classified into the three different SME sizes as per the criteria defined in section 1.2.1, as illustrated in figure 4.4:
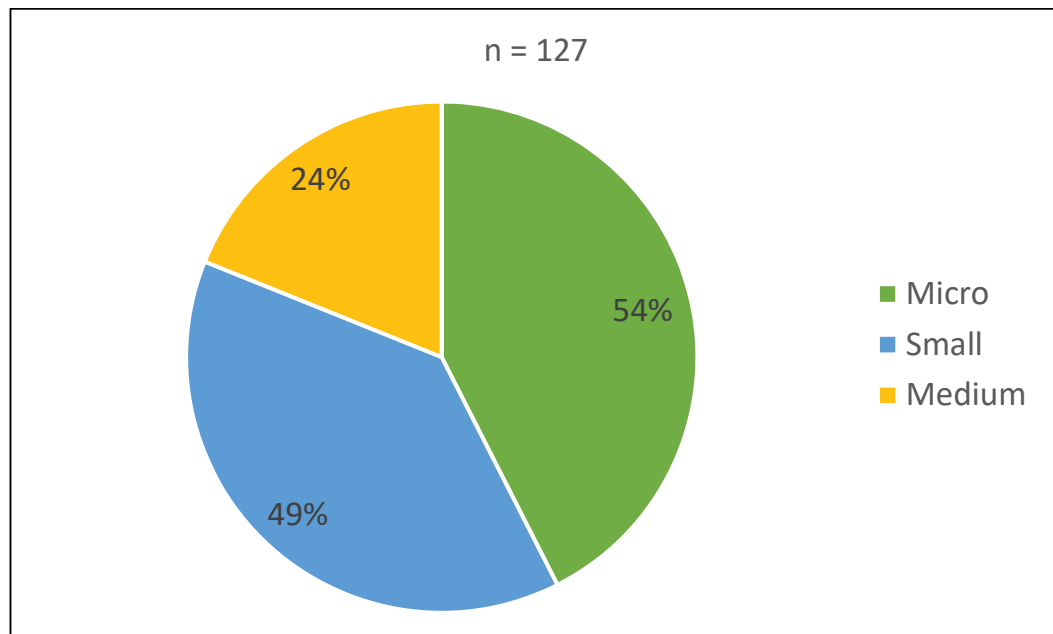
Figure 4.4: Respondents classified by SME size
n = 127

The count ranking of micro, small and medium entities in the sample reflects those in the population, where the highest number of respondents were *Micro entities (54%)*, followed by *Small entities (49%)* and *Medium entities (24%)*. Respondent SMEs were also characterised by the different areas of activity as shown in figure 4.5. The prevailing activity was *Retail (25.2%)*, followed by *Other Services (18.1%)*, *Wholesale (15.7%)*, *Manufacturing (11.0%)*, *Construction (8.7%)*, *Professional Services (8.7%)*, *Financial Services (4.7%)*, *IT/Software Services (3.9%)* and *Food & Catering (3.9%)*.
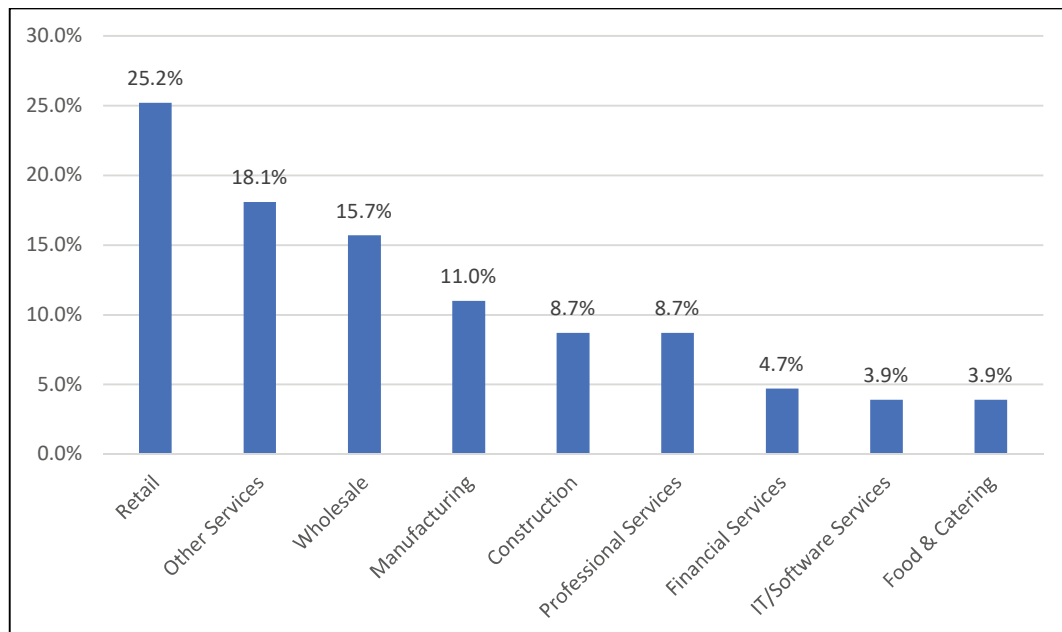
Figure 4.5: Classification by Area of Activity
n = 127

4.3 Trust, Reliance and Organisational Culture in Maltese SMEs

4.3.1 Trust and Reliance

A Friedman test was run on the responses from questions 17 and 18, testing the following hypotheses:

H_0: The mean rating scores assigned to the statements do not differ significantly.

H_1: The mean rating scores assigned to the statements differ significantly.

Since the p-values for both sets of statements were lower than 0.05, H_1 was accepted in each case, implying that there is a significant difference in the mean rating scores assigned to the statements for both questions 17 and 18.

Table 4.2 and 4.3 include the two most agreed-with statements and the two statements of highest disagreement from questions 17 and 18 respectively. Statements labelled as 'T' relate to trust, while statements labelled as 'R' relate to reliance. It can be seen that T1, T4, R2 and R6 received the highest agreement from the lists, while T6, T8, R5 and R4 were disagreed with the most. T2 and R3 are also included in the list, showing that they were in fact the most disagreed with statements; however, as discussed in section 3.7, it is important to note that both statements were not included in the trust and reliance scores.

Statement	Mean Agreement Score
T1: Trust in accounting information increases the confidence of achieving positive results from decision making	4.29
T4: Accounting information is reliable to take decisions upon	4.11
T6: In times of crisis, accounting information should be used to find solutions	3.79
T8: Accounting information has to be trusted when I lack previous technical experience, such as expanding into new industries or starting a new business	3.79
T2: Trusting accounting information makes you vulnerable to accountants and accounting information	2.48

Table 4.2: Mean ranking scores of statements from Q17
*p-value < 0.01, **n = 127***

Accounting information is more likely to be used in decision making:	Mean Agreement Score
R2: when owners are more comfortable with their ability to interpret such accounting information	4.10
R6: by owners who have more confidence in their accounting information	4.05
R5: by owners who have more business experience	3.73
R4: by owners who a have higher level of education	3.51
R3: when it is prepared externally rather than internally	2.73

Table 4.3: Mean ranking scores of statements from Q18
*p-value < 0.01, **n = 127***

As discussed in Chapter 3, a mean score for both trust and reliance was calculated from questions 17 and 18 respectively. The mean score for trust in Maltese SMEs was found to be 3.47, while the reliance mean score was 3.23, as seen from table 4.4. These means are also presented visually in figure 4.6, where it is evident that the mean trust score is higher than the reliance trust score.

	Mean score	Std. Deviation	Minimum	Maximum
Trust	3.47	0.40	2.50	4.38
Reliance	3.23	0.42	2.17	4.17

Table 4.4: Mean Trust and Reliance scores in Maltese SMEs
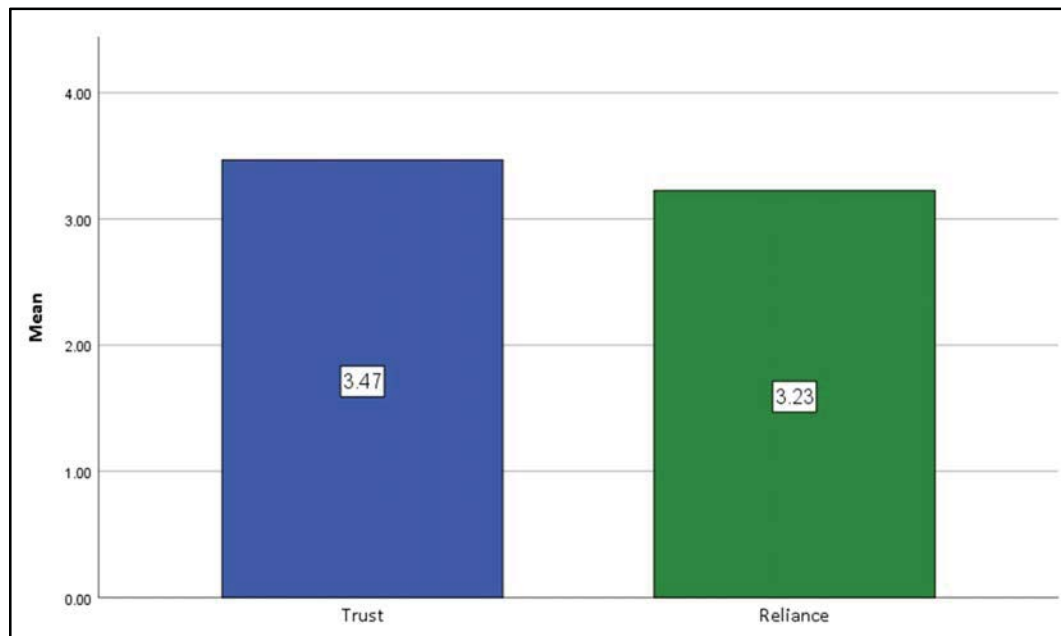
Figure 4.6: Mean Trust and Reliance Scores in Maltese SMEs

The Spearman's Correlation test was used to analyse whether a relationship exists between trust and reliance. As seen in table A4.1-4 (Appendix 4.1), a statistically significant *(p-value = 0.000)* positive correlation was found to exist between the two variables, and such correlation was moderate in strength *(r = 0.372)*. This relationship can be seen visually in figure 4.7 below, where the trend line clearly demonstrates that as trust increases, reliance increases as well and vice versa.
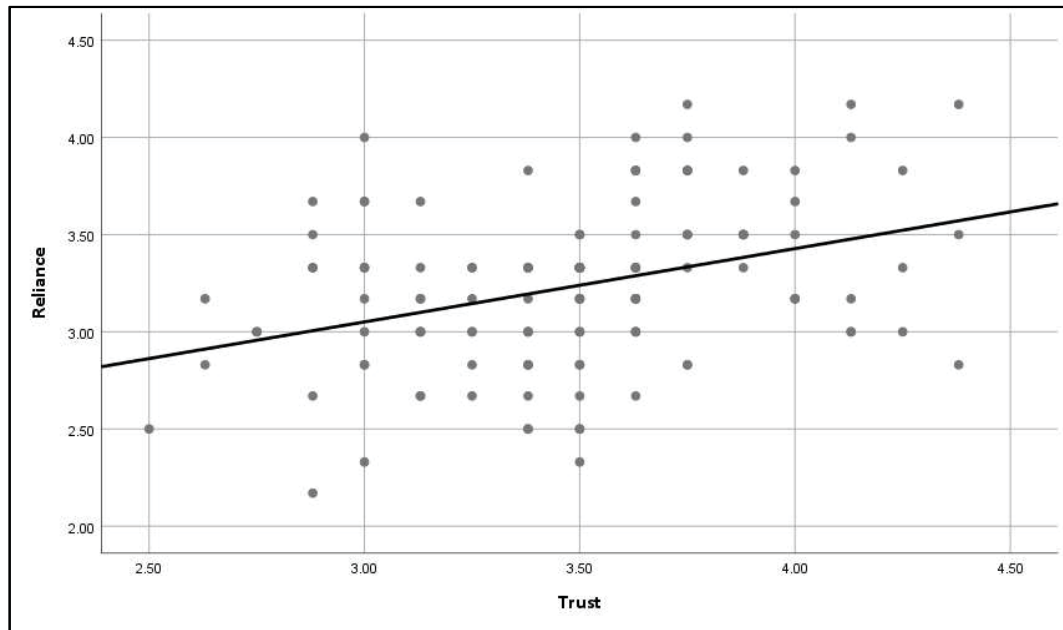
Figure 4.7: Scatter Plot for the Correlation between Trust and Reliance
p-value < 0.05

4.3.2 A profile of Organisational Cultures within Maltese SMEs

The results from the Friedman test (Appendix 4.1) show that there was a significant difference in the way Questions 11 to 16 were answered *(p-value < 0.05)*. Table 4.5 shows the three statements which had the highest mean score. All three statements corresponded to the Clan culture and key words included loyalty, trust, teamwork, participation and family.

Statement Number	Statement	Mean Score
Q14A	The glue that holds the organisation together is loyalty and mutual trust. Commitment to this organisation runs high.	44.65
Q13A	The management style in the organisation is characterised by teamwork, consensus and participation.	44.17
Q11A	The organisation is a very personal place. It is like an extended family. People seem to share a lot of themselves.	40.28

Table 4.5: The three statements from Q11-Q16 with the highest mean score
p-value < 0.05

As can be seen in table 4.6 below, the prevailing culture in Maltese SMEs is the Clan culture *(66.1%)*, followed by the Hierarchy culture *(20.5%)*, Market Culture *(8.7%)* and the Adhocracy culture present in merely 4.7% of the respondent SMEs (see figure 2.2 from Chapter 2). For the other categorisations, Internal *(86.6%)* and Flexibility *(73.2%)* were significantly higher than External *(13.4%)* and Stability *(26.8%)* respectively.

Culture Categorisation	Culture Type	n	%
Clan, Adhocracy, Market and Hierarchy	Clan	84	66.1%
	Adhocracy	6	4.7%
	Market	11	8.7%
	Hierarchy	26	20.5%
		127	**100%**
Internally or Externally Oriented	Internal	110	86.6%
	External	17	13.4%
		127	**100%**
Flexibility or Stability	Flexibility	93	73.2%
	Stability	34	26.8%
		127	**100%**

Table 4.6: Proportion of different cultures within the sample
n = 127

Five respondents' highest mean score was equal for two cultures, meaning that they exhibited two dominant cultures instead of just one. However, for the purpose of running statistical tests these five respondents were required to be assigned just one dominant culture. This assignment was carried out on the basis of sampling error. Sampling error decreases as the sample size increases (Wimmer and Dominick, 2011). In order to mitigate sampling error in culture groups, respondents with two dominant cultures were assigned the culture with the least count in the sample. In so doing, the count of the Adhocracy, Market and Hierarchy cultures within the sample increased and so more representative p-values were generated, while also minimising the possibility for type I and type II errors. This method of selecting the culture with the least count was consistent across all cases involving duplicate dominant cultures.

The Kruskal-Wallis Test was used to investigate whether the four different cultures all exhibit the same cultural strength within SMEs. The null (H_0) and alternative (H_1) hypotheses tested were:

H_0: The mean Cultural Strength exhibited by SMEs does not vary significantly between different categories of culture.

H_1: The mean Cultural Strength exhibited by SMEs varies significantly between different categories of culture.

Since the resultant p-value was less than 0.05 *(p-value = 0.001)*, H_0 was rejected and H_1 accepted. From table 4.7 below it is evident that when dominant, with a mean score of 44.19, the Clan culture exhibits the highest strength in an SME among all dominant cultures. The Market and Hierarchy cultures are both dominant with approximately the same strength, on average, with mean scores of 36.99 and 36.36. The Adhocracy Culture is the weakest culture when dominant, with a mean strength score of 32.09. It is also apparent that the Clan culture fluctuated the most in strength, in the case of one SME even reaching a strength score of 96.67.

Culture	Mean	Std. Deviation	Minimum	Maximum
Clan	44.19	13.18	26.67	96.67
Adhocracy	32.09	4.11	27.50	37.50
Market	36.36	11.33	26.67	66.67
Hierarchy	36.99	5.79	29.17	53.33

Table 4.7: The mean cultural strength score for each culture
n = 127, p-value < 0.05

The Chi-Square Test of Independence was used to test whether a particular culture is more prevalent in a specific SME size, that is micro, small or medium. The following null (H_0) and alternative (H_1) hypotheses were tested:

H_0: No association exists between culture groups and SME size.

H_1: An association exists between culture groups and SME size.

The resultant p-value was 0.193, hence H_0 was accepted while H_1 was rejected. This result makes it clear that different culture groups are not associated in any way with SME size. Table 4.8 below illustrates how the different culture groups were distributed across the three SME sizes in the sample. As can be seen, the Clan culture dominated SMEs across all three levels, with the Hierarchy culture consistently being the second most prevalent culture. Interestingly, the Adhocracy culture was not present in any of the 24 Medium entities in the sample. On the other hand, the Medium entity level was characterised by the Market culture *(20.8%)* to a higher extent than the Micro *(7.4%)* and Small *(4.1%)* levels.

			Culture				
			Clan	Adhocracy	Market	Hierarchy	Total
SME size	Micro	Count	35	4	4	11	54
		% within SME Size	64.8%	7.4%	7.4%	20.4%	100.0%
	Small	Count	36	2	2	9	49
		% within SME Size	73.5%	4.1%	4.1%	18.4%	100.0%
	Medium	Count	13	0	5	6	24
		% within SME Size	54.2%	0.0%	20.8%	25.0%	100.0%

Table 4.8: Culture groups characterised by SME size,
n = 127, $X^2(6)$ = 8.669, p-value > 0.05

4.3.3 Dominant Culture Strength and SME Size

The Spearman's Correlation was used once again to explore whether SME size is related with the strength of the dominant culture. Thus, the hypotheses for each categorisation of culture were:

H_0: There is no relationship between dominant culture strength and SME size.

H_1: A statistically significant relationship between dominant culture strength and SME size exists.

H_0 was accepted in the case of culture categorised as Internal or External. On the other hand, H_1 was accepted in the cases of culture categorised as Clan, Adhocracy, Market or Hierarchy *(p-value = 0.028)* and culture as Flexibility or Stability *(p-value = 0.012)*. In both cases the statistically significant correlations were negative and small in strength, r = -0.196 and r = -0.224 respectively. Both relationships are depicted visually in figures 4.8 and 4.9, where it is seen in both cases that as the SME size increases, the strength of the dominant culture decreases. It can also be noted that the correlation is marginally stronger in the case of culture as Flexibility or Stability than in the other categorisation of culture.
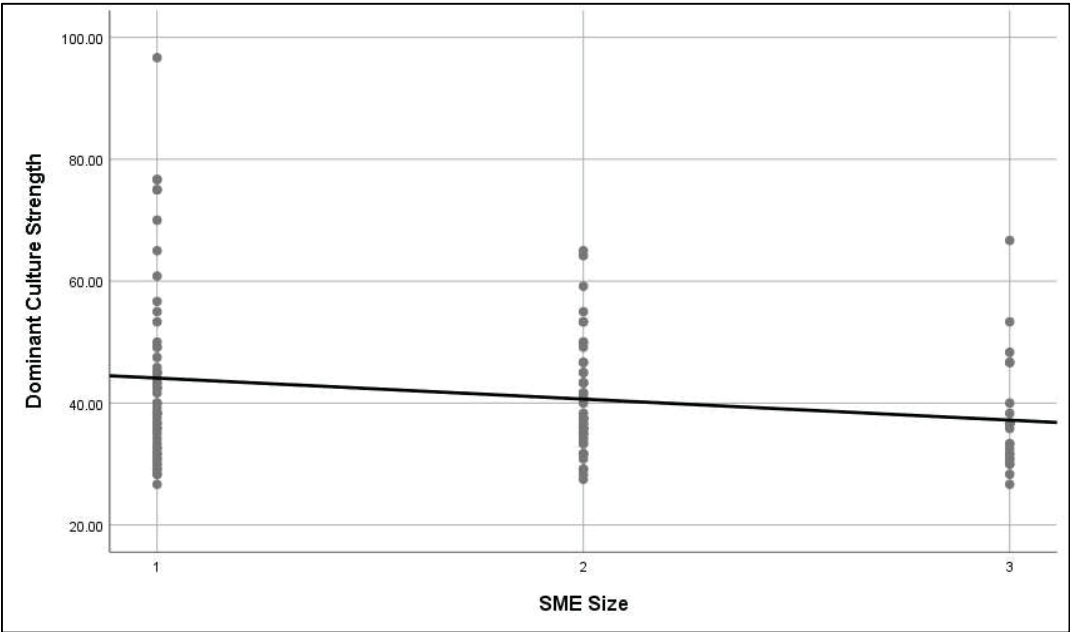
*Figure 4.8: The relationship between Dominant Culture Strength and SME Size for Culture as Clan, Adhocracy, Market and Hierarchy, where 1 = Micro, 2 = Small and 3 = Medium, **p-value < 0.05**, **r = -0.196***
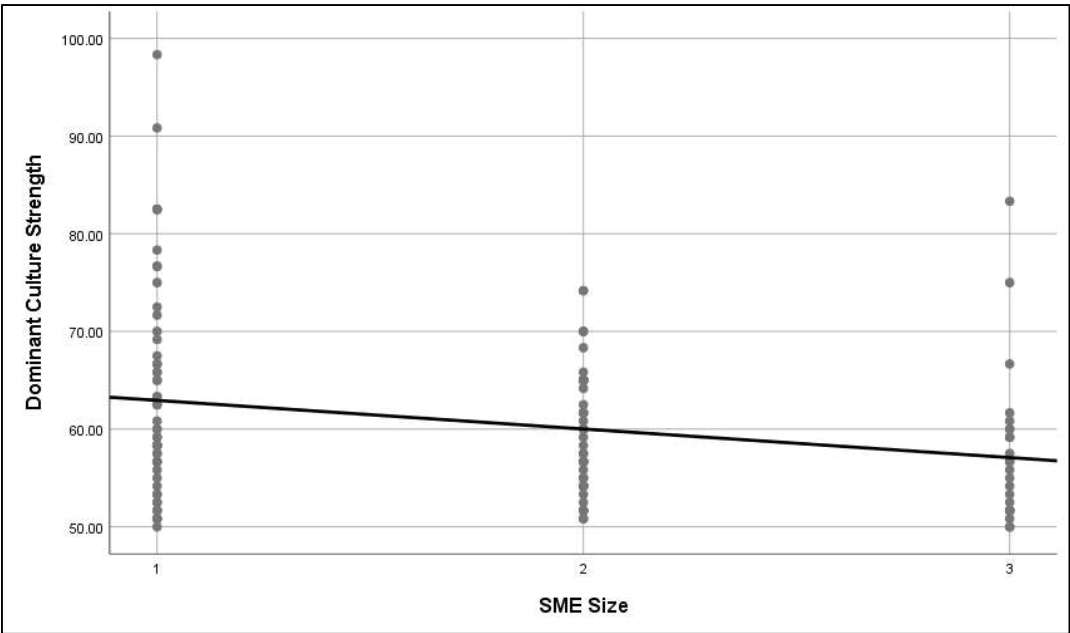
*Figure 4.9: The relationship between Dominant Culture Strength and SME Size for Culture as Flexibility or Stability, where 1 = Micro, 2 = Small and 3 = Medium, **p-value < 0.05**, **r = -0.224***

Furthermore, a Chi-Square test was run between SMEs with a dominant culture score of more or less than 70 and SME size, where a statistically significant association was found to exist (*p-value = 0.014, Cramer's V = 0.259)*. As seen in figure A4.1-7 (Appendix 4.1), it is evident that within the culture categorisation as Clan, Adhocracy, Market or Hierarchy, SMEs with a dominant culture score of 70 or more all fall within the micro bracket.

A statistically significant *(p-value = 0.046)* relationship was also found between the number of employees and dominant culture strength for culture categorisation as Clan, Adhocracy, Market and Hierarchy. This relationship was negative and small in strength *(r = -0.177),* as seen visually in figure A4.1-1 (Appendix 4.1).

4.3.4 SME Size, Reliance and Trust

In light of the previous findings, a correlation test was run to explore whether SME size is also related with Trust or Reliance. As seen in table 4.9 below, both correlations are positive, however none of the two exceed the threshold for statistical significance. Thus, there is no statistically significant evidence that SME size is related to higher trust or reliance in financial statements.

Relationship tested	p-value	Correlation Coefficient
SME Size and Trust	0.135	0.134
SME Size and Reliance	0.546	0.054

Table 4.9: Spearman's Correlation test between SME Size and Trust & Reliance

4.3.5 Accounting Knowledge, Business Experience, Reliance and Trust

A statistically significant negative correlation was found between level of accounting education and years of business experience *(r = -0.184, p-value = 0.039)*. As shown visually in figure 4.10, the level of accounting education decreases as business experience increases.
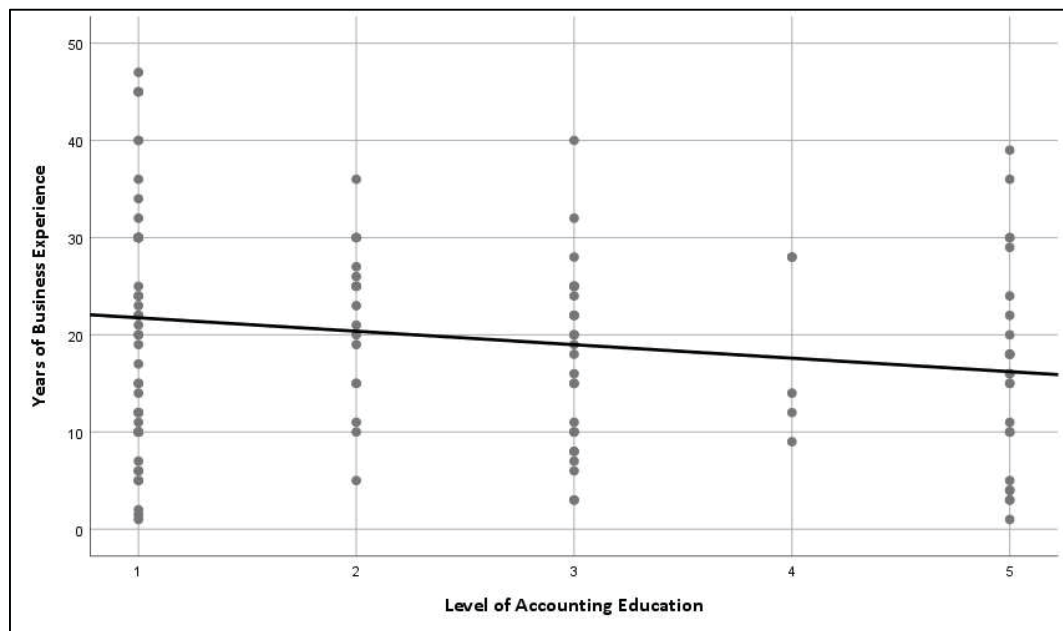
Figure 4.10: Relationship between years of business experience and level of accounting education, where 1 = No education in Accounting, 2 = O-level, 3 = A-level, 4 = Other accounting education, 5 = University level,
p-value < 0.05, r = -0.184

To complement this finding, a Spearman's Correlation test was run between level of accounting education and trust/reliance; and between business experience and trust/reliance, where the below hypotheses in brackets refer to the words in brackets:

H_0 (H_0^1): There is no relationship between the variable and trust (reliance).

H_1 (H_1^1): A statistically significant relationship between the variable and trust (reliance).

H_0 and H_0^1 were accepted in all cases except for the relationship between business experience and reliance, for which H_1^1 was accepted, as demonstrated in table 4.10. A statistically significant *(p–value = 0.041)* negative correlation was found to exist between business experience and reliance, and such correlation was small in strength *(r = -0.182)*. As shown in figure 4.11, as the years of business experience increase, reliance on financial statements decreases.

Relationship tested	p-value	Correlation Coefficient
Level of accounting education and Trust	0.895	-0.012
Level of accounting education and Reliance	0.117	0.140
Level of Business Experience and Trust	0.257	-0.102
Level of Business Experience and Reliance	**0.041**	**-0.182**

Table 4.10: Results from the Spearman's Correlation Tests
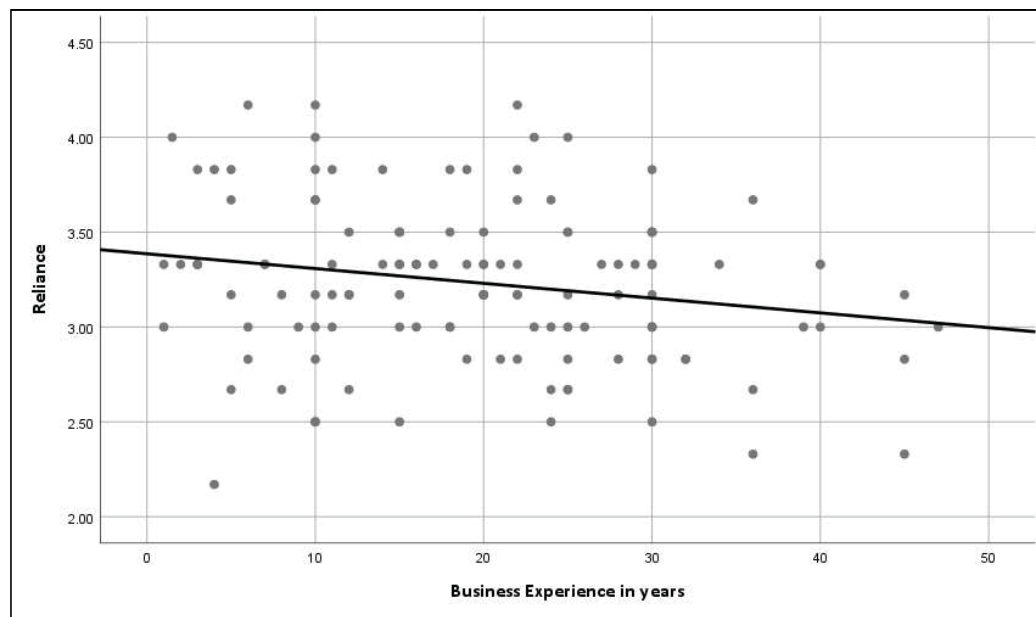
Figure 4.11: Relationship between years of business experience and Reliance
p-value < 0.05, r = -0.182

Even though business experience is negatively correlated with both accounting education and reliance, reliance and accounting education were not found to be statistically significantly correlated *(p-value = 0.117)*, even though the correlation coefficient was positive *(r = 0.140)*. No statistically significant correlation whatsoever exists between accounting education, business experience and trust.

4.4 Different Organisational Cultures and their association with Financial Statements Trust and Reliance

This section presents the findings with regards to the third research objective, that is whether different types of organisational culture are associated with different levels of financial statements trust and reliance. Since the results are purely statistical, the same format is kept in each subsection to facilitate an easier reading. For each perspective of culture, the null and alternative hypotheses are stated for both reliance and trust, followed by the result of the statistical test and the interpretation of such result. The final subsection then reperforms all the tests with the data categorised by Micro, Small and Medium levels, to analyse for consistency with the general SME size. Prior to the performance of each test, the distribution of the reliance and trust scores had to be tested for normality as grouped by the different categorisations of culture in each case. The use of a parametric or a non-parametric test then ensued.

4.4.1 Organisational Cultures as Clan, Adhocracy, Market or Hierarchy

The Shapiro-Wilk test resulted that the trust and reliance scores as categorised by these culture groups were normally distributed. The one-way ANOVA test was used to explore whether SMEs in different cultures had differing trust and reliance scores.

4.4.1.1 Trust

The null (H_0) and alternative (H_1) tested through the one-way ANOVA were:

H_0: There is no significant difference in the trust mean scores between the cultures.

H_1: There is a significant difference in the trust mean scores between the cultures.

The one-way ANOVA test resulted in a p-value of 0.303, hence H_0 was accepted and H_1 rejected. This result confirms that trust in financial statements does not differ statistically significantly between the Clan, Adhocracy, Market and Hierarchy cultures. This result is shown graphically in figure 4.12 below, as well as the mean trust score of each culture.
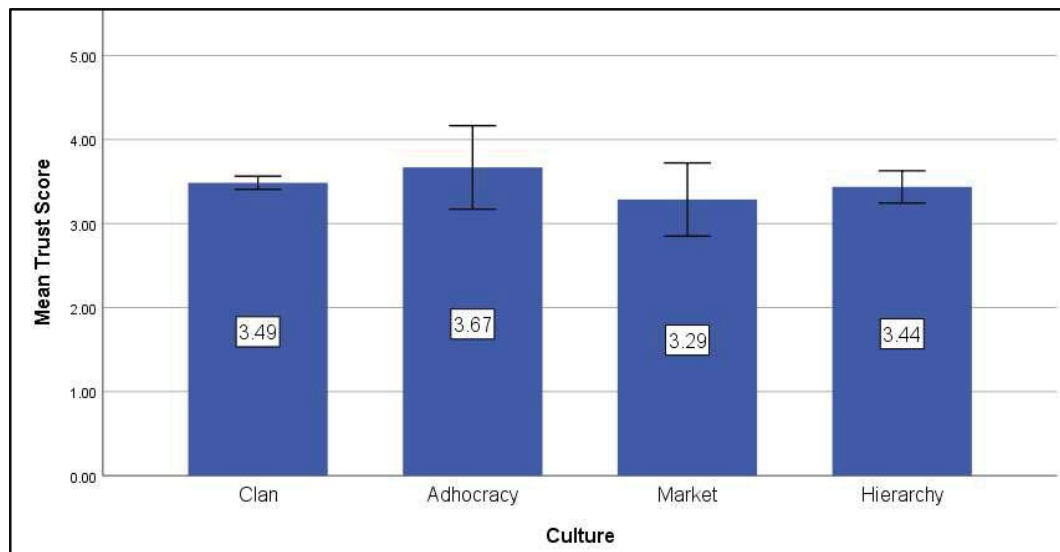
Figure 4.12: Mean trust score of each culture
p-value = 0.303

4.4.1.2 Reliance

The one-way ANOVA was used again to test for the following hypotheses regarding reliance:

H_0: There is no significant difference in the reliance mean scores between the cultures.

H_1: There is a significant difference in the reliance mean scores between the cultures.

This time H_0 was rejected and H_1 accepted as the resultant p-value was 0.029. This confirms that at least one culture exhibits a statistically significant difference in the mean reliance score, as shown in figure 4.13.
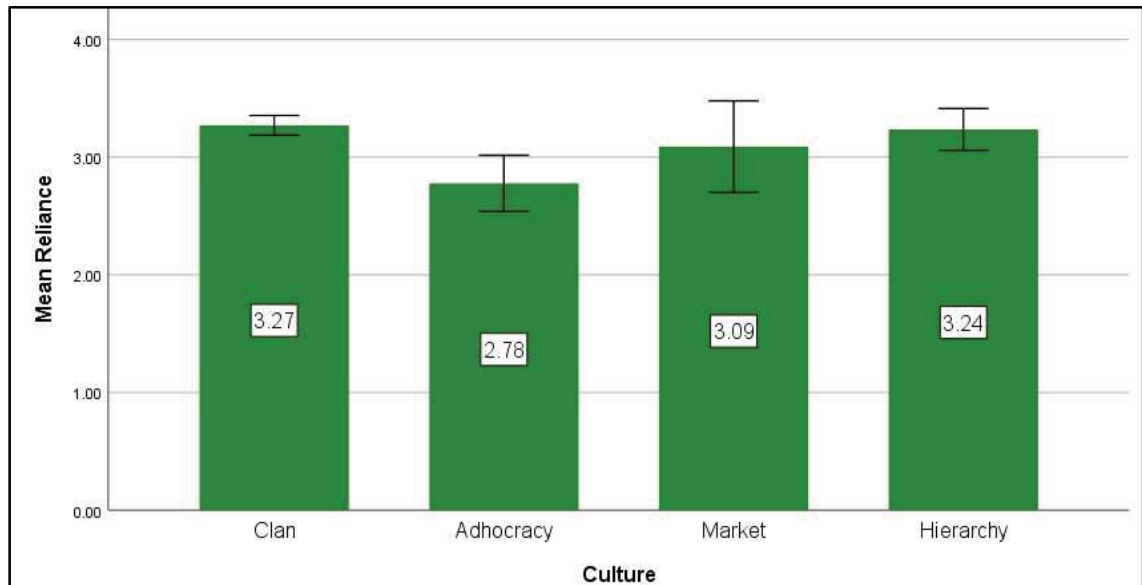
Figure 4.13: Mean reliance score of each culture
p-value = 0.029

The Clan culture exhibited the highest reliance mean score *(3.27 ± 0.0837)*, followed closely by Hierarchy *(3.24 ± 0.1779)*, Market *(3.09 ± 0.389)* and Adhocracy with the lowest mean score of 2.78 ± 0.2391 (Appendix 4.1). As shown in table 4.11, Tukey's post hoc test revealed that only the difference between the

Clan and Adhocracy mean reliance scores (0.4931) was statistically significant
(p = 0.027). This means that the reliance mean scores between the different
cultures were not statistically significantly different except in the case between
the Clan and Adhocracy cultures.

(I) Culture	(J) Culture	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Clan	Adhocracy	**.49310**	**.17387**	**.027**	**.0403**	**.9459**
	Market	.18143	.13193	.517	-.1622	.5250
	Hierarchy	.03527	.09234	.981	-.2052	.2758
Adhocracy	Clan	**-.49310**	**.17387**	**.027**	**-.9459**	**-.0403**
	Market	-.31167	.20882	.445	-.8555	.2322
	Hierarchy	-.45782	.18635	.072	-.9432	.0275
Market	Clan	-.18143	.13193	.517	-.5250	.1622
	Adhocracy	.31167	.20882	.445	-.2322	.8555
	Hierarchy	-.14615	.14799	.757	-.5316	.2393
Hierarchy	Clan	-.03527	.09234	.981	-.2758	.2052
	Adhocracy	.45782	.18635	.072	-.0275	.9432
	Market	.14615	.14799	.757	-.2393	.5316

*Table 4.11: Pairwise comparison of the mean reliance score between the four
cultures*

4.4.2 Organisational Culture as Internally or Externally Oriented

The Shapiro-Wilk test resulted that the mean scores of reliance and trust as categorised by internal or external orientation did not follow a normal distribution (Appendix). Hence, the Mann-Whitney test was used to analyse whether the mean reliance and trust scores differed significantly between an Internal or External Culture.

4.4.2.1 Trust

The null (H_0) and alternative (H_1) hypotheses for the Mann-Whitney U Test were:

H_0: The distribution of trust scores for Internal and External orientations are equal.

H_1: The distribution of trust scores for Internal and External orientations are not equal.

The resultant p-value from the Mann-Whitney test was 0.701, meaning that H_0 was retained. This implies that there is no statistically significant evidence that Internally and Externally oriented SMEs have different levels of trust in financial statements.

4.4.2.2 Reliance

Similarly, the Mann-Whitney U test hypotheses for reliance were:

H_0: The distribution of reliance scores for Internal and External orientations are equal.

H_1: The distribution of reliance scores for Internal and External orientations are not equal.

As in the case of trust, the p-value *(0.079)* from the Mann-Whitney test was greater than 0.05, hence the null hypothesis was accepted once again. Consequently, Internal or External cultures were shown to have no statistically significant difference in the reliance score.

The results of the previous two tests are demonstrated visually in figure 4.14, where Internal SMEs exhibited mean trust and reliance scores of 3.48 and 3.26 respectively, while External SMEs averaged a trust score of 3.37 and a reliance score of 3.01. None of the differences in trust and reliance scores are statistically significant.
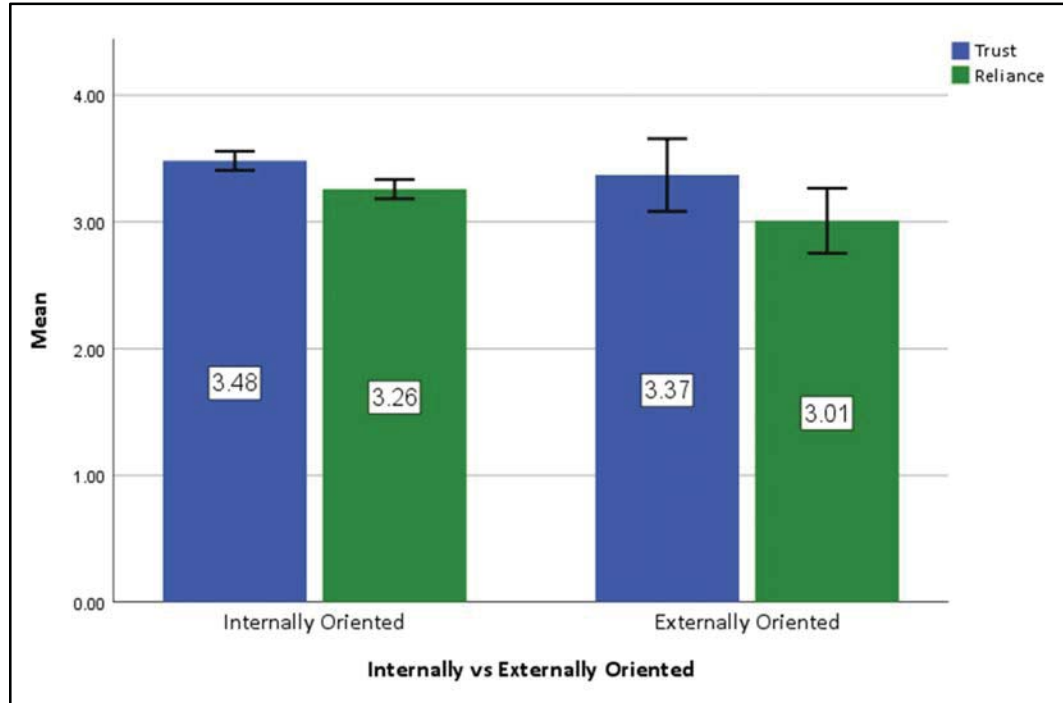
*Figure 4.14: Mean reliance and trust scores for internally and externally dominant SMEs, **p-values > 0.05***

4.4.3 Organisational Culture as Flexibility or Stability

The Shapiro-Wilk test confirmed that the reliance and trust scores as categorised by the Flexibility or Stability culture categorisation were normally distributed (Appendix). Hence, the Independent Samples T test was used to test the following hypotheses:

H_0 (H_0^1): There is no significant difference in the trust in (reliance on) financial statements between the Flexibility and Stability cultures.

H_1 (H_1^1): There is a significant difference in the trust in (reliance on) financial statements between the Flexibility and Stability cultures.

Table 4.12 below shows the results of the two tests, where both H_0 and H_0^1 were accepted due to the p-values exceeding the 0.05 threshold. This evidences that the differences in reliance and trust between Flexibility and Stability SMEs are not statistically significant. Visual assessment of table 4.12 and figure 4.15 below confirms this statement, as the mean scores for both reliance and trust vary marginally.

	p-value	Hypotheses accepted	Culture	Mean Score	Std. Deviation
Trust	0.759	H_0	Flexibility	3.47	0.3958
			Stability	3.45	0.4980
Reliance	0.440	H_0^1	Flexibility	3.21	0.4180
			Stability	3.27	0.4345

Table 4.12: Results of the Independent Samples T test
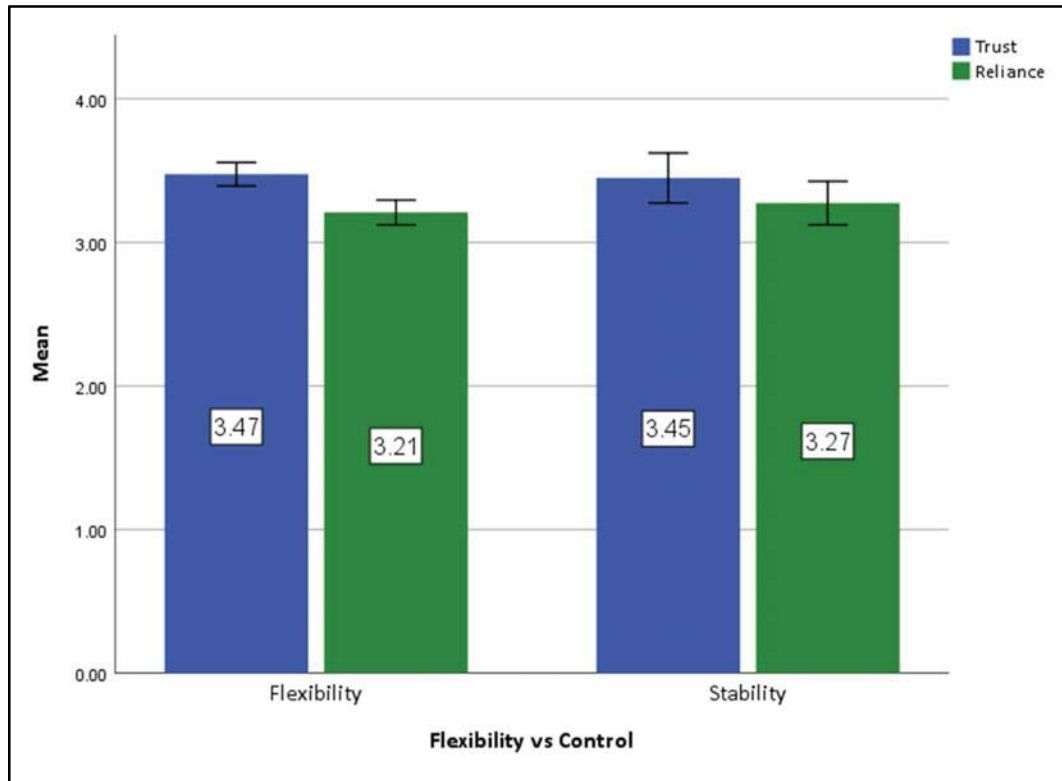
*Figure 4.15: Trust and Reliance mean scores categorised by Flexibility and Stability, **p-value > 0.05***

4.4.4 Consistency of Results between the different sizes of an SME

Respondents' data was grouped into three, according to the Micro, Small and Medium sizes. Each of the three groups of data was subsequently subjected to tests in order to determine whether there was a statistically significant difference between the mean reliance and trust scores within each of the three SME groups, as was done in the preceding sections. The results of all the tests are presented below in table 4.13, where it can be seen that all p-values surpass the 0.05 significance threshold. This implies that no statistically significant differences were found in the means scores of both trust and reliance between the different cultures, within each separate SME size.

	Cultures Categorisation	Reliance or Trust	Test Performed	p-value
Micro n = 54	Clan, Market, Adhocracy or Hierarchy	Trust	One-way ANOVA	0.473
		Reliance	One-way ANOVA	**0.078**
	Internal or External Orientation	Trust	Mann-Whitney	0.866
		Reliance	Mann-Whitney	0.235
	Flexibility or Stability	Trust	Independent Samples T test	0.596
		Reliance	Independent Samples T test	0.818
Small n = 49	Clan, Market, Adhocracy or Hierarchy	Trust	One-way ANOVA	0.260
		Reliance	One-way ANOVA	**0.357**
	Internal or External Orientation	Trust	Independent Samples T test	0.314
		Reliance	Independent Samples T test	0.817
	Flexibility or Stability	Trust	Independent Samples T test	0.863
		Reliance	Independent Samples T test	0.190
Medium n = 24	Clan, Market, Adhocracy or Hierarchy	Trust	One-way ANOVA	0.189
		Reliance	One-way ANOVA	**0.219**
	Internal or External Orientation	Trust	Mann-Whitney	0.273
		Reliance	Independent Samples T test	0.383
	Flexibility or Stability	Trust	Independent Samples T test	0.508
		Reliance	Independent Samples T test	0.888

Table 4.13: Reperformance of tests on data categorised by SME sizes

4.5 The Effect of Organisational Culture Strength on Financial Statements Trust & Reliance

This section provides statistical evidence to address the fourth research objective, this being whether an association exists between the strength of Organisational Culture and levels of financial statements trust and reliance. As was done in the previous section, a consistent format is adhered to where the three categorisations of Organisational Culture are analysed sequentially under each manifestation of cultural strength. The Shapiro-Wilk test resulted that the data was not normally distributed (Appendix), therefore the Spearman's Correlation test was used as the non-parametric statistical test. No other tests of normality had to be performed as no categorical grouping variables were analysed.

4.5.1 The Strength of the Cultural Profile

The first conceptualisation of cultural strength which was tested was whether different cultural scores within the same SME have a relationship with reliance or trust in financial statements. As previously discussed, each respondent SME had a combination of four different cultural scores and the culture with the highest score was selected as the dominant culture. In this test, all cultural scores were included, irrespective of whether that score corresponded to the dominant culture or not. In this case, the Spearman's Correlation tested the following hypotheses for each categorisation of culture:

H_0 (H_0^1): There is no statistically significant relationship between the culture score and trust (reliance).

H_1 (H_1^1): There exists a statistically significant relationship between the culture score and trust (reliance).

4.5.1.1 Organisational Culture as Clan, Adhocracy, Market or Hierarchy

This categorisation of culture included four different scores corresponding to the four different cultures. Table 4.14 below presents the results from each Spearman's Correlation test conducted. H_1 was accepted in the case of the Market score and H_1^1 was accepted solely in the case of the Adhocracy score. In all other cases, H_0 and H_0^1 were accepted, as no statistically significant relationships were evidenced.

	Cultural Score	p-value	Correlation Coefficient
Trust	Clan Score	0.830	-0.19
	Adhocracy Score	0.571	0.051
	Market Score	**0.030**	**0.194**
	Hierarchy Score	0.246	-0.104
Reliance	Clan Score	0.587	0.049
	Adhocracy Score	**0.021**	**-0.204**
	Market Score	0.700	0.035
	Hierarchy Score	0.887	0.013

Table 4.14: Spearman's Correlation test results for cultural scores correlated with Trust and Reliance

The Market score was found to be positively correlated with trust, where such correlation was statistically significant and small in strength *(p-value = 0.030, r = 0.194)*. In figure 4.16 below, this relationship is visible as when the Market Score increases, an increase in Trust is evidenced.
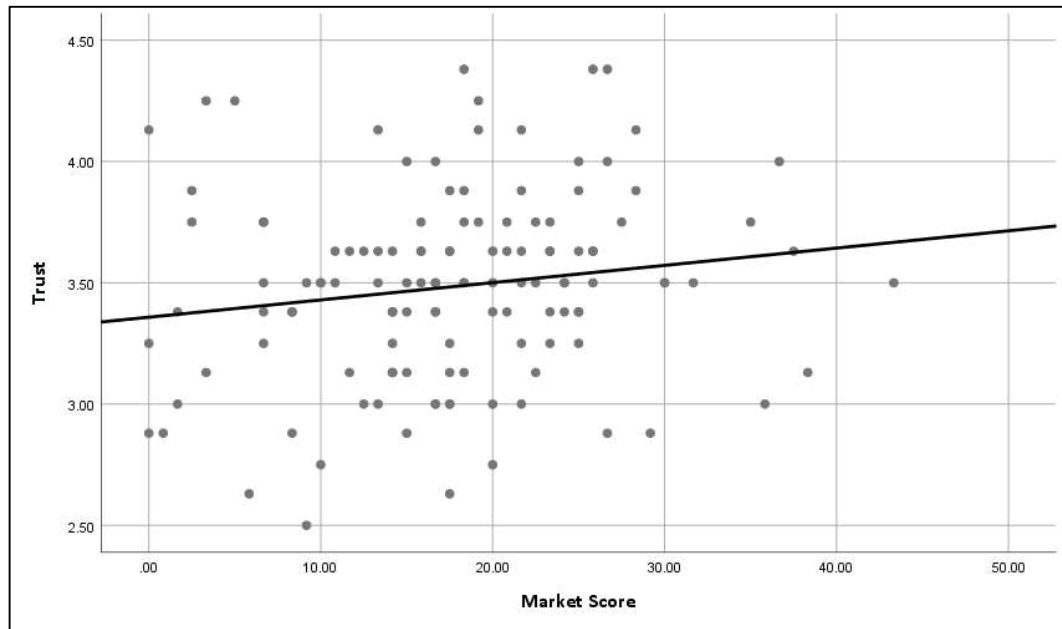
Figure 4.16: Scatter plot of Market Score related with Trust
p-value = 0.030, r = 0.194

Contrastingly, the Adhocracy score was found to be negatively correlated with Reliance. Such correlation was statistically significant *(p-value = 0.021)* and relatively small *(r = -0.204)*. Figure 4.17 below depicts the relationship visually, where it is conspicuous that as the Adhocracy score in an SME increases, the Reliance score decreases. The gradient of the trend line also demonstrates the small but statistically significant correlation coefficient.
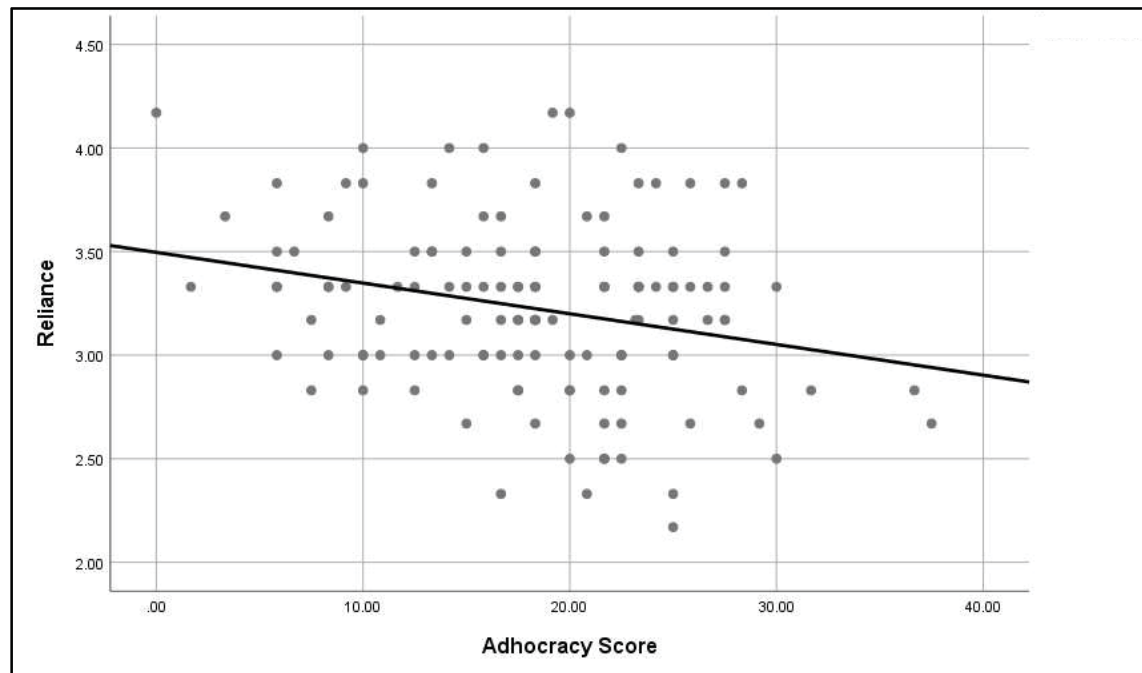
Figure 4.17: Scatter plot of Adhocracy Score related with Reliance
**p-value = 0.02*, r = -0.204*

4.5.1.2 Organisational Culture as Internal or External and Flexibility or Stability

Both of these culture categorisations consisted solely of two culture groups. As the scores of the two cultures in each categorisation always added up to 100, the correlation tests resulted in the same p-values and also in the same magnitude, but different direction, of correlation between the two respective cultures. In all cases H_0 and H_0^1 were accepted as both the Internal or External and Flexibility or Stability categorisations of culture lacked statistically significant evidence of a relationship with trust or reliance, as seen in table 4.15.

	Cultural Score	p-value	Correlation Coefficient
Trust	Internally Oriented	0.136	-0.134
	Externally Oriented	0.136	0.134
Reliance	Internally Oriented	0.431	0.070
	Externally Oriented	0.431	-0.070
Trust	Flexibility	0.699	0.035
	Stability	0.699	-0.035
Reliance	Flexibility	0.508	-0.059
	Stability	0.508	-0.059

Table 4.15: Results of the Spearman's Correlation test for the Internal or External and Flexibility or Stability categorisations of culture

From this subsection it is concluded that while an SME has a cultural profile comprising of different cultural scores, only the Adhocracy score and Market score were found to be statistically significantly correlated with reliance and trust respectively. No other statistically significant correlations between culture scores and trust were evidenced.

4.5.2 The Strength of the Dominant Culture

The second perspective of cultural strength statistically analysed was whether the strength of the dominant culture, irrespective of which particular culture, is related to different levels of trust or reliance. Hence, only the highest out of the different culture scores for each culture categorisation was included in the Spearman's Correlation tests, which tested the following hypotheses:

H_0 (H_0^1): There is no statistically significant relationship between the dominant culture strength and trust (reliance).

H_1 (H_1^1): There exists a statistically significant relationship between the dominant culture strength and trust (reliance).

4.5.2.1 Trust

H_1 was accepted for both the Clan, Adhocracy, Market or Hierarchy and Internal or External categorisations of culture, as seen in table 4.16. In fact, both categorisations resulted in very similar p-values *(0.044 and 0.041 respectively)* and virtually identical negative correlation coefficients of -0.180 and -0.182 respectively. This implies that both groups of culture are related with trust and that the correlations in both cases are statistically significant, negative and small *(r = -0.180, -0.182)*. Contrastingly, in the Flexibility or Stability categorisation H_0 was accepted, hence no relationship with trust was found.

Culture Categorisation	p-value	Correlation Coefficient
Clan, Adhocracy, Market or Hierarchy	0.044	-0.180
Internally or Externally Oriented	0.041	-0.182
Flexibility or Stability	0.973	0.003

Table 4.16: Results of Spearman's Correlation test for the three categorisations of culture related with Trust

Figures 4.18 and 4.19 below depict these significant relationships. In both cases, the spread of the data points and the gradient of the trend line evidence that the correlations are small (albeit statistically significant) and that the relationships are inverse.
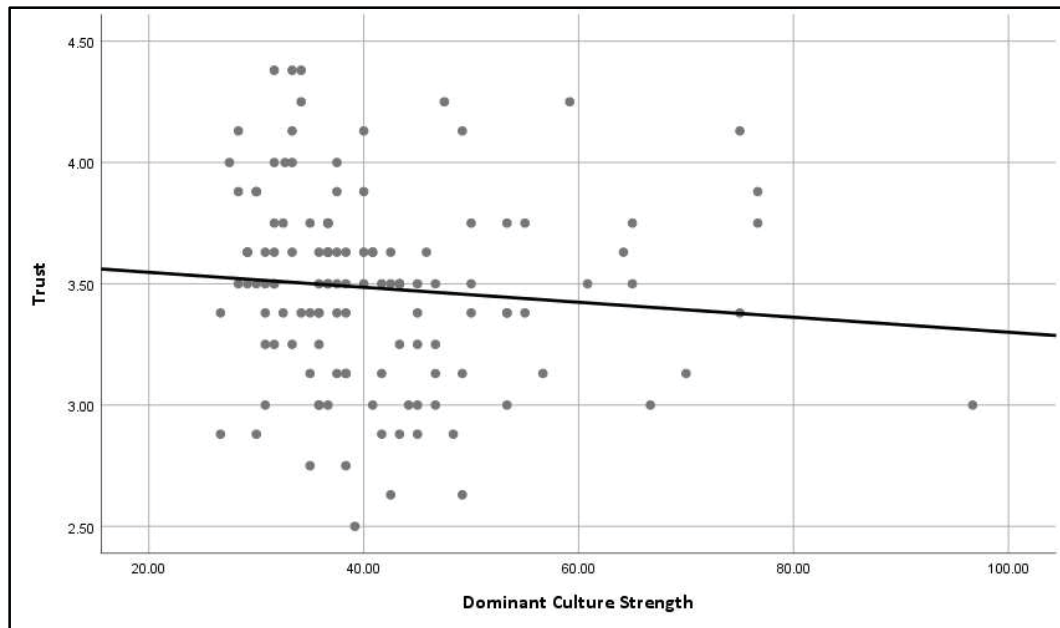
Figure 4.18: Scatter Plot for Trust related with Dominant Culture Strength for the categorisation of culture as Clan, Adhocracy, Market and Hierarchy,
p = 0.044 r = -0.180
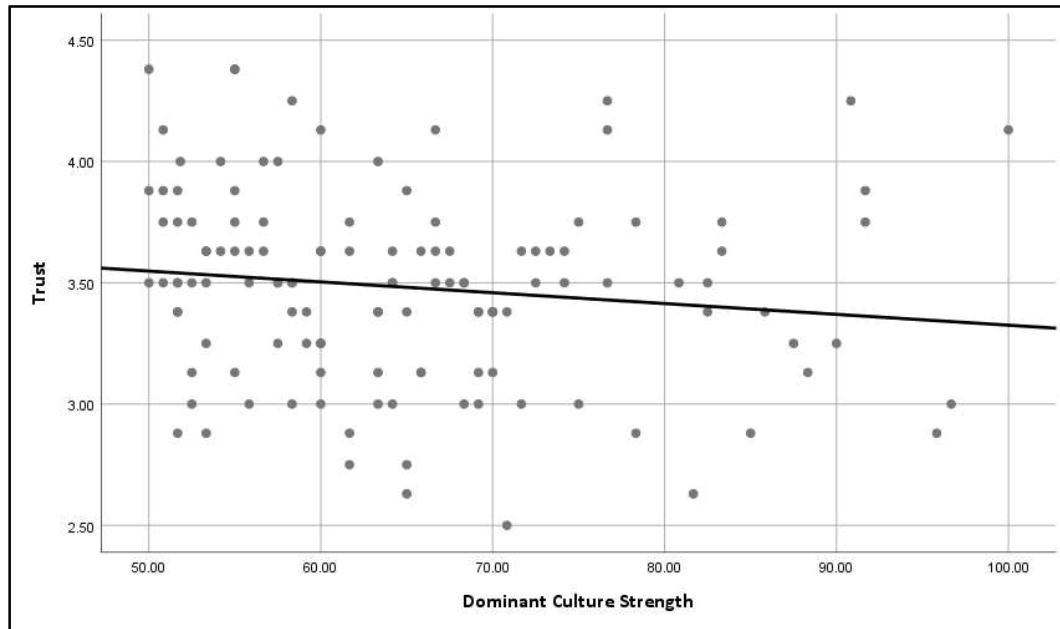
Figure 4.19: Scatter Plot for Trust related with Dominant Culture Strength for the categorisation of culture as Internal or External
p = 0.044 r = -0.180

4.5.2.2 Reliance

In the case of Reliance $H_0{}^1$ was accepted for all three categorisations of culture, because as can be seen from table 4.17, all p-values surpassed the 0.05 significance threshold. Thus, it can be concluded that there is no statistical evidence that reliance is related to the strength of the dominant culture. However, in this test the strength of the dominant culture does not acknowledge the fact that there are different types of cultures, but only takes into consideration the strength of the highest score.

Culture Categorisation	p-value
Clan, Adhocracy, Market or Hierarchy	0.434
Internally or Externally Oriented	0.477
Flexibility or Stability	0.848

*Table 4.17: Results of Spearman's Correlation test for the three categorisations of culture related with Reliance, **p-values > 0.05***

4.6 Organisational Culture and other aspects of Financial Statements

In this section, further associations between organisational culture and financial statements are statistically analysed. Both the first and second research objectives are addressed. However, whereas previous sections focused solely on the level of reliance and trust in financial statements, in this section the focus will be on other accounting related aspects. Hence, in this section the focus will not be on the mean reliance and trust scores exhibited by respondents, but on the individual Likert scale statements *(questions 17 and 18)* from which the scores were originally derived. Since the focus is not on the mean trust and reliance scores, statements T2 and R3 were also included in the analysis, as discussed in Chapter 3. Furthermore, the same perspectives of Organisational Culture as in the previous sections will be tested to answer the different questions: differences between culture, the strength of the cultural profile and the strength of the dominant culture.

Table 4.18 and 4.19 below have been provided to facilitate reference with the statements from questions 17 and 18.

	Question 17
T1	Trust in accounting information increases the confidence of achieving positive results from decision making
T2	Trusting accounting information makes you vulnerable to accountants and accounting information
T3	Trust in accounting information reduces uncertainty in decision making
T4	Accounting information is reliable to take decisions upon
T5	Accounting information is often used in decision making in my organisation
T6	In times of crisis, accounting information should be used to find solutions
T7	The accountant is trusted when taking decisions
T8	Accounting information has to be trusted when I lack previous technical experience, such as expanding into new industries or starting a new business

Table 4.18: Statements from question 17

	Question 18 – Accounting information is more likely to be used in decision making:
R1	by owners who are able to understand such accounting information
R2	when owners are more comfortable with their ability to interpret such accounting information
R3	when it is prepared externally rather than internally
R4	by owners who a have higher level of education
R5	by owners who have more business experience
R6	by owners who have more confidence in their accounting information

Table 4.19: Statements from question 18

4.6.1 Different Organisational Cultures

The different categorisations of culture were each tested for differing levels of agreement with the statements from questions 17 and 18 between the cultures in each categorisation. In order to conduct this analysis, The Chi-Square Test tested the following hypotheses in each of the following subsections:

H_0: No association exists between the different cultures and the level of agreement with the statement

H_1: A statistically significant association exists between the different cultures and the level of agreement with the statement

4.6.1.1 Organisational Culture as Clan, Adhocracy, Market or Hierarchy

H_1 was accepted in the cases of statements T6, R4 and R5, as the p-values were lower than the 0.05 significance threshold, whereas in all other cases H_0 was retained.

In the case of T6, as shown in table 4.20, it is clear that the Market culture expressed the most disagreement with the statement that accounting information should be used in times of crisis. Whereas other cultures had a maximum of 7.1% of respondents disagreeing with the statement, disagreement was expressed by 27.3% of Market respondents. Furthermore, none of the latter strongly agreed, while there were at least 16.7% of respondents who strongly agreed within the other cultures. Moreover, all Adhocracy respondents agreed with the statement, with 50% agreeing and 50% strongly agreeing. Thus, it can be concluded there exists a statistically significant association *(p-value = 0.034)* between culture type and agreement with T6, where such association is moderately strong *(Cramer's V = 0.242)*, the Market culture expressed the lowest level of agreement and the Adhocracy culture expressed the highest.

			T6				
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Culture	Clan	Count	0	6	25	39	14
		% within Culture	0.0%	7.1%	29.8%	46.4%	16.7%
	Adhocracy	Count	0	0	0	3	3
		% within Culture	0.0%	0.0%	0.0%	50.0%	50.0%
	Market	Count	1	2	3	5	0
		% within Culture	9.1%	18.2%	27.3%	45.5%	0.0%
	Hierarchy	Count	0	1	6	11	8
		% within Culture	0.0%	3.8%	23.1%	42.3%	30.8%

Table 4.20: Crosstabulation of Culture and agreement with T6
p-value < 0.05, $X^2(12)$ = 22.365, Cramer's V = 0.242

From table 4.21 it is seen that 66.7% of Adhocracy respondents disagreed with statement R4, while the maximum disagreement by the other cultures was 16.7% by Clan respondents. Similarly, as seen from table 4.22, Adhocracy respondents disagreed the most with R5 and not one respondent strongly agreed. It is concluded that a moderate association *(Cramer's V = 0.240, 0.238)* exists between culture type and agreement with R4 and R5 *(p-value = 0.039, 0.042)*, where in both instances Adhocracy respondents conveyed the least agreement.

			R4				
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Culture	Clan	Count	1	14	18	38	13
		% within Culture	1.2%	16.7%	21.4%	45.2%	15.5%
	Adhocracy	Count	0	4	1	0	1
		% within Culture	0.0%	66.7%	16.7%	0.0%	16.7%
	Market	Count	0	1	4	5	1
		% within Culture	0.0%	9.1%	36.4%	45.5%	9.1%
	Hierarchy	Count	2	1	9	11	3
		% within Culture	7.7%	3.8%	34.6%	42.3%	11.5%

Table 4.21: Crosstabulation of Culture and agreement with R4
p-value < 0.05, $X^2(12)$ = 21.869, Cramer's V = 0.240

			R5				
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Culture	Clan	Count	0	6	17	46	15
		% within Culture	0.0%	7.1%	20.2%	54.8%	17.9%
	Adhocracy	Count	0	2	2	2	0
		% within Culture	0.0%	33.3%	33.3%	33.3%	0.0%
	Market	Count	1	1	2	6	1
		% within Culture	9.1%	9.1%	18.2%	54.5%	9.1%
	Hierarchy	Count	0	2	10	9	5
		% within Culture	0.0%	7.7%	38.5%	34.6%	19.2%

Table 4.22: Crosstabulation of Culture and agreement with R5
p-value < 0.05, $X^2(12)$ = 21.655, Cramer's V = 0.238

4.6.1.2 Organisational Culture as Internally or Externally Oriented

As seen in Appendix 4.1 (tables A4.1-20 and A4.1-21), in this categorisation of culture only the levels of agreement with statements T1 and T8 were statistically significantly associated with culture *(p-values < 0.05; Cramer's V = 0.224, 0.313 respectively)*. Hence, in all other cases H_1 was rejected. External respondents agreed or strongly agreed *(70.6%)* with T1 less than Internal respondents did *(89.1%)*. Conversely, External respondents were more in agreement *(88.3%)* with statement T8 than Internal respondents were *(66.4%)*.

4.6.1.3 Organisational Culture as Flexibility or Stability

In this categorisation, H_1 was accepted only in the case of T5. A moderately strong statistically significant association was found to exist between cultures as Flexibility or Stability and level of agreement with T5 *(p-value = 0.014, Cramer's V = 0.314)*, as seen in table A4.1-22 (Appendix 4.1).

4.6.2 The effect of the Strength of Organisational Culture

Similar to section 4.4, strength of organisational culture is sub-sectioned into strength of the cultural profile and strength of the dominant culture. In this section, the Spearman's Correlation test tested:

H_0 (H_0^1): There is no relationship between the strength of the cultural profile (strength of the dominant culture) and level of agreement with the statement.

H_1 (H_1^1): There exists a relationship between the strength of the cultural profile (strength of the dominant culture) and level of agreement with the statement.

4.6.2.1 The Strength of the Cultural Profile

H_1 was only accepted in the relationships presented in table 4.23 below. All correlations involved the Adhocracy score. The relationships with statements R1 and R6 were negative, small in strength and similar in correlation coefficient (r = -0.176, -0.189). Contrastingly, the statistically significant (*p-value = 0.021*) relationship with statement T2 was positive, but also small in strength (*r = 0.205*). As the Adhocracy score increases, the level of agreement with R1 and R6 decreases, whereas the level of agreement with T2 increases, and all these correlations are statistically significant (p–value <0.05). A visual presentation of all three relationships can be found in Appendix 4.1.

Relationship	p-value	Correlation Coefficient
Adhocracy score and level of agreement with R1	0.047	- 0.176
Adhocracy score and level of agreement with R6	0.033	- 0.189
Adhocracy score and level of agreement with T2	0.021	0.205

*Table 4.23: Statistically Significant correlations between Adhocracy score and levels of agreement with statements R1, R6 and T2, **p-value <0.05***

4.6.2.2 The Strength of the Dominant Culture

$H_1{}^1$ was only accepted for the positive relationship between the dominant culture strength of culture as Flexibility or Stability and the level of agreement with T8 (p-value = 0.005, r = 0.246). The dominant culture strength in the other culture categorisations was not found to be associated with any of the statements *(p-values > 0.05).*

4.7 Conclusion

This chapter provided the findings with regards to organisational culture and attitudes towards financial statements necessary to meet the research objectives. In the next section, a thorough discussion on the findings from this chapter will ensue.

Chapter 5

Discussion

5.1 Introduction

This chapter comprises of a discussion on the findings of the previous chapter. In order to address the research objectives of this study, section 5.2 discusses the findings relating to the organisational culture orientation of Maltese SMEs, as well as their levels of trust and reliance, in line with the first two research objectives. In addressing the remaining research objectives, sections 5.3 and 5.4 then include a discussion on the associations between culture and attitudes towards financial statements, while section 5.5 evaluates the results of the different categorisations of culture. To facilitate a better understanding of this chapter, table 5.1 provides a summary of the main findings of Chapter 4.

Table 5.1: Summary of the main findings of Chapter 4

The mean trust score in Maltese SMEs is higher than the mean reliance score
Most common culture was clan (keywords: loyalty, trust, teamwork, participation and family)
Most common cultures from other categorisations were Internal and Flexibility
The Clan culture has the highest mean dominant culture score
The Adhocracy culture has the lowest mean dominant culture score
Statements of highest agreement: T1, T4, R2 and R6
Statements of highest disagreement: T6, T8, R4 and R5 (T2, R3)
Reliance and trust are positively correlated, with a moderate strength
SMEs with a dominant culture score of above 70 are all found in micro level, none in small or medium levels (p-value < 0.05)
Dominant culture strength for two categorisations of culture negatively correlated with SME size: in categorisations as Clan, Adhocracy, Market or Hiearchy and Flexibility or Stability

Dominant culture strength negatively correlated with number of employees; in categorisation as Clan, Adhocracy, Market or Hierarchy only
Negative correlation between years of business experience and accounting education
Negative correlation between years of business experience and reliance
Accounting education and reliance were not found to be significantly correlated
Trust does not differ significantly between culture groups
The Clan culture has a statistically significantly higher level of reliance than the Adhocracy culture
Trust and Reliance do not differ statistically significantly between Internal and External cultures
Trust and Reliance do not differ statistically significantly between Flexibility and Stability cultures
The Adhocracy Score is negatively correlated with Reliance
The Market Score is positively correlated with Trust
The Scores of the Internal or External and Flexibility or Stability cultures were not found to be related with trust or reliance
The Dominant Culture Score of culture as Clan, Adhocracy, Market or hierarchy is negatively correlated with trust
The Dominant Culture Score of culture as Internal or External is negatively correlated with trust
Reliance was not found to be correlated with the dominant culture strength of neither categorisation
Market culture least agreemenet with T6
Adhocracy culture highest agreement with T6
Adhocracy culture least agreement with R4 and R5
Adhocracy score positively correlated with agreement with T2
Adhocracy score negatively correlated with agreement with R1 and R6

5.2 Trust, Reliance and Organisational Culture in Maltese SMEs

5.2.1 Trust and Reliance

While Tan and Woodward (2005) had argued that there is a perceived incompatibility between the terms 'trust' and 'accounting', the findings of this study prove otherwise. The levels of trust in and reliance on financial statements by Maltese SMEs were found to be moderately high, and also closely aligned. As expected, the level of trust in accounting information is slightly higher than the actual reliance. This makes sense, as an SME would not use financial statements in decision making if it doesn't trust that such accounting information is actually fruitful in decision making. As Van der Meer-Kooistra and Vosselman (2000) sustain, trust in accounting is vital for the functionality of an accounting system. The difference between the levels of trust and reliance represents those SMEs who have trust in accounting information, yet they still choose not to rely on it in decision making. The reasons are varied, and possible explanations are also given in the Adhocracy case in section 5.4.1.

The fact that Maltese SMEs have high trust in accounting information is further evidenced by the fact that respondents conveyed high agreement to the statements that trust in accounting information increases the confidence of good decision making, as explained by Luhmann (1979) and that such accounting information is actually reliable for decision making.

Contrastingly, Maltese SMEs conveyed the least agreement with the idea that accounting information should be used and trusted in times of crisis or when lacking previous business experience. This means that Maltese SMEs mainly trust accounting information in the normal course of business and in routine decision making. When faced with situations such as expanding into new industries or times of crisis, directors exhibit less trust in accounting information

and instead rely on other managerial aspects which they would have gained through business experience. In fact, Mizzi (2009) reports that the primary use of management accounts in small companies is to monitor current performance, as opposed to finding solutions in situations of little knowledge.

It is also clear from section 4.3.1 that directors of Maltese SMEs do not feel vulnerable as a result of exhibiting trust in accounting information. This contrasts with Rousseau *et al.*'s (1998) argument that trust involves the willingness to accept vulnerability. Directors of Maltese SMEs do have high trust in accounting information, yet it is evidenced that they do not feel they are accepting any vulnerability by doing so. Therefore, in view of this finding a revision of the definition formulated for trust in section 2.2.2 is required, with the new definition being: *trust is the expression of confidence in the reliability of financial statements with the positive expectation of achieving positive results from decision making, without necessarily instilling a feeling of vulnerability to accounting information and accountants*.

Directors of Maltese SMEs were found to agree that reliance on accounting information increases when they are confident in their ability to interpret account information. This might therefore lead one to draw the conclusion that directors with a higher level of accounting education rely on financial statements more than directors with no accounting education do. This line of thinking is further given meaning since increased years of business experience were found to be negatively correlated with both the level of accounting education and reliance on accounting information. However, such a conclusion was not found to be true in section 4.3.5, as no statistically significant relationship between reliance and the level of accounting education was evidenced. Therefore, this means that Maltese SME directors' interpretation of accounting information is not dependent on their level of accounting education, which contrasts with Cassar (2009). However, confidence in their interpretation does not necessarily mean that the interpretation is actually correct. As argued by Van Auken (2001), unless owners of SMEs actually interpret financial statements well, reliance on such accounting information would be ineffective. Furthermore, as the years of business experience increase, directors rely less on accounting information and

presumably more on their experience and knowledge of the company. This is supported by Mitchell *et al.'s* (2017) argument that entrepreneurs often rely on heuristics or biases in decision making.

Moreover, respondents agreed least with the ideas that accounting information is used more by those with a higher level of education or with more years of business experience. In the case of the latter, the inverse was actually proven to be true. In the case of the former, it goes to show that even directors with a lower level of education rely on financial statements, further fuelling the argument that interpretation of accounting information, rather than the level of education, determines whether reliance occurs or not. However, the accuracy of such interpretation was not addressed in this study.

An important relationship was evidenced between trust and reliance in section 4.3.1. As directors of Maltese SMEs increase their trust in accounting information, they inevitably incorporate it more in their decision making. When positive results from trusting accounting information are expected and actually achieved, accounting information is used to a greater degree in future situations in anticipation of more positive results. Furthermore, reliance increases when the accountant is trusted in decision making, as evidenced in Chapter 4. Similarly, increased reliance will in turn increase trust. As Busco *et al.* (2006) argue, trust in financial statements exists and actually increases when such financial statements are incorporated in routine decision making. Furthermore, directors conveyed high agreement with the fact that confidence in accounting information leads to increased reliance in financial statements. As it has already been deduced that confidence in financial statements increases trust, this agreement proves that confidence in accounting information also increases reliance. Hence, with confidence as the linking factor, trust and reliance are once again seen to be positively related.

5.2.2 Organisational Culture

As expected, the Clan culture dominated the proportion of cultures within the sample. With this culture's description including loyalty, trust and family as key words, it is obvious that this culture is exhibited mostly in family businesses. Since the vast majority of Maltese businesses are family owned, the Clan culture was expected to have the highest proportion. Furthermore, this culture was proven to be the strongest in Maltese SMEs. Since multiple generations from the same family are employed in a family business, the children of the founding director would pass on the culture to new employees themselves. The Clan exhibited the highest dominant culture strength and in turn the latter was found to be negatively correlated with SME size. This means that Clans with a strong culture are more likely to be in the micro level. This is supported by the fact that many owner-managed business' goal is ensuring long-term stability, rather than growth (Jarvis *et al*., 1996). This contrasts with other cultures, where the founder alone would have less personal contact with new employees. The Adhocracy culture was found to have the lowest proportion in the sample. This might indicate that the characteristics of an Adhocracy, being innovation and entrepreneurship, are better to suited to have as part of the cultural profile, rather than as a dominant culture. This is furthermore evidenced by the fact that the Adhocracy was found to be the weakest dominant culture in Maltese SMEs. The Adhocracy will be discussed in more detail in section 5.4.1.

The Internal and Flexible cultures also dominated both of the other categorisations of culture. This shows that in Malta there is a high internal focus, which again conforms to the idea of a family business, but also a focus on flexibility rather than stability. Family businesses may be more flexible as employees who are part of the family would be willing to make more sacrifices for the business and work hours are more flexible.

The Dominant Culture Strength (DCS) was found to be negatively correlated with the SME size and the number of employees. This confirms the argument that organisational culture is more pronounced in smaller organisations than in larger

ones (Tidor *et al.* 2012). Cameron and Quinn (2006) argue that most people are unaware of the concept of organisational culture. This correlation evidences the fact that the strength of the dominant culture is dispersed as Maltese SMEs grow from a micro entity to a medium entity. As Schein (2004) explains, culture has to be passed on to new employees. When an organisation is still a micro entity, the owner is more present in the business and in touch with employees, so new joiners are passed on the culture by the director him/herself (Tidor et al., 2012). As the organisation grows in size, the owner has to delegate some business activities and so personal contact with new employees will in turn decrease. Therefore, as Maltese SMEs grow in size, the culture is not passed on by the director due to decreased personal contact and also evidently not by the existing employees. This could be the case in Maltese SMEs, where Medium companies lose the strength of their dominant culture, either due to existing employees not passing the culture on to new employees, or due to directors not being knowledgeable about organisational culture in the first place.

5.3 Are different cultures associated with different levels of financial statements trust and reliance by Maltese SMEs?

In order to address the third research objective in an all-encompassing manner, culture was categorised into three different types. In the first categorisation of culture, the results in Chapter 4 proved conclusive to be able to deduce that Maltese Clan SMEs rely on financial statements more than Maltese Adhocracy SMEs do.

5.3.1 The Clan-Adhocracy difference in Reliance

As discussed in Chapter 2, the Adhocracy culture is characterised by entrepreneurship, flexibility, creativity and adaptability in an uncertain environment. As the name itself implies, an Adhocratic SME would be defined by ad hoc practices instead of routines. Contrastingly, a Clan SME would include teamwork, participation and internal cohesion. Referring once again to Busco *et al.* (2006), accounting is used less if used in an ad hoc manner without consistency and without rationale. This statement in itself already explains why an Adhocratic SME would have less reliance than other cultures. However, one has to ask why there is a difference specifically with the Clan culture. Referring to Mizzi (2009), a vast majority of small companies in Malta refer to an accountant for business advice and if employed internally on a full-time basis, the internal accountant is the most common source of business advice. Therefore, with a culture of participation and teamwork, it is more probable that a Clan culture would have an internal accounting department which is actually involved in decision making, or that an external accountant is referred to for business advice. This line of thinking is also confirmed if the accountant is seen as an access point which encourages reliance (Bachmann, 2001). Such business advice given by

an accountant would undoubtedly be based on accounting information, so by relying on accountants for business advice a Clan culture would indirectly be relying on accounting information. This would be much less probable in an Adhocracy, where entrepreneurship is dominant and hence there is the increased risk that heuristics and biases affect decision making (Mitchell *et al.*, 2007). As the findings in section 4.5.1.1 prove that strong Adhocracy SMEs rely on financial statements less, the internal accountant may be ignored during decision making. Even worse, the accountant may be a source of conflict with the directors, as the former might be trying to deliver information which the directors would be unwilling to accept.

Interestingly, the levels of trust were not found to be different between the two cultures. This means that both cultures have the same level of trust in financial statements, however the Clan culture practices higher reliance. Again, the argument of entrepreneurs basing decisions on heuristics (Mitchell *et al.*, 2007) is applicable, as directors of Adhocracy SMEs might trust the figures in financial statements, yet they still choose to rely on their own heuristics and business experience.

Whereas the difference in the means scores of reliance between the Clan and Adhocracy cultures was found to be statistically significant on the general SME level, no statistically significant difference was found within the Micro level, the Small Level or the Medium level. This implies that the Clan-Adhocracy difference in the level of reliance is only true on the general SME level and not within the individual SME levels. One also needs to keep in mind that no medium entities were dominantly Adhocracy cultured, which might imply that the difference in reliance between Clan and Adhocracy SMEs might be attributed to entity size. However, such a possibility was eliminated as no significant association whatsoever was found between SME size and reliance on financial statements in section 4.3.4. Hence, this confirms that the discrepancy in financial statements reliance is in fact due to cultural differences and not due to size differences.

5.3.2 Culture Categorised as Internal or External and as Flexibility or Stability

Both trust and reliance were higher in Internal SMEs than in External SMEs within the sample. Internally oriented SMEs are categorised by internal cohesion and integration of activities (Cameron and Quinn, 2006), therefore the chances that an internal accountant is employed, and that accounting information is ingrained within decision making is higher than in Externally Oriented SMEs, which are categorised by independence and external competition (Cameron and Quinn, 2006). Hence, such a result would have been very plausible. Nonetheless, it cannot be said that all Maltese SMEs with an Internal culture would predominantly use and trust financial statements more than Maltese SMEs with an External culture do, as the results in section 4.4.2 were not statistically significant.

In the Flexibility or Stability categorisation of culture, the results were even less conclusive. The trust exhibited by both types of culture was found to be virtually equal. Furthermore, Stability SMEs within the sample were found to rely on accounting information marginally more than Flexibility SMEs. Such difference in reliance could be due to the fact that Stability SMEs are categorised by stability and routines. As Busco *et al.* (2006) argue, when there is a routine of incorporating accounting information in decision making, the level of reliance is much higher than would be in the case of incorporation in an ad hoc manner. However, once again this study cannot conclude that Maltese Flexibility SMEs use or trust financial statements less than Stability SMEs do.

5.3.3 Conclusion on the association between different culture groups and attitudes towards financial statements

This means that in Malta, excluding the Clan-Adhocracy difference in reliance, the difference in cultural orientation is not a deciding factor whether accounting information is trusted or relied upon. Thus, a Hierarchy SME trusts and uses

financial statements to achieve its goals of efficiency and stability to the same degree that a Clan SME would trust and use financial statements in ensuring the commitment and welfare of its employees. Consequently, the fact that trust and reliance are the same across different cultures, excluding the Clan-Adhocracy difference, has conclusively been proven, but one can note that there is still a difference in the purpose for which financial statements are used between the different cultures. This purpose, as argued by Horngren *et al.* (2009) is aligned with the culture's goals and values. Therefore, while this study has been conclusive in proving that different cultures use and trust financial statements to the same degree, it can be seen that the purpose for which they are used is still different, dependent on the different cultures' goals. Furthermore, since different types of accounting information are used for the attainment of different goals, it could also be the case that different accounting information is being relied upon in different cultures. Different cultures themselves could be acknowledging the fact that a certain type of accounting information is more useful for them than other types, hence they might have higher trust in the accounting information which works for them and less trust in other less useful accounting information. However, the bottom line is that excluding the Clan-Adhocracy difference in reliance, Maltese SMEs with different cultures do not have differing levels of trust and reliance on accounting information, even though the type of accounting information relied upon could be different.

5.4 Is the strength of organisational culture associated with different levels of trust and reliance in financial statements within Maltese SMEs?

In order to answer this question and address the fourth research objective, two aspects of Organisational Culture strength were analysed; the dominant culture strength and the strengths of the different cultures within the same SME, being the cultural profile (Cameron and Quinn, 2006). In this section, culture is seen as a phenomenon which changes along the life cycle of the organisation as explained by Cameron and Quinn (2006), where cultures can become stronger or weaker.

In section 4.5.2.1, it was found that as the DCS of Maltese SMEs increases, irrespective of whether the culture is a Clan, Adhocracy, Market or Hierarchy, the level of trust in financial statements decreases. This relationship is also present in culture categorised as Internal or External, but not in culture categorised as Flexibility or Stability. This relationship implies that as the DCS increases, directors of Maltese SMEs trust financial statements less and prefer to trust their own business experience. In the case of a strengthening Hierarchy culture, a director would increasingly agree that organisational goals are achieved more by having formal policies which direct employees, rather than by trusting financial statements. Similarly, a director of a strengthening Clan SME would increasingly say that obtaining employees' opinion during decision making is more important than trusting accounting information.

The relationship between organisational culture strength and attitudes towards financial statements can be further explained by looking at the individual cultures. No significant findings were found specifically for the Clan and Hierarchy cultures. However, the Adhocracy and Market cultures were found to have very significant

relationships, and when these relationships are analysed in a holistic manner, an argument of how organisational culture strength affects trust and reliance in financial statements can be made.

5.4.1 The Adhocracy Case

With regards to the Adhocracy culture, it was found that an increasing Adhocracy score, without necessarily being the dominant culture, is negatively correlated with reliance on financial statements, but positively correlated with agreement with statement T2. In this section, an analogy of an Adhocracy SME which is increasing in culture strength will be used. As the Adhocracy culture strengthens, directors rely less on financial statements as they increasingly feel that such reliance would leave them vulnerable to accounting information. Furthermore, as the DCS increases, trust also decreases. This makes sense in this case as the entrepreneurial spirit would dominate the managerial aspect of the SME. As argued by Mitchell *et al.* (2007), entrepreneurs rely on heuristics and biases rather than on accounting information. Such directors are not afraid to take risks; therefore, it is of no surprise that they may trust their own instincts more than they trust accounting information. Since Adhocracy SMEs focus on innovation and on being responsive in fast-changing conditions, their directors may feel that relying on accounting information would slow down the decision-making process. Furthermore, they may prioritise the uniqueness of their products over the cost of product development or whether they have the required funds for such product development. These last two examples can both be obtained from accounting information.

There might come a point where the SME faces concerns on the business' survival, which can be termed as the 'time of crisis'. Whereas before this point Adhocracy directors relied on their own knowledge in managing the business, they may find that the survival of their business necessitates the use of other information, such as financial statements. Hence, at this point the directors would change the way decision-making is carried out by making more use of accounting information. As a result, in such a time of crisis the Adhocracy culture weakens

as the directors rely less on their instincts, and in turn accounting information is used and trusted more. This is in line with the argument that accounting information becomes ingrained in organisational routines if it used to find solutions in situations of crisis (Busco *et al.*, 2006). If the use of accounting information becomes routine, the ad hoc characteristics of the Adhocracy are lost, as actually occurs when the culture weakens.

This argument is validated due to the fact that all Adhocracy respondents agreed that at a time of crisis accounting information should be used to find solutions. This may also indicate that Adhocracy directors think that accounting information is only useful to solve situations of crisis, rather than during the ordinary course of business. The fact that the Adhocracy was found to be the weakest dominant culture is highly logical, since directors have to balance the level of reliance on heuristics and business experience with the level of reliance on accounting information.

It is also worth noting that in section 4.6.2.1 results showed that the Adhocracy score is negatively correlated with agreement with statements R1 and R6. This means that directors with strong Adhocracy cultures do understand and have confidence in financial statements, yet they still choose not to use them, or use them solely in times of crises. Furthermore, Adhocracy SMEs were the most to disagree with statements R4 and R5. This means that the real reason these directors do not rely on accounting information is because they feel that relying on accounting information would leave them in a state of vulnerability, and not due to reasons relating to lack of education or business experience.

5.4.2 The Market Case

As discussed in Chapter 2, the Market culture is characterised by a focus on output, profitability and transacting with external parties. Since the strength of the Market culture and trust in financial statements were found to be positively correlated, it can be deduced that an SME with a very strong Market culture achieves its cultural goals by trusting and relying on financial statements. The

question then arises as to why the Market culture was not found to have the highest trust in financial statements. This answer may be sought by making use of an analogy of an SME with a Market culture increasing in strength.

The company starts with a weak Market culture, which starts increasing in strength as business progresses. The profit figures on financial statements start being used as performance targets, while the formal exchange of accounting information with external parties also ensues (Kalafatis *et al.*, 2005). As these targets are met and valuable business relations are built, financial statements are seen as an enabler towards reaching the company's goals and so are increasingly trusted as the culture strengthens. If the culture had to continue growing in strength indefinitely, trust would increase so much that the directors would blindly trust and rely on financial statements without considering other managerial factors. As Carraher and Van Auken (2013) argue, blind trust in financial statements does not necessarily guarantee good decisions, especially if the interpretation is incorrect. Hence, one can argue that there may be a point where the quality of decision making is impaired to the point where the business' survival is at risk, which can once more be termed 'the time of crisis'. Thus, whereas the directors previously trusted financial statements in the course of business activities, further increased trust in financial statements could harm the business. The directors might implement a change in the decision making process in an effort to save the business, thereby weakening the Market culture and halt increasing their trust in financial statements. Instead of focusing solely on achieving budgeted profit figures, the directors may start investigating, for example, whether employee fatigue is affecting output. This implies that there is a point where the Market culture should stop increasing in strength, at which point, consequently, trust in financial statements stops increasing.

A more statistical line of thinking in the Market case is as follows: apart from being positively related with Market strength, trust is also negatively correlated with the DCS, where in this case the Market is the dominant culture. As the Market culture increases in strength, trust increases accordingly, as has already been said above. Once the Market culture becomes dominant, the negative correlation between trust and the DCS is triggered. Consequently, at some point the negative

correlation between the DCS and trust meets the positive correlation between trust and the Market culture, whereby trust would reach an equilibrium. If the Market culture weakens from this point, the two correlations would no longer be in equilibrium, until the culture is strengthened again to the point where equilibrium in trust is reached once again.

Both of the above arguments hint towards the possibility that for Market SMEs there could exist an optimal point for trust in financial statements. In fact, this optimal level of trust has been the subject of various research (Wicks *et al.*, 1999; Tomkins, 2001) and the findings from this study evidence that such optimal level of trust exists in Maltese SMEs with a Market culture. This means that while trust in accounting information is supportive of reaching a Market SME's goals, there might come a point where the directors have to supplement the trust and use of accounting information with other managerial actions, such as developing unique products or ensuring the welfare of employees. If trust is lower than the optimal point, the directors would feel that they have lost some of their identity as the culture is weakened. Conversely, as discussed, if trust is above the optimal point the directors may find that accounting information is wrongly prioritised over other factors in decision making.

The Market argument is further validated by the fact that Market SMEs conveyed the most disagreement with statement T6. Hence, the directors of these SMEs admit the fact that in a time of crisis accounting information should not be relied on and trusted to find solutions. As argued, during a time of crisis these SMEs should actually maintain the same level of trust in financial statements, but supplement the decision making process with other managerial actions, such as product diversification.

5.4.3 So, does the strength of organisational culture affect the level of trust and reliance?

The fact that the previous arguments were made in such a validating manner proves that the strength of organisational culture may affect the level of trust and

reliance. However, answering this question is not straightforward, as different types of cultures result in different effects. In the case of the Clan and Hierarchy cultures no conclusive findings were evidenced between culture strength and attitudes towards financial statements. Thus, arguments as in the Adhocracy and Market cases could not be made for the Clan and Hierarchy cultures. It was seen that the strength of the Adhocracy culture affects the level of reliance and when the Adhocracy culture is dominant, trust is also affected. In the case of the Market culture, results show that trust increases with the strength of the Market culture, but an optimum point exists where trust should cease increasing. The other categorisations of culture were too devoid of findings to be able to make similar arguments and conclude that trust and reliance on financial statements are affected by culture strength of the cultures within those categorisations. Ultimately, the answer to this question involves delicate consideration of how culture is categorised, which culture type is being addressed, and also whether trust or reliance are affected positively or negatively.

5.5 Which categorisation of Culture?

As evident throughout Chapters 4 and 5, the categorisations of culture as Internal or External and as Flexibility or Stability were too absent of complementary findings to be able to argue as to why and how trust and reliance are affected by organisational culture. The most fruitful findings and sensible arguments centred around culture categorised as Clan, Adhocracy, Market or Hierarchy. Furthermore, it was evidenced that even within this categorisation of culture the conclusions were not generally applicable across the board. Only one significant association was found between the different culture types and attitudes towards financial statements, being in the culture categorisation as Clan, Adhocracy, Market or Hierarchy. Not all the cultures were found to be significantly associated with culture strength, and the cultures which were indeed found to be associated all possess their unique associations with trust and reliance. In conclusion, the results show that categorising organisational culture into two culture types is too broad to analyse the attitudes towards financial statements. As a result, this study evidences that the more organisational culture is segmented into different cultures, the more unparalleled relationships can be found with trust and reliance.

5.6 Conclusion

This chapter has provided an argumentative discussion on the salient findings relevant to the research objectives. Where appropriate, literature was used to validate the arguments raised. The next chapter will conclude the study and present a number of recommendations, as well as some areas of further study.

Chapter 6

Conclusion

6.1 Introduction

In concluding the dissertation, section 6.2 summarises the study while section 6.3 presents an evaluation of the final results. Sections 6.4 and 6.5 provide recommendations and areas for further research respectively. Finally, a concluding remark is included in section 6.6.

6.2 Summary of the Study

This study presented an analysis between organisational culture and attitudes towards financial statements. The objectives of this study were achieved through the collection of primary data by means of a survey questionnaire completed by directors of local SMEs. Various statistical tests were utilised to extract findings from the primary data collected. The analysis of secondary data was also instrumental in understanding the areas under study and in formulating the questionnaire. The resulting findings were discussed in the light of previous literature in order to reach the objectives of the study in an all-encompassing manner.

The first research objective related to establishing and analysing the levels of trust and reliance Maltese SMEs place on financial statements. Both trust and reliance were found to be moderately high in Maltese SMEs, with the level of trust being slightly higher than the level of reliance. The statement that trust in accounting information increases the confidence of good decision making received the highest agreement from respondents. Conversely, respondents agreed least with the idea that accounting information should be used during times of crisis or when lacking previous business experience, implying that such accounting information is used routinely rather than extraordinarily. As explained in section 5.2.1, the responses relating to trust in financial statements necessitated a revision of the definition for trust extracted from the literature in section 2.2.2. Respondents agreed that reliance on accounting information

increases when they are confident in their ability to interpret such information. However, reliance was not found to be related to their level of accounting education, implying that the interpretation of accounting information is not dependent on accounting education. It was also proven that as SME directors' years of business experience increase, they rely less on financial information and presumably more on their experience, in line with Mitchell *et al.* (2007). Lastly, it was found that trust and reliance on accounting information are positively related, and that reliance increases when the accountant is trusted in decision making.

The second research objective related to establishing the cultural orientations of Maltese SMEs. In order to address the research objectives in a comprehensive manner, culture was analysed through three different categorisations. As expected, in each categorisation the culture most synonymous with a family business had the highest count. In the first categorisation of culture this was found to be the Clan, which is characterised by teamwork and participation. Furthermore, this culture type was found to exhibit the highest strength in Maltese SMEs. The Adhocracy was the least common culture, while also being the weakest dominant culture. The Internal and Flexible cultures were the most prevalent in the other two categorisations of culture. Interestingly, the findings clearly evidenced that as an organisation grows, the strength of the dominant organisational culture weakens, as argued by Tidor *et al.* (2012).

The third research objective related to whether the levels of trust and reliance on financial statements differ within different organisational cultures. Statistically significant evidence in section 4.4.1.2 proves that Maltese Clan SMEs rely on financial statements more than Maltese Adhocracy SMEs do. Whereas the accountant would be valued in a Clan SME, the ad hoc characteristics of an Adhocracy would hinder accounting information from being used routinely in decision making. Contrastingly, the levels of trust between the two cultures were not found to be different. This implies that even though a difference in reliance exists, both culture types have the same level of trust in financial statements. No other statistically significant difference in the means of trust and reliance were found between all other culture types within the three categorisations of culture. Hence, it can be concluded that the only association between different cultures

and different attitudes towards financial statements exists solely in the level of reliance between the Clan and Adhocracy cultures.

The fourth objective related to whether an association exists between the strength of organisational culture and attitudes towards financial statements. Results determined that as the dominant culture strengthens, trust in financial statements decreases since directors presumably rely more on their business experience and cultural values. However, this finding was not shared by the culture categorisation as Flexibility or Stability. More specifically, the Adhocracy and Market cultures were each found to have numerous unique relationships. As an Adhocracy culture strengthens, the directors rely less on financial statements and increasingly agree that reliance on accounting information makes them vulnerable. This is in line with Mitchell *et al.* (2007), who argue that entrepreneurs rely on heuristics and biases. As a Market culture strengthens, the directors increasingly trust financial statements until an optimal level of trust is reached. The possibility of an optimal level of trust has been the focus of various research (Tomkins, 2001; Wicks *et al.*, 1999). At a time of crisis, Adhocracy directors were found to rely on accounting information to find solutions. Contrastingly, it resulted that Market directors do not trust and rely on financial statements at such a time. Both of these findings validate the Adhocracy and Market arguments, as discussed in section 5.4.

The last research objective referred to whether different categorisations of culture have different associations between culture and attitudes towards financial statements. As clearly evidenced throughout Chapters 4 and 5, the categorisations of culture as Internal or External and as Flexibility or Stability were limited in statistically significant findings. All significant results prevailed in the culture categorisation as Clan, Adhocracy, Market or Hierarchy. This implies that the more organisational culture is segmented into different types, the more salient findings can emerge.

6.3 Evaluation of the Final Results

Prior to this study, no evidence existed as to whether organisational culture affects attitudes towards financial statements in Maltese SMEs. Furthermore, while embarking on this study the researcher had no assurance that such an association would be found.

Starting from a generic investigation into whether an association between culture and attitudes towards accounting exists, not only did evidence of such an association emerge, but also more than one association was found. In addition, associations were found to exist both in terms of different culture categorisations, different culture types and also the strength of particular cultures. While there were cultures which lacked an association with attitudes towards financial statements, the cultures which were indeed determined to be associated were plentiful in findings and validating relationships. Furthermore, not one association was found to be consistent in different cultures, meaning that each association is unique.

It can be concluded that this study has successfully addressed the research gap explained in section 1.3, as the areas of organisational culture, trust and reliance on financial statements have been bridged together, with salient findings both within each separate area and within the areas related together. Moreover, this study can serve as the basis for further research in the realm of organisational culture and accounting information in Maltese SMEs. As discussed in section 5.2.1, a definition for trust in financial statements in the context of Maltese SMEs was produced from the findings of the study, which can be used in future research in the area of trust in financial statements.

6.4 Recommendations

This study proposes the following recommendations:

A) That directors of Maltese SMEs become more knowledgeable about organisational culture

As SMEs grow in size, the strength of the organisational culture disperses, as evidenced in section 4.3.3. Apart from the association with the attitudes towards financial statements evidenced in this study, in past studies organisational culture was also proven to affect other organisational aspects, including business performance (Ogbonna and Harris, 2000). Hence, it is recommended that SME directors recognise that organisational culture is an important aspect and formally try to learn how it can be used as a tool to achieve the organisational goals. Entities such as the Malta Chamber of Commerce, GRTU and the Ministry for the Economy, Investment and Small Business can organise information forums, as well as training sessions aimed at businesses to learn more about the importance of organisational culture and also how to pass their culture on to new employees during their induction training. Furthermore, the CVF (Cameron and Quinn, 2006) is one model which can be used by the entities in delivering such information sessions.

B) That accounting professionals need to be aware that organisational culture may have an impact on the work they perform and their contribution to decision making

The association between organisational culture and the levels of trust and reliance on financial statements is of importance to accountants. For example, as Clan SMEs were proven to rely on accounting information considerably more than Adhocracy SMEs do, accountants may be able to contribute more in a Clan SME, which may even give rise to enhanced job

satisfaction. Furthermore, external accountants should market their advisory services to Clan SMEs rather than those with an Adhocracy culture, as it is more probable that the latter would reject such services. Therefore, this association should be taught to accountants, perhaps by the Malta Institute of Accountants (MIA) as part of accountant's Continuing Professional Education. As will be seen in the subsequent recommendations, in certain specific cultures this impact of organisational culture is quite significant.

C) Accounting professionals employed in Adhocracy SMEs

Strong Adhocracy SMEs were found to place little reliance on financial statements. Therefore, an accountant who promotes the use of accounting information to such directors might be faced with rejection, or even worse be in conflict with them. The findings of this study show that these directors welcome accounting information in a time of crisis. Hence, the preparation of accounting information which prevents such crises might be appreciated by the directors, as opposed to information used to monitor current performance.

D) Accounting professionals employed in Market SMEs

Strong Market SMEs were found to have high trust in financial statements. Hence, accounting professionals should strive to be included in the decision making of such SMEs, as their accounting information would be appreciated by the directors. However, accountants should be wary of the optimal level of trust and refrain from promoting accounting information beyond this point, as conflict with the directors may arise.

6.5 Areas for Further Research

As previously discussed, the evidence from this study allows for a wide array of possible research in the realm of organisational culture and accounting information. A few possible areas of such research are the following:

A) **Recreating this study but using a different organisational culture framework**

The CVF is just one framework of organisational culture. As discussed in Chapter 2, various other models have been developed through research. As it was argued that more findings emerged the more organisational culture was segmented, a model which categorises culture into more than four types should be used. One such model is Cooke and Szumal's (2000) model, which segments organisational culture into twelve different cultures.

B) **Organisational Culture and the types of accounting information used in decision making**

Whereas this study focused on the attitudes towards accounting, such a study would focus on whether SMEs with different organisational cultures use different types of accounting information, and whether the strength of the culture has an effect on the type of information used. Such different types could be, for example, routine management accounting information or statutory financial statements.

C) **Developing a framework of organisational culture based on the use of accounting information**

The OCAI was developed through research on the indicators of organisational effectiveness. Research could be undertaken as to why SMEs have different levels of reliance on financial statements and subsequently develop a cultural framework of 'Accounting Cultures'. Such a framework

would categorise different cultures according to the levels of reliance on accounting information.

D) The relationship between organisational culture and gender

As explained in Appendix 4.2, an association was found to exist between gender and organisational culture orientation. Although such finding was not deemed to be of relevance to this study, research could be carried out to determine why and how gender is associated with different culture orientations.

E) Organisational culture and the relationship with the accountant

Such a study would delve into whether organisational culture affects the relationship with the SME's accountant. Other aspects, such as whether an internal accountant is employed and whether high ranking employees have an accounting background could also be researched.

F) Relating Organisational Culture with other aspects of the organisation

Previous research was carried out on how organisational culture can affect management's actions, but few of these studies have been replicated in the context of Maltese SMEs. These areas include business performance (Ogbonna and Harris, 2000), financial performance (Gordon and DiTomaso, 1992) and the implementation of Total Quality Management (Green, 2012).

6.6 Concluding Remark

This study has succeeded in proving that in certain instances, organisational culture is indeed associated with different attitudes towards financial statement. However, the author of this dissertation believes that this analysis should not end with this dissertation. The worlds of organisational culture and accounting are immensely vast; this study has merely scratched the surface of the relationship between these two areas. The findings from this dissertation should serve to fuel expansive new research in the local SME scenario, with the recommendations provided serving as a starting point. The author of this study hopes that these two areas of studies will continue to be researched together in the future, as a plethora of new associations are certain to be discovered.

Appendices

Appendix 3.1: The Survey Questionnaire

Dear Participant, my name is Thomas Zammit and I am a student in the final year of the Master in Accountancy course at the University of Malta. This short questionnaire is part of my thesis and should only take around 8 minutes to complete. Names of respondents will not be recorded and this survey is 100% anonymous. I remind you that this questionnaire must be filled in only by a director. I thank you for your valuable contribution in completing this questionnaire.

1.) What is your gender?	
☐	Male
☐	Female
☐	Other

2.) What age (in years)?	

3.) How long have you been involved in the business (in years)?	

4.) How is your business incorporated? (please tick one)	
☐	Sole Trader
☐	Partnership
☐	Limited Liability Company
☐	Other (*Please Specify here*)

5.) What is the primary activity of your business?
☐ Retail
☐ Services
☐ Manufacturing
☐ Food & Catering
☐ Wholesale
☐ Other *(Please Specify here)*

6.) How many employees are employed in the business?
☐ 0 - 10 employees
☐ 10 - 50 employees
☐ 0 - 250 employees
☐ More than 250 employees

7.) What is the current balance sheet total as shown on your most recent balance sheet?
☐ 0 - €350,000
☐ €350,000 - €4,000,000
☐ €4,000,000 - €20,000,000
☐ More than €20,000,000

8.) What was your approximate total revenue during the last calendar year?
☐ Business had no revenues
☐ 0 - €700,000
☐ €700,000 - €8,000,000
☐ €8,000,000 - €40,000,000
☐ More than €40,000,000

9.) Please indicate the highest level of education you have obtained:	
☐	O-level
☐	A-level
☐	University degree/Professional Qualification
☐	Trade qualification
☐	No formal educational qualifications
☐	Other *(Please Specify here)*

10.) Please indicate whether you have any level of **accounting** education:	
☐	No education in accounting
☐	O-level
☐	A-level
☐	Bachelor of Commerce in Accounting
☐	Master in Accountancy
☐	ACCA/ACA
☐	Other *(Please Specify here)*

The following six questions ask you to identify the way you experience your organisation. Please rate each of the statements by dividing 100 points between alternatives A, B, C, and D depending on how similar the description is to your firm (100 would indicate very similar and 0 would indicate not at all similar). The total points for each question must equal 100. You may divide the 100 points in any way among the four alternatives in each question. You can allocate a number of 0 to a statement if you feel it does not apply to your organisation at all. Remember that the total must equal 100. Kindly input your scores in the text boxes. Question X is given as an example:

X.) Example	
A. The organisation is a place where employees enjoy working.	40
B. Employees in the organisation are reluctant to perform their work.	0
C. Employees compete against each other to be the best employee.	25
D. Employees require authority and guidance to perform their work well.	35
Total	**100**

11.) Dominant characteristics	
A. The organisation is a very personal place. It is like an extended family. People seem to share a lot of themselves.	
B. The organisation is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.	
C. The organisation is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.	
D. The organisation is a very controlled and structured place. Formal procedures generally govern what people do.	
Total	**100**

12.) Organisational Leadership	
A. The leadership in the organisation is generally considered to exemplify mentoring, facilitating or nurturing.	
B. The leadership in the organisation is generally considered to exemplify entrepreneurship, innovating or risk taking.	
C. The leadership in the organisation is generally considered to exemplify an aggressive, results-oriented, no-nonsense focus.	
D. The leadership in the organisation is generally considered to exemplify coordinating, organising, or smooth-running efficiency.	
Total	**100**

13.) Management of Employees	
A. The management style in the organisation is characterised by teamwork, consensus and participation.	
B. The management style in the organisation is characterised by individual risk-taking, innovation, freedom and uniqueness.	
C. The management style in the organisation is characterised by hard-driving competitiveness, high demands, and achievement.	
D. The management style in the organisation is characterised by security of employment, conformity, predictability, and stability in relationships.	
Total	**100**

14.) Organisational Glue	
A. The glue that holds the organisation together is loyalty and mutual trust. Commitment to this organisation runs high.	
B. The glue that holds the organisation together is commitment to innovation and development. There is an emphasis on being on the cutting edge.	
C. The glue that holds the organisation together is the emphasis on achievement and goal accomplishment. Aggressiveness and winning are common themes.	
D. The glue that holds the organisation together is formal rules and policies. Maintaining a smooth-running organisation is important.	
Total	**100**

15.) Strategic Emphasis	
A. The organisation emphasises human development. High trust, openness and participation persists.	
B. The organisation emphasises acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.	
C. The organisation emphasises competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.	
D. The organisation emphasises permanence and stability. Efficiency, control and smooth operations are important.	
Total	**100**

16.) Criteria of Success	
A. The organisation defines success on the bases of the development of human resources, teamwork, employee commitment and concern for people.	
B. The organisation defines success on the bases of having the most unique or the newest products. It is a product leader and innovator.	
C. The organisation defines success on the bases of winning in the marketplace and outpacing the competition. Competitive market leadership is key.	
D. The organisation defines success on the bases of efficiency. Dependable delivery, smooth scheduling, and low cost production are critical.	
Total	**100**

17) Please indicate (*x*) to what extent you agree with the following statements:					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
T1) Trust in accounting information increases the confidence of achieving positive results from decision making	☐	☐	☐	☐	☐
T2) Trusting accounting information makes you vulnerable to accountants and accounting information	☐	☐	☐	☐	☐
T3) Trust in accounting information reduces uncertainty in decision making	☒	☐	☐	☐	☐
T4) Accounting information is reliable to take decisions upon	☒	☐	☐	☐	☐
T5) Accounting information is often used in decision making in my organisation	☐	☐	☐	☐	☐

T6) In times of crisis, accounting information should be used to find solutions	☐	☐	☐	☐	☐
T7) The accountant is trusted when taking decisions	☐	☐	☐	☐	☐
T8) Accounting information has to be trusted when I lack previous technical experience, such as expanding into new industries or starting a new business	☐	☐	☐	☐	☐

18) Accounting information is more likely to be used in decision making:					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
by owners who are able to understand such accounting information	☐	☐	☐	☐	☐
when owners are more comfortable with their ability to interpret such accounting information	☐	☐	☐	☐	☐
when it is prepared externally rather than internally	☐	☐	☐	☐	☐
by owners who a have higher level of education	☐	☐	☐	☐	☐
by owners who have more business experience	☐	☐	☐	☐	☐
by owners who have more confidence in their accounting information	☐	☐	☐	☐	☐

19.) Thank you for taking the time to complete this survey! If you have any feedback or comments for this questionnaire, kindly write it in the following textbox:

Appendix 3.2: Reliability Testing for Questions 17 and 18

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.652	.670	7

Table A3.2-1: Cronbach's Alpha for Question 17 (Trust), excluding statement 2

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.650	.666	5

Table A3.2-1: Cronbach's Alpha for Question 18 (Reliance), excluding statement 3

Appendix 3.3: Calculation of Margin of Error

Margin of Error = $z\sigma_p$

$z \approx 1.96$ for a 95% Level of Confidence

σ_p is the standard deviation of the proportion's sampling distribution and it is at its maximum when p = 0.5:

$$\sigma p = \sqrt{\left(\frac{p(1-p)}{n}\right)\left(\frac{N-n}{N-1}\right)}$$

Given:

- N = 28,863 (Population)
- n = 127 (Sample Size)
- p = 0.5 (Point where σ_p is maximised)

the maximum value of the standard error σ_p is:

$$\sigma p = \sqrt{\left(\frac{0.5(1-0.5)}{127}\right)\left(\frac{28,863-127}{28,863-1}\right)} = 0.044271$$

Therefore, the Maximum Margin of Error = $z\sigma_p$ = $(1.96)(0.044271) = \mathbf{8.68}\%$

Appendix 4.1: Statistical Tests

Shapiro-Wilk Test of Normality

The Shapiro-Wilk test tests if data is normally distributed for each group of the independent variable (Camilleri, 2015). The hypotheses tested under this statistical test are:

H_0: The continuous variable for each group is normally distributed

H_1: The continuous variable for each group is not normally distributed

The null hypothesis (H_0) is accepted if the p-value is greater than the 0.05 level of significance, meaning that data is not normally distributed. The alternative hypothesis (H_1) is accepted if the p-value is less than the 0.05 level of significance, meaning that the data is not normally distributed. The subsequent choice of statistical tests is dependent on the outcome of the Shapiro-Wilk test. If the data is found to be normally distributed, parametric tests are used. On the contrary, if the data is not found to be normally distributed, non-parametric tests are used.

Independent Samples T-Test

The Independent Samples t-test is a parametric test which is utilised to compare the mean scores of two groups on the same variable (Camilleri, 2015). The hypotheses tested under this statistical test are:

H_0: There is no significant difference in the means between the groups.

H_1: There exists a significant difference in the means between the groups.

The null hypothesis (H_0) is accepted if the p-value is greater than the 0.05 level of significance. The alternative hypothesis (H_1) is accepted if the p-value is less than the 0.05 level of significance.

Mann-Whitney U Test

The Mann-Whitney test is a non-parametric test which is used to determine whether any differences exist between two groups on an ordinal or continuous variable (Camilleri, 2015). The hypotheses tested under this statistical test are:

H_0: The distribution of scores for the two groups are equal.

H_1: The distribution of scores for the two groups are not equal.

The null hypothesis (H_0) is accepted if the p-value is greater than the 0.05 level of significance. The alternative hypothesis (H_1) is accepted if the p-value is less than the 0.05 level of significance.

One-way ANOVA Test

The one-way ANOVA test is a parametric test which determines whether a statistically significant difference between the means of three or more independent groups exists (Camilleri, 2015). An important assumption under this test is there should be no significant outliers in the continuous variable. The hypotheses tested under this statistical test are:

H_0: There is no significant difference in the means between the groups

H_1: There exists a significant difference in the means in at least one group

The null hypothesis (H_0) is accepted if the p-value is greater than the 0.05 level of significance. The alternative hypothesis (H_1) is accepted if the p-value is less than the 0.05 level of significance. Furthermore, a post-hoc test under the one-way ANOVA test is the Tukey test, which presents a pairwise comparison of the means in order to determine where the significant difference in means lies.

Kruskal-Wallis Test

The Kruskal-Wallis test is a non-parametric analogue to the one-way ANOVA test, which tests whether three or more groups come from the same populations (Camilleri, 2015). The hypotheses tested under this statistical test are:

H_0: The means do not vary significantly between the different groups

H_1: The means vary significantly between the different groups

The null hypothesis (H_0) is accepted if the p-value is greater than the 0.05 level of significance. The alternative hypothesis (H_1) is accepted if the p-value is less than the 0.05 level of significance.

Spearman's Correlation Test

The Spearman's Correlation test is a non-parametric test which is used to test whether an association between two variables exists. The test generates a correlation coefficient, denoted as *r*, which is a measure of the strength and direction of the association between the two variables. The coefficient ranges from -1 (perfect negative relationship) to +1 (perfect positive relationship). A value of 0 would indicate no relationship between the two variables (Camilleri, 2015). The hypotheses tested under this statistical test are:

H_0: There is no relationship between the two variables.

H_1: There exists a statistically significant relationship between the two variables.

The null hypothesis (H_0) is accepted if the p-value is greater than the 0.05 level of significance. The alternative hypothesis (H_1) is accepted if the p-value is less than the 0.05 level of significance. The magnitude of the Spearman correlation coefficient determines the strength of the correlation. Table A4.1-1 includes general guidelines on the strength of the association.

Coefficient Value	Strength of Association
$0.1 < |r| < 0.3$	Small Correlation
$0.3 < |r| < 0.5$	Medium/Moderate Correlation
$|r| > 0.5$	Large/Strong Correlation

Table A4.1-1: Guidelines on the strength of the association, where |r| means the absolute value

Chi-Square Test

The Chi-Square test is a test which is used to check for associations between two nominal variables in a two-way contingency table (Camilleri, 2015). The hypotheses tested under this statistical test are:

H_0: No association exists between the two variables.

H_1: An association exists between the two variables.

The null hypothesis (H_0) is accepted if the p-value is greater than the 0.05 level of significance. The alternative hypothesis (H_1) is accepted if the p-value is less than the 0.05 level of significance. The Chi-Square Test also produces Cramer's V, which is a measure of the strength of the association between the two variables. Cramer's V ranges in value from 0 to +1, with a value of 0 indicating no association, while a value of 1 indicates complete association. Table A4.1-2 includes guidelines for interpreting Cramer's V.

Value of Cramer's V	Strength of Association
0.1	Small Association
0.3	Medium/Moderate Association
0.5	Large Association

Table A4.1-2: Guidelines on the strength of the association

Friedman Test

The Friedman test is utilised to enable a comparison between the mean rating scores assigned to several related statements, such as a number of statements in a Likert scale format (Camilleri, 2015). The hypotheses tested under this statistical test are:

H_0: The mean rating scores assigned to the statements do not differ significantly.

H_1: The mean rating scores assigned to the statements differ significantly.

The null hypothesis (H_0) is accepted if the p-value is greater than the 0.05 level of significance. The alternative hypothesis (H_1) is accepted if the p-value is less than the 0.05 level of significance.

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
Q11A	127	40.28	19.296	0	100
Q11B	127	19.84	11.968	0	55
Q11C	127	21.69	12.104	0	50
Q11D	127	18.19	15.782	0	80
Q12A	127	30.79	17.587	0	100
Q12B	127	22.72	14.125	0	100
Q12C	127	13.15	12.721	0	60
Q12D	127	33.35	18.794	0	100
Q13A	127	44.17	20.313	0	100
Q13B	127	13.90	11.967	0	50
Q13C	127	16.14	14.103	0	100
Q13D	127	25.79	14.873	0	70
Q14A	127	44.65	22.103	0	100
Q14B	127	16.65	12.409	0	60
Q14C	127	18.31	14.451	0	100
Q14D	127	20.39	14.552	0	70
Q15A	127	34.53	18.284	0	100
Q15B	127	20.12	11.330	0	60
Q15C	127	18.62	14.956	0	100
Q15D	127	26.73	14.189	0	80
Q16A	127	33.55	17.973	0	100
Q16B	127	16.49	12.858	0	60
Q16C	127	21.38	14.416	0	80
Q16D	127	28.58	16.902	0	100

*Table A4.1-1: Friedman Test on Questions 11 to 16, **p-value < 0.05***

	N	Mean	Std. Deviation	Minimum	Maximum
T1	127	4.28	.686	3	5
T2	127	2.49	1.030	1	5
T3	127	3.93	.969	1	5
T4	127	4.10	.711	1	5
T5	127	3.95	.825	1	5
T6	127	3.76	.877	1	5
T7	127	3.93	.768	2	5
T8	127	3.76	.831	1	5

*Table A4.1-2: Friedman Test on Question 17, **p-value < 0.05***

	N	Mean	Std. Deviation	Minimum	Maximum
R1	127	4.01	.707	2	5
R2	127	4.08	.625	2	5
R3	127	2.73	.988	1	5
R4	127	3.50	.999	1	5
R5	127	3.72	.870	1	5
R6	127	4.04	.660	2	5

*Table A4.1-3: Friedman Test on Question 18, **p-value < 0.05***

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			Trust	Reliance
Spearman's rho	Trust	Correlation Coefficient	1.000	.372**
		Sig. (2-tailed)	.	.000
		N	126	126
	Reliance	Correlation Coefficient	.372**	1.000
		Sig. (2-tailed)	.000	.
		N	126	126

*Table A4.1-4: Spearman's Correlation Test between Trust and Reliance, **p-value < 0.05**, **r = 0.360***

			SME Size	Dominant Culture Strength
Spearman's rho	SME Size	Correlation Coefficient	1.000	-.196*
		Sig. (2-tailed)	.	.028
		N	126	126
	Dominant Culture Strength	Correlation Coefficient	-.196*	1.000
		Sig. (2-tailed)	.028	.
		N	127	127

*Table A4.1-5: Spearman's Correlation Test between Dominant Culture Strength and SME Size for Culture as Clan, Adhocracy, Market and Hierarchy, **p-value < 0.05**, **r = -0.196***

			SME Size	F or S Str
Spearman's rho	SME Size	Correlation Coefficient	1.000	-.224*
		Sig. (2-tailed)	.	.012
		N	126	126
	Dominant Culture Strength	Correlation Coefficient	-.224*	1.000
		Sig. (2-tailed)	.012	.
		N	127	127

*Table A4.1-6: Spearman's Correlation Test between Dominant Culture Strength and SME Size for Culture as Flexibility or Stability, **p-value < 0.05**, **r = -0.224***

			Flatly vs Dominantly Cultured		Total
			Flat	Dominant	
SME Size	Micro	Count	48	6	54
		% within SME Size	88.9%	11.1%	100.0%
		Adjusted Residual	-2.9	2.9	
	Small	Count	49	0	49
		% within SME Size	100.0%	0.0%	100.0%
		Adjusted Residual	2.0	-2.0	
	Medium	Count	24	0	24
		% within SME Size	100.0%	0.0%	100.0%
		Adjusted Residual	1.2	-1.2	
Total		Count	121	6	127
		% within SME Size	95.3%	4.7%	100.0%

Table A4.1-7: Chi-Squared Test, **$X^2(2) = 8.513$, p-value < 0.05**

			Employees	Dominant Culture Strength
Spearman's rho	Employees	Correlation Coefficient	1.000	-.177[*]
		Sig. (2-tailed)	.	.046
		N	127	127
	Dominant Culture Strength	Correlation Coefficient	-.177[*]	1.000
		Sig. (2-tailed)	.046	.
		N	127	127

*Table A4.1-8: Spearman's Correlation Test between Number of Employees and DCS, **p-value < 0.05***
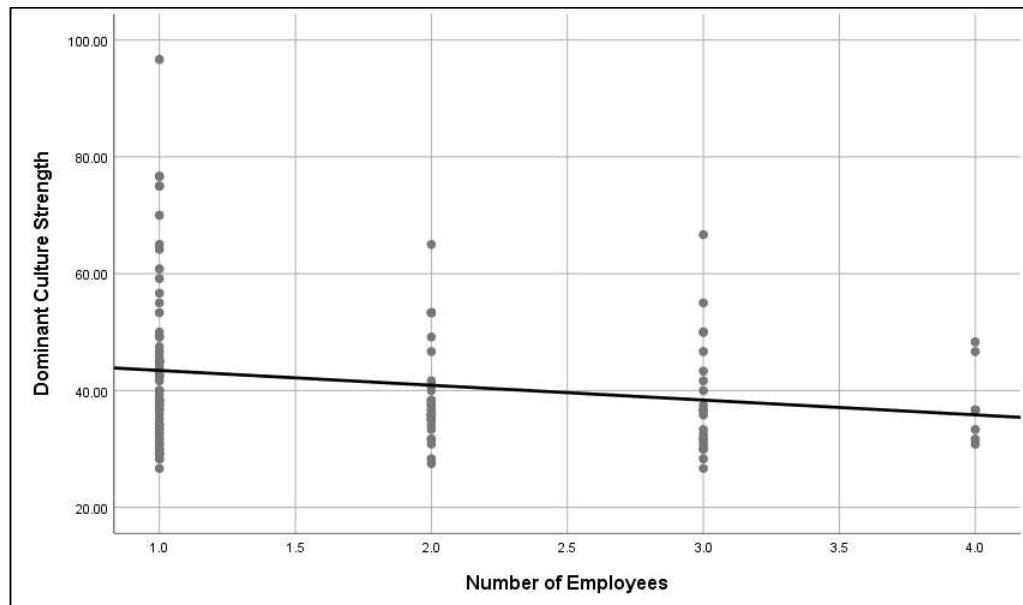
*Figure A4.1-1: The relationship between Dominant Culture Strength and Number of Employees for Culture as Clan, Adhocracy, Market and Hierarchy, **p-value <0.05, r = -0.177***

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			Years of Business Experience	Level of Accounting Education
Spearman's rho	Years of Business Experience	Correlation Coefficient	1.000	-.184[*]
		Sig. (2-tailed)	.	.039
		N	126	126
	Level of Accounting Education	Correlation Coefficient	-.184[*]	1.000
		Sig. (2-tailed)	.039	.
		N	127	127

*Table A4.1-9: Relationship between years of business experience and level of accounting, **p-value < 0.05***

			Years of Business Experience	Reliance
Spearman's rho	Years of Business Experience	Correlation Coefficient	1.000	-.182[*]
		Sig. (2-tailed)	.	.041
		N	126	126
	Reliance	Correlation Coefficient	-.182[*]	1.000
		Sig. (2-tailed)	.041	.
		N	126	126

*Table A4.1-10: Relationship between years of business experience and level of reliance, **p-value < 0.05***

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	Culture	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Reliance	Clan	.142	84	.000	.976	84	.114
	Adhocracy	.244	6	.200[*]	.924	6	.534
	Market	.206	11	.200[*]	.896	11	.163
	Hierarchy	.146	26	.159	.952	26	.253

Table A4.1-11: Shapiro-Wilk Test for reliance

	Culture	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Trust	Clan	.111	84	.013	.979	84	.178
	Adhocracy	.199	6	.200[*]	.963	6	.842
	Market	.168	10	.200[*]	.940	10	.555
	Hierarchy	.150	26	.139	.946	26	.188

Table A4.1-12 Shapiro-Wilk Test for trust

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.582	3	.527	3.115	.029
Within Groups	20.823	123	.169		
Total	22.405	126			

Table A4.1-13: One-Way Anova test for Reliance and the culture categorisation as Clan, Adhocracy, Market or Hierarchy

					95% Confidence Interval for Mean	
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Clan	84	3.2714	.38598	.04211	3.1877	3.3552
Adhocracy	6	2.7783	.22790	.09304	2.5392	3.0175
Market	11	3.0900	.57907	.17460	2.7010	3.4790
Hierarchy	26	3.2362	.44021	.08633	3.0583	3.4140
Total	127	3.2252	.42168	.03742	3.1511	3.2992

*Table A4.1-14: The mean reliance scores for each culture, **p-value < 0.05***

	Internal vs External	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Reliance	Internal Dominant	.129	110	.000	.974	110	.028
	External Dominant	.156	17	.200[*]	.951	17	.474

Table A4.1-15: Shapiro-Wilk test for reliance

	Internal vs External	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Trust	Internal Dominant	.099	110	.010	.982	110	.134
	External Dominant	.155	16	.200[*]	.944	16	.399

Table A4.1-16: Shapiro-Wilk test for trust

	Flexibility vs Stability	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Reliance	Flexibility	.116	93	.004	.980	93	.177
	Stability	.170	34	.014	.954	34	.160

Table A4.1-17: Shapiro-Wik test for reliance

	Flexibility vs Stability	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Trust	Flexibility	.107	93	.011	.986	93	.403
	Stability	.161	33	.030	.934	33	.047

Table A4.1-18: Shapiro-Wilk Test for trust

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Trust	.111	127	.001	.970	127	.006
Reliance	.118	127	.000	.979	127	.043

Table A4.1-19: Shapiro-Wilk Test for trust and reliance
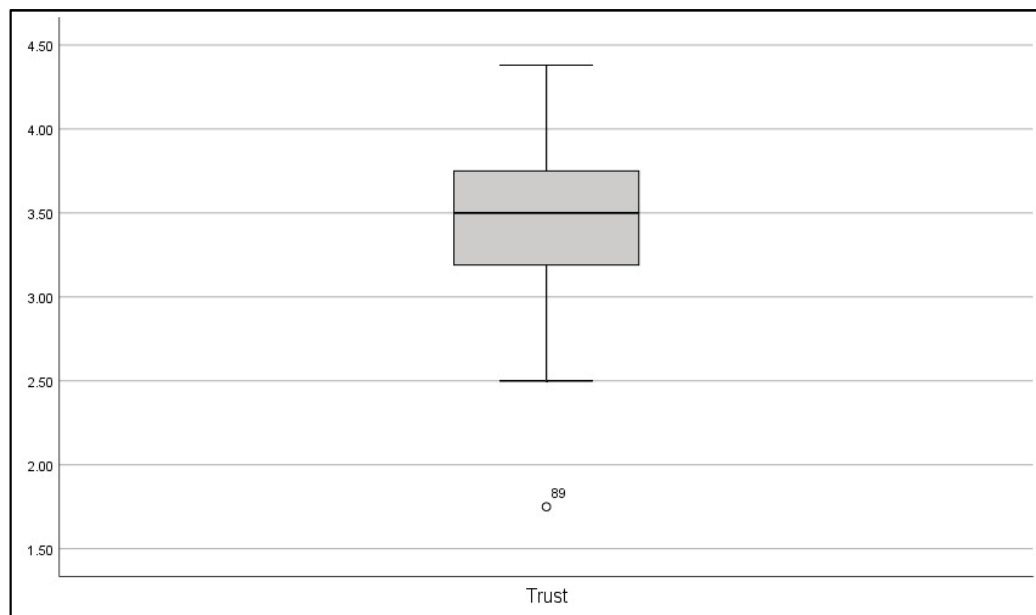
Figure A4.1-2: Trust mean score outlier

				T1			
			Neutral	Agree	Strongly Agree	Total
Internal vs External	Internal Dominant	Count	12	48	50	110
		% within Internal vs External	10.9%	43.6%	45.5%	100.0%
		Adjusted Residual	-2.1	-1.2	2.6	
	External Dominant	Count	5	10	2	17
		% within Internal vs External	29.4%	58.8%	11.8%	100.0%
		Adjusted Residual	2.1	1.2	-2.6	
Total		Count	17	58	52	127
		% within Internal vs External	13.4%	45.7%	40.9%	100.0%

Table A4.1-20: Chi-Square Test

			T8					
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Internal vs External	Internal Dominant	Count	0	9	28	55	18	110
		% within Internal vs External	0.0%	8.2%	25.5%	50.0%	16.4%	100.0%
		Adjusted Residual	-2.6	1.2	1.8	-2.0	.5	
	External Dominant	Count	1	0	1	13	2	17
		% within Internal vs External	5.9%	0.0%	5.9%	76.5%	11.8%	100.0%
		Adjusted Residual	2.6	-1.2	-1.8	2.0	-.5	
Total		Count	1	9	29	68	20	127
		% within Internal vs External	0.8%	7.1%	22.8%	53.5%	15.7%	100.0%

Table A4.1-21: Chi-Square Test

			T5					
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Flexibility vs Stability	Flexibility	Count	0	3	15	51	24	93
		% within Flexibility vs Stability	0.0%	3.2%	16.1%	54.8%	25.8%	100.0%
		Adjusted Residual	-2.9	1.1	.6	-1.3	1.7	
	Stability	Count	3	0	4	23	4	34
		% within Flexibility vs Stability	8.8%	0.0%	11.8%	67.6%	11.8%	100.0%
		Adjusted Residual	2.9	-1.1	-.6	1.3	-1.7	
Total		Count	3	3	19	74	28	127
		% within Flexibility vs Stability	2.4%	2.4%	15.0%	58.3%	22.0%	100.0%

Table A4.1-22: Chi-Square Test

ANOVA

Reliance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.341	2	.170	.958	.387
Within Groups	22.064	124	.178		
Total	22.405	126			

Table A4.1-23: One-Way Anova test for Reliance and SME size

			Adhocracy Score	R1
Spearman's rho	TotalB	Correlation Coefficient	1.000	-.176[*]
		Sig. (2-tailed)	.	.047
		N	127	127
	R1	Correlation Coefficient	-.176[*]	1.000
		Sig. (2-tailed)	.047	.
		N	127	127

*Table A4.1-24: Relationship between Adhocracy Score and agreement with R1, **p-value < 0.05***
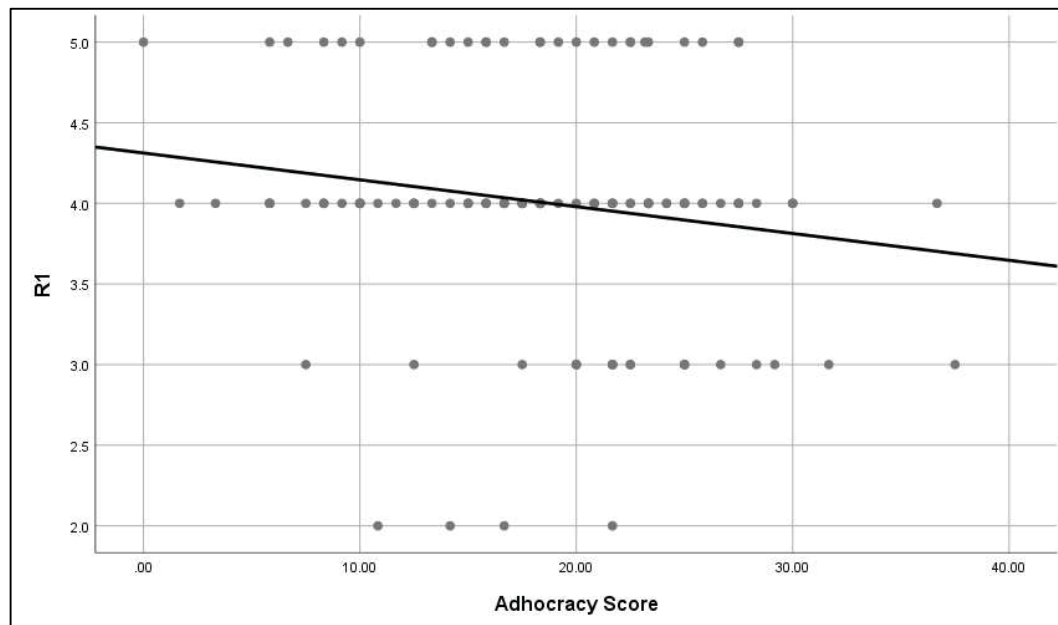
*Figure A4.1-3: The relationship between Adhocracy Score and agreement with R1, **p-value <0.05**, **r = -0.176***

			Adhocracy Score	R6
Spearman's rho	TotalB	Correlation Coefficient	1.000	-.189[*]
		Sig. (2-tailed)	.	.033
		N	127	127
	R6	Correlation Coefficient	-.189[*]	1.000
		Sig. (2-tailed)	.033	.
		N	127	127

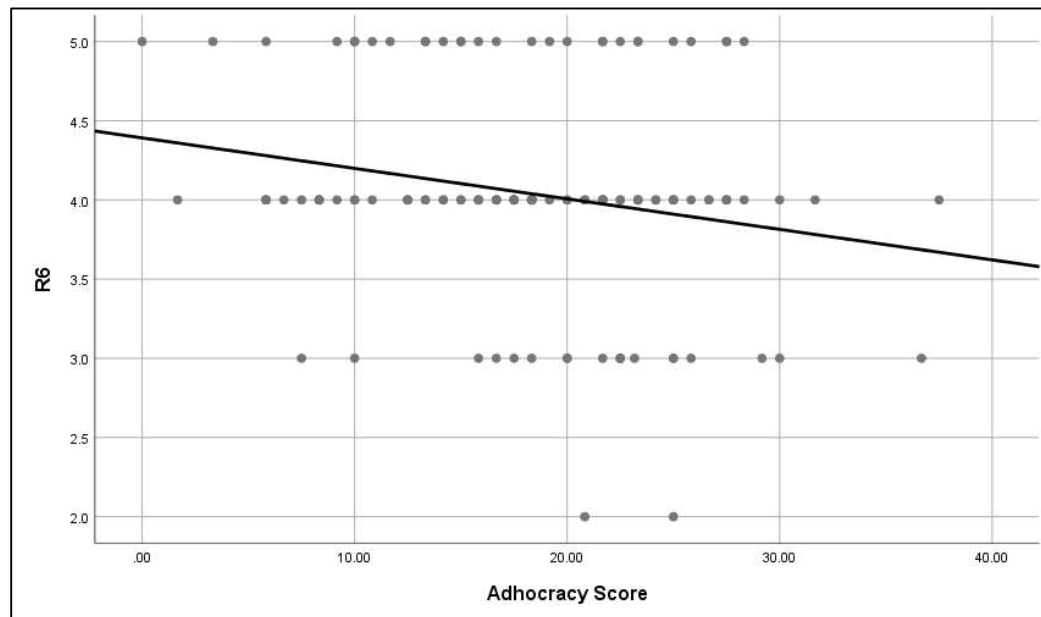*Table A4.1-25: Relationship between Adhocracy Score and agreement with R6,*
p-value < 0.05

Figure A4.1-4: The relationship between Adhocracy Score and agreement with
*R6, **p-value <0.05**, r = -0.189*

			Adhocracy Score	T2
Spearman's rho	TotalB	Correlation Coefficient	1.000	.205[*]
		Sig. (2-tailed)	.	.021
		N	127	127
	T2	Correlation Coefficient	.205[*]	1.000
		Sig. (2-tailed)	.021	.
		N	127	127

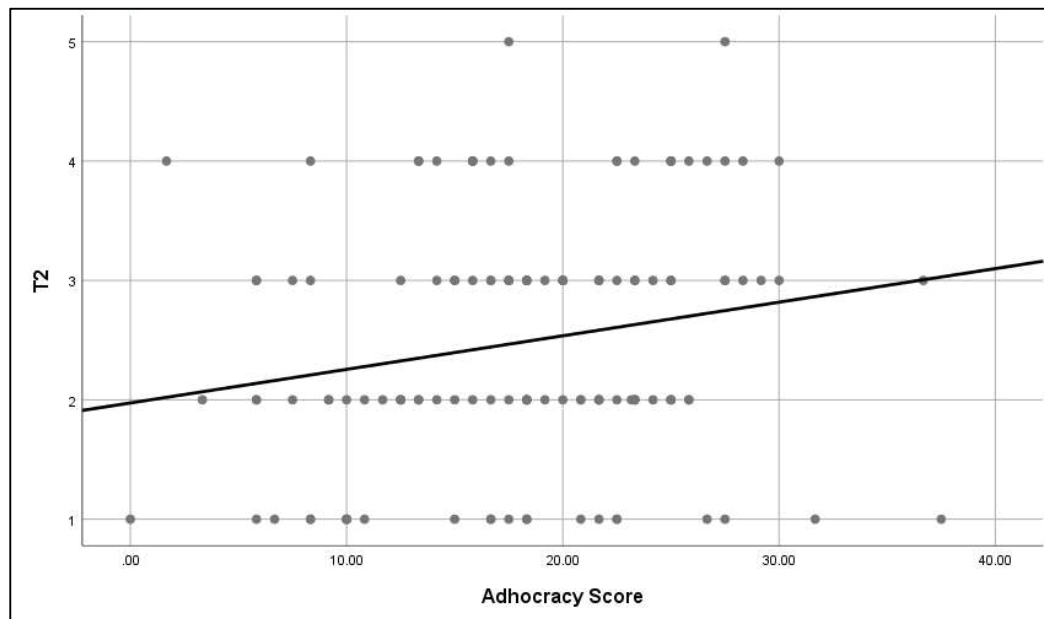*Table A4.1-26: Relationship between Adhocracy Score and agreement with R1, p-value < 0.05*

Figure A4.1-5: The relationship between Adhocracy Score and agreement with T2, p-value <0.05, r = 0.205

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			Dominant Culture Strength	T8
Spearman's rho	Dominant Culture Strength	Correlation Coefficient	1.000	.246**
		Sig. (2-tailed)	.	.005
		N	127	127
	T8	Correlation Coefficient	.246**	1.000
		Sig. (2-tailed)	.005	.
		N	127	127

*Table A4.1-27: Relationship between Dominant Culture Strength (Flexibility or Stability) and agreement with T8, **p-value < 0.05***
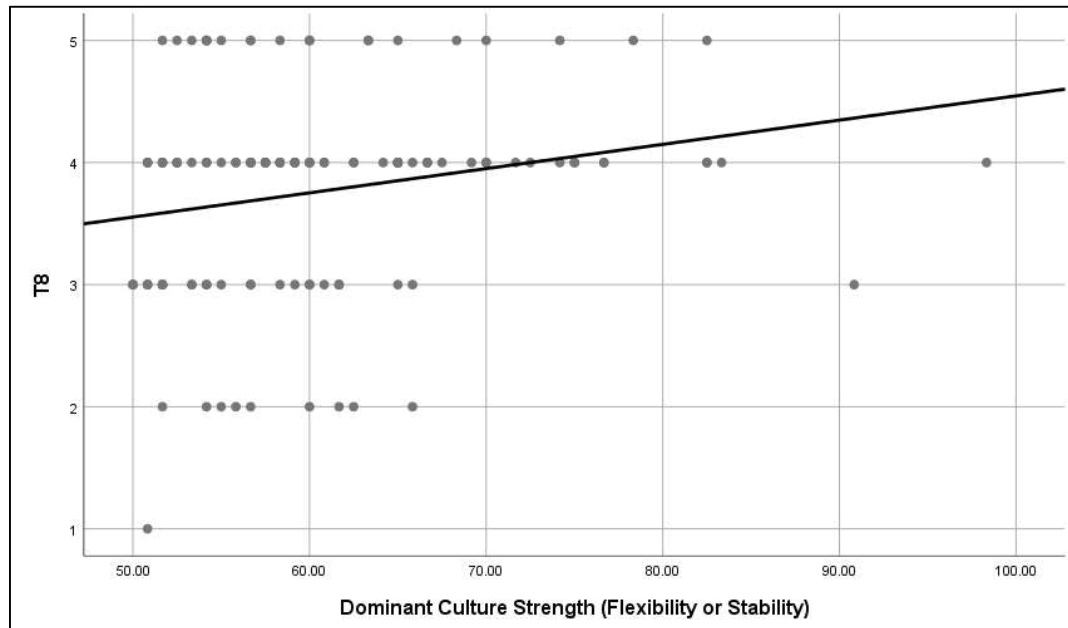

*Figure A4.1-6: The Relationship between Dominant Culture Strength (Flexibility or Stability) and agreement with T8, **p-value < 0.05, r = 0.246***

Appendix 4.2: Further Analysis of Culture with Demographic Variables

The Chi-Square Test of Independence was used multiple times to test whether Culture orientation is associated with education, accounting education, age group, business experience, activity or gender. Table 4.x presents the p-values generated by the test. In all cases except for gender, H_0 was accepted. This means that within Maltese SMEs there is no association whatsoever between culture groups and education, accounting education, age, business experience or area of activity. However, a statistically significant association was found between culture groups and gender within Maltese SMEs, $\chi^2(3) = 10.903$, p < 0.05, with a moderately strong association (Cohen, 1988), Cramer's V = 0.293.

Chi-Square Test	p-value	Hypothesis Accepted
Culture Groups and Education	0.063	H_0
Culture Groups and Accounting Education	0.865	H_0
Culture Groups and Age	0.439	H_0
Culture Groups and Business Experience	0.271	H_0
Culture Groups and Activity	0.877	H_0
Culture Groups and Gender	**0.012**	**H_1**

Table A4.2-1: Results from the Chi-Square Tests

Table 4.y below demonstrates the association between culture group and gender. It is evident that the Clan culture is the most Dominant culture, irrespective of gender. On the other hand, 17.4% of SMEs with a female director were dominated by the Adhocracy Culture, while a mere 1.9% of SMEs with a male director exhibited this culture. Contrastingly, the Market and Hierarchy cultures were exhibited to a higher extent *(9.6% and 22.1% respectively)* in SMEs with a male director than SMEs directed by a female *(4.3% and 13.0%)*. Hence, while

the Clan culture proportion was the same across the two genders, the proportions of the other three cultures differed significantly.

			Culture				
			Clan	Adhocracy	Market	Hierarchy	Total
Gender	Male	Count	69	2	10	23	104
		% within Gender	66.3%	1.9%	9.6%	22.1%	100.0%
	Female	Count	15	4	1	3	23
		% within Gender	65.2%	17.4%	4.3%	13.0%	100.0%

Table A4.2-2: Cross tabulation between Gender and Culture

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