

**Open University of Cyprus**  
**Faculty of Economics & Management**

**Postgraduate (Master's) Program of Study**  
*Enterprise Risk Management (ERM)*

**Postgraduate (Master's) Dissertation**



**A study of the effect of business certification schemes on reducing  
the perceived risks on the side of the customer**

**Georgia Chairalla**

**Supervisor**

**Dr Angeliki Menegaki**

**May 2022**

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The present Postgraduate (Master's) Dissertation was submitted in partial  
fulfilment of the requirements for the postgraduate degree  
In Enterprise Risk Management (ERM)  
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## Summary

This dissertation aimed to study consumers' perceived risk in relation to business certification programs, through a questionnaire answered by 203 people from around the world.

Citing a broad theoretical framework based on the existing literature on perceived consumer risk examined, the dissertation explores how consumers could achieve complete satisfaction when purchasing a product/service, to first examine whether the product/service comes from systems business certification.

The development of consumer attitude towards perceived risk may be based on the opportunities offered by the change in consumer strategy towards business certification schemes. The search for an adaptation strategy involves changing the consumer's abilities to better adapt to the opportunities presented.

Understanding a consumer aptitude is also crucial from another aspect. Consumer skills to perceive risk can be at the forefront of the development of a superior decision-making ability. By utilizing essential talents, new opportunities might be generated. Consumers may lack basic abilities since they may not comprehend why they need to be informed about business certification programs. It is critical to understand this before purchasing a product or a service.

Therefore, the role played by unique resources and key competencies is important for the long-term contribution. On the one hand, the ability to codify knowledge removes barriers to imitation and undermines fundamental skills. On the other hand, it is difficult to codify certain types of knowledge, such as intuition and experience, which are common knowledge based on interactions with business certification systems. In this way, knowledge and experience with perceived risk can serve as a foundation for improved market decision-making.

Pursuing the right focus on behaviour can be difficult when it is part of a consumer's overall mentality. However, consumer behaviour either through business certification programs or through diversification costs focuses on a specific market segment and meets the needs of specific customers that are not covered by costs or diversification.

## Περίληψη

Στόχος της παρούσας διπλωματικής εργασίας ήταν η μελέτη του αντιλαμβανόμενου κινδύνου των καταναλωτών σε σχέση με τα προγράμματα πιστοποίησης επιχειρήσεων, μέσα από ένα ερωτηματολόγιο που απάντησαν 203 άτομα από όλο τον κόσμο.

Παραθέτοντας ένα ευρύ θεωρητικό πλαίσιο που βασίζεται στην υπάρχουσα βιβλιογραφία σχετικά με τον αντιληπτό κίνδυνο του καταναλωτή που ήδη εξετάστηκε, η διατριβή διερευνά πώς οι καταναλωτές θα μπορούσαν να επιτύχουν πλήρη ικανοποίηση όταν αγοράζουν ένα προϊόν/υπηρεσία, για να εξετάσει πρώτα εάν το προϊόν/υπηρεσία προέρχεται από επιχειρηματική πιστοποίηση συστημάτων.

Η ανάπτυξη της στάσης των καταναλωτών απέναντι στον αντιληπτό κίνδυνο μπορεί να βασίζεται στις ευκαιρίες που προσφέρει η αλλαγή στη στρατηγική των καταναλωτών προς τα συστήματα πιστοποίησης επιχειρήσεων. Η αναζήτηση μιας στρατηγικής προσαρμογής περιλαμβάνει την αλλαγή των ικανοτήτων του καταναλωτή για καλύτερη προσαρμογή στις ευκαιρίες που παρουσιάζονται.

Η κατανόηση της ικανότητας του καταναλωτή είναι επίσης κρίσιμη από μια άλλη πτυχή. Οι δεξιότητες των καταναλωτών για την αντίληψη του κινδύνου μπορεί να είναι στην πρώτη γραμμή της ανάπτυξης μιας ανώτερης ικανότητας λήψης αποφάσεων. Χρησιμοποιώντας βασικά ταλέντα, μπορεί να δημιουργηθούν νέες ευκαιρίες. Οι καταναλωτές μπορεί να στερούνται βασικών ικανοτήτων, καθώς μπορεί να μην κατανοούν γιατί πρέπει να ενημερώνονται για τα προγράμματα πιστοποίησης επιχειρήσεων. Είναι σημαντικό να το κατανοήσουν αυτό πριν αγοράσουν ένα προϊόν ή μια υπηρεσία.

Ως εκ τούτου, ο ρόλος που διαδραματίζουν οι βασικές ικανότητες είναι σημαντικός για τη μακροπρόθεσμη συνεισφορά. Από τη μία πλευρά, η ικανότητα κωδικοποίησης της γνώσης αφαιρεί τα εμπόδια στη μίμηση και υπονομεύει τις θεμελιώδεις δεξιότητες. Από την άλλη πλευρά, είναι δύσκολο να κωδικοποιηθούν ορισμένοι τύποι γνώσης, όπως η διαίσθηση και η εμπειρία, που είναι κοινή γνώση που βασίζεται σε αλληλεπιδράσεις με συστήματα πιστοποίησης επιχειρήσεων. Με αυτόν τον τρόπο, η γνώση και η εμπειρία με τον αντιληπτό κίνδυνο μπορούν να χρησιμεύσουν ως βάση για βελτιωμένη λήψη αποφάσεων στην αγορά.

Η επιδίωξη της σωστής εστίασης στη συμπεριφορά μπορεί να είναι δύσκολη όταν είναι μέρος της συνολικής νοοτροπίας ενός καταναλωτή. Ωστόσο, η συμπεριφορά των καταναλωτών είτε μέσω προγραμμάτων πιστοποίησης επιχειρήσεων είτε μέσω του κόστους διαφοροποίησης εστιάζει σε ένα συγκεκριμένο τμήμα της αγοράς και καλύπτει τις ανάγκες συγκεκριμένων πελατών που δεν καλύπτονται από κόστος ή διαφοροποίηση.

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# *Introduction*

## **Aim of the subject**

The purpose of this dissertation is to study the effect of business certification systems on reducing perceived risks on the part of the customer (Cypriot consumers & other nationalities).

It is important to control the perception of risk by the consumer, in order to encourage more customers to make purchases from companies that have certification procedures. As a result, the buying behaviour of consumers should be investigated based on attitude and perceived risk, as this will result in more transactions in Cyprus, which will have a significant impact on the development of trade in Cyprus. In the marketing literature it has been found that the perception of risk directly affects the purchase intention, that is, when customers perceive large risks, they are less likely to buy or repurchase. If the threat is felt, it can be genuine. This will affect consumers' shopping habits. Consumer perceptions of risks should be assessed regularly so that they can be actively regulated and reduced, thus contributing to market development.

Furthermore, the purpose of this study is to investigate the effect of perceived risk as a factor that influences the buying behaviour and decisions of consumers, as well as the effect of business certification schemes on risk perception.

All business processes can have an impact on the quality of a product or service. As a result, using standards to achieve quality is beneficial. The certification of a business with an ISO standard is more than just a reference for the execution of the process. It is our duty to follow the quality standards.

## **Reasons to choose the topic**

In the framework of risk perception research, an attempt is made to understand what elements impact a person's perception of risk and how they contribute to the formulation of their final judgement on risk, in addition to comprehending what is a genuine risk. We would say that risk perception studies how individuals and social groups judge and interpret available data on potential losses and more specifically on the risk posed by each risk. The importance of risk-taking research lies in the fact that the judgments and interpretations of ordinary people, individually or in groups, are the ones that affect their actions and attitudes - positive or negative - towards the management measures proposed by government agencies.

People consider and evaluate the characteristics of a risk situation and not an abstract concept such as risk. In addition, we conclude that perceived risk is multi-modal. When perceived from a distinct perspective, the same risk might imply various things to different people or different things to the same person. In many circumstances, essential parts of risk perception entail judgement not just of an activity's physical qualities and consequences, but also of social and structural variables such as dependability and trust. Finally, perceived risk cannot be represented as a subjective element in a quantitative relationship that risks, such as the sum of an event's probability and effects.

This would impose excessively restrictive assumptions about such a broad social phenomenon.

Therefore, in this paper, I will try to analyse the phenomenon of risk perception in depth. Further exploration of how consumers perceive risk in relation to business certification schemes will lead to safe conclusions regarding the current situation in Cyprus and abroad. In addition, this study will examine the ways based on the respondent's opinions to reduce consumers' perceived risk. It will also show possible obstacles it will face in implementing them in the Cypriot context. The dissertation consists of an introduction, followed by 8 Chapters and Conclusions.

## **Research Justification**

As we are aware of what is happening in business risk management, we notice in the literature that the perceived risk is not completely understood by many customers. Indeed, we note that the occurrence of business certification schemes, as well as the way consumers make purchase decisions to lower perceived risk, challenges existing understanding in the sector.

A review of the related literature also indicates that not everyone agreed on the projected association between perceived risk and information obtained by customers throughout the purchasing process of products/services on the label, whether certified or not. Personal preferences may influence how these products/services are perceived, and detailed knowledge of important product aspects cannot be obtained without first-hand experience (Grant, Clarke, & Kyriazis, 2007; Korgaonkar, Silverblatt, & Girard, 2006).

Acknowledging the need for new theories to bridge the gap caused by the phenomenon-theory contradiction and the literature gap. Furthermore, when we examine business risk management techniques, we discover that customers struggle to establish how and when, throughout the search stage of the purchasing process, they may reduce their risk perception of the business certification program. It is unknown how this may affect customer search and shopping behaviour. It's also unclear how customers might reduce their risk perceptions. As a result, the present literature contains research gaps in the following areas:

Current theories are unable to describe the recently discovered phenomena of how to lower perceived risk during information search in connection to business certification schemes.

A lack of theories in enterprise risk management that clarify how perceived risk in relation to business certification schemes affects consumers' behaviour in purchasing contexts

The limited understanding of reducing consumer perceived risk that necessitates a thorough understanding of human behaviour and interactions in a dynamic and rapidly changing environment.

Therefore, I perceived a research opportunity, which drove me to conduct this study on consumers' perceived risk in relation to business certification schemes. According to Shepherd (2017), when there are conflicts between observable events, current theories, and a preference for practice, a trigger for theorizing arises.

## **Objectives**

The goal of this study is to look at how business certification schemes impact customers' risk

perceptions and consumer behaviour during the product/service purchasing decision-making process, as well as ways to reduce their perceived risk. Finally, we seek to add added information to the process of conceptualizing perceived risk in the situation mentioned above.

The study's goal is to provide a clear picture of how consumers perceive risk in connection to business certification schemes throughout the world, specifically in Cyprus (Cypriots vs other nationalities), and what must be done to lower consumers' perceived risk.

How do Business Certification programs affect consumers' risk perceptions during the search stage?

**This work specifically addresses the following research questions.**

In terms of risk perception dynamics during purchasing processes:

**RQ 1:** Awareness level and consumer impact on business certification schemes and the most common ISO certifications.

**RQ 2:** Consumers perceive risk: impact (attitude, intention, trust, understanding, information, commitment, influence, cost, habits).

**RQ3:** How does consumers' perceived risk interact with pre-purchase information retrieval under business certification schemes?

**RQ4:** Consumer purchasing decision-making process and level of knowledge on certified products/services.

**RQ5:** Implications for consumer market decision-making and perceived risk in relation to business certification schemes.

**RQ6:** What suggestions, unique ideas, links, and concepts can be found that influence and reduce the perceived risk of customers in relation to the business certification system?

**RQ7:** How do the perceived risk and its relation to the search for information and the answer to this questionnaire change the purchasing behaviour of consumers in relation to business certification systems?

## **Overview of chapters**

Given what has been stated about it as a means of recognizing the study's difficulty, in connection to business certification schemes, a method of its exact methodology and what new we may recommend in the future to lessen the risk is seen by the consumer.

The chapters are as listed below:

### **Chapter 1: Literature Review**

Introduces important literature on the phenomena of the need to investigate the context and the previous ones. It explores many theoretical perspectives, as well as how theories and empirical research have evolved over time and what the current state of the literature is. Describes the research topic in which the current dissertation is framed, the background of the study, the defined phenomena, and the study environment. It also includes a statement summarizing the justification, objectives, research questions and uniqueness of the study. Finally, this chapter discusses and explains the research attitude towards the theoretical views on which the tables are framed, as well as presents a version of the perceived risk at some point in the market records that are searched.

## **Chapter 2: Theory in Risk**

Definition, perception, types of perceived risk, and definition, measurement models, and emotions related to perceived risk)

## **Chapter 3: Consumer profile, behaviour, satisfaction, and trust.**

## **Chapter 4: Certification**

Definition, Basic certifications – ISO Standards

## **Chapter 5: Product perception**

Service and Quality

Chapter 6: Data collection

## **Chapter 7: Analysis and Findings**

**Chapter 8: Proposals for Future Research, Research Limitations and Suggestions for future investigation**

The eighth chapter examines the study's shortcomings. Furthermore, because this study opens the door to entirely new research, this chapter presents the identification of the most recent research prospects. It also offers up new possibilities for testing and improvement recommendations that might help today, with an emphasis on the goal of understanding consumer perceived risk and purchasing decisions in relation to business certification schemes.

## **Chapter 9: Conclusion**

The end of this dissertation underlines the relevance of integrating fresh information in the area and reiterates the rationale for this study to look at.

# *Chapter 1*

## *Literature Review*

### **Introduction**

The first chapter introduces the research field of knowledge, as well as the background of the research topic and the context in which it is framed. This chapter investigates the state of the art in several literature disciplines, including perceived risk, information search, and consumers' purchase decision-making process in relation to business certification schemes and how consumers can reduce perceived risk, as well as new literature on customer behaviour.

The second section goes over the time-evolution hypotheses that have been used to characterize the purchasing decision-making process. The revision examines classic ideas as well as what has been written regarding the effect of a business certification scheme on the process. The new literature is examined next, considering classic theories while contextualizing the purchasing decision-making process in a contemporary setting.

Sections 3 and 4 examine consumers' purchasing decision-making process. Search psychological theories and search economic theories are explicitly examined. This section also investigates the factors involved in information search connected to business certification systems, as well as how product qualities and attributes impact how customers seek information.

Finally, section 5 looks at the research on perceived risk, its many aspects, and its link to information search behaviour. Furthermore, this part 'digs' deeper into the basic ideas of prospect theory and constructive consumer choice processes theory, which support the perceived risk construct by examining how consumers process information and risk associated with business certificate schemes.

### **Research Background**

Understanding perceived risk and how consumers make purchasing decisions is becoming even more important in business risk management theory and practice because it reveals how customers are best influenced in their purchasing decisions (Blackwell, Miniard, & Engel, 2001; Edelman, 2010).

Furthermore, according to Edelman (2010), a clear understanding of how consumers make purchase decisions, with a focus on the stages of the decision-making process, provides more accurate resource allocation insights than other strategies based on understanding how to search for a product/service in the context of a business certification scheme.

Consumer behaviour in terms of buying decisions is being influenced by the business certification process (Darley, Blankson, & Luethge, 2010; Edelman, 2010; Grant, Clarke, & Kyriazis, 2013; Lemon & Verhoef, 2016). Indeed, the Internet's development has affected customer behaviour throughout the search stage of the purchasing decision-making process (Darley et al., 2010).

Furthermore, the literature suggests that the business certification program has generated a change in thinking about how customers behave toward such organisations in purchasing scenarios in terms of perceived risk. Consumers' behaviour has caused researchers to examine fundamental practices and the existing self-concept of risk perception, as well as to create new tactics to

overcome market issues associated with certification schemes by lowering perceived risk. As a result, new literature is emerging that analyses how contemporary consumers make purchasing decisions, as well as how to lessen their perceived risk regarding business certification systems.

## **Research Gap**

### **Introduction**

The Business Certification System modifies customers' purchasing behaviour in relation to perceived risk by changing the processes and interactions that make up the model used to represent the consumer market decision-making process (Darley et al., 2010; Grant et al., 2007). The buying process becomes more dynamic, with a lengthier evaluation period (Edelman, 2010; Flstad & Kvale, 2018). A previous study found that when information sources do not match customer requirements when it comes to certified items. Lemon and Verhoef (2016) Lemon and Verhoef (2016) (Grant et al., 2013)

Consequently, we can observe that the use of conventional and online sources of information leads to separate product search and evaluation processes (Darley et al., 2010; Edelman, 2010; Grant et al., 2007). On the other hand, the theory about the pattern and nature of these discriminations has been limited. As a result, there is a scarcity of studies on how consumers perceive risk and how it influences their behaviour and decision-making in connection to business certification programs.

The literature on perceived risk has surely been extensively researched during the last 40 years. Furthermore, different risk-reduction strategies may be used for different perceived hazards. Although some research examines the relationship between risk perception and risk reduction behaviour, they tend to focus on retrieving consumer information.

As a result, existing research suggests that perceived risk is a critical element that influences consumer behaviour throughout the information retrieval phase and that this is changing rapidly in today's environment. To describe the spectrum of information retrieval approaches that combine traditional sources into the consumer purchase decision process, we may search if consumers seek information that might impact risk perception, therefore modifying consumer information retrieval behaviour.

The present research will focus on products and services, identifying the unique risks that customers perceive when purchasing a business certification system. Finally, the investigation will go deeper into the topic. Although this study will focus on perceived risks, it will first examine the perceived risks associated with acquiring products/services, something that is discussed by most of the previous material and then find ways to reduce them.

# Chapter 2

## *Theory in Risk*

Humanity faces various kinds of challenges and risks every day. Our life is a constant effort to satisfy our needs while avoiding the obstacles and risks posed by nature and our social environment. This has been happening since the first moment humanity existed on planet Earth and will continue to happen in the future. What varies from season to season is how individuals perceive and prioritize difficulties and risks, what tools they use to study and evaluate each challenge/threat, and lastly, what strategies and technical breakthroughs they employ to manage it. Risk, to mitigate or, if feasible, eradicate it and its harmful consequences. For ages, man has depended on instinct and experience, as well as biases and religious ideas. This began to change as philosophy and science advanced. Humanity now investigates, rationalizes, and systematized its surroundings as well as the things it sees.

## *Definition Of Risk*

To interpret the challenges, uncertainties and risks faced on an individual or social level, humans introduced the concept of risk. The remarkably interesting thing about the concept of “risk” is that even today it remains vague, as there can be no clear answer to the question “What is the risk?” The word risk means different things to different people, in different countries and at various times, often leading to confusion and misinterpretation. The word itself derives its origin from the Italian word *rischio* and can take many interpretations in Greek such as risk, fear, adverse event etc.

Risk is defined as the probability of occurrences or actions inhibiting the achievement of an organisation’s strategic and operational goals. Risk can be defined by two parameters: severity as the severity of the damage and probability as the probability of damage occurring (Deysher, 2014).

In the ISO 9001 standard, the term "risk" refers to the degree of uncertainty in accomplishing these objectives. Lack of faith in the organisation’s capacity to deliver the goods and services requested by consumers consistently. Consequently, customer dissatisfaction (Hutchins, 2014).

Daily, we all engage in risk-based thinking, often unintentionally. Risk has always been a hazy concept in ISO 9001, but the 2015 version defines and integrates it across the management system. The term "risk" has already been integrated into the procedure's strategy. The preventative intervention has become the norm because of the inclusion of the term "risk."

Risk is frequently seen solely in a negative light. However, risk-taking thinking may also aid in the identification of chances. This might be viewed as a benefit of taking a risk.

Risk is considered from the beginning and throughout the approach process when using risk-based thinking. Risk-based thinking makes active action part of strategic planning (Deysher B., 2014).

## *Perception of Risk*

## Definition and Concept of Risk Perception

The perception of risk as a concept refers to the "acceptable" risk from individuals or the community and shows how willing society is to take risks in relation to specific threats. Slovic et al. state that the more people believe that they are benefiting from a risky behaviour or activity, the greater their tolerance for that risk.

According to sociological approaches, there is not a single acceptable level of risk, in the following cases: (Sapoundzaki & Dandoulaki, 2016)

Individual acceptance: This is the acceptance by a specific person.

Aggregate individual acceptance: This refers to the average of various levels of individual acceptance.

The internal acceptance of the community system: It is the level of acceptance of the risk that has been understood through communication within a specific social system.

Social acceptance: Refers to the acceptance of risk by society or a social group.

Acceptance by experts: Experts define what individuals accept as risk and what society.

The perception of risk varies according to the person, and the case in which the culture must react. The different preference for risk in each person is an element of their personality. Consumers who perceive high levels of risk in the various markets they make tend to limit their available options to a few safe alternatives. On the contrary, those who perceive low risk tend to choose from many more alternatives.

## ***Risk Perception Models***

Risk perception is influenced by several social, cultural, and political variables. Nobody is ever alone. We are social beings who live and work in a social environment. The rules of society impose constraints, specify duties and rights on citizens' conduct, and eventually give a set of principles that form an individual's attitude and views. Because there is no reason to believe that an individual's thoughts and values regarding risk and hazard differ from those of others.

### **The Risk Awareness Model**

A person's perception is described as a combination of risk (the amount of the probability of death or sickness) and anger (the perceptual or emotional component of risk, such as dread or anxiety). Numerous elements connected to the risk itself influence how we perceive it. Perception of risk examines the subjective aspects that determine how people understand risks, such as worry, concern, wrath, fear, and hostility. People's views and subsequent behaviours are influenced by how they emotionally react to perceived hazards. (1990, Slovic, Fischhoff, and Lichtenstein)

### **The Negative Dominance Model**

The existence of asymmetric links between negative and positive information is described as the processing of negative and positive information in situations of high concern (with more emphasis on the negative). People value losses (bad outcomes) more than profits (positive results). As a result, negative messages should be offset with more positive or "solution-oriented"

communications. Announcements with negative signs, on the other hand, are more regulated, remembered, and have a bigger impact.

### **The Trust Determination Model,**

The necessity of trust for effective risk information is emphasised. Trust is built over time and through ongoing action, through attentive listening and communication skills such as interest and empathy, the ability and experience of commitment and engagement, and honesty and open dialogue. Individuals or small groups (information exchanges, workshops for the public) are the most effective environments for transmitting trust (Renn & Levine, 1991). Confidential trust is lower if experts disagree, are not sensitive or are reluctant to share information, are considered irresponsible or do not convey coordinated messages.

The following are some more significant social psychology theories and principles:

- The Theory of Expectation-Value, which argues that risk acceptance is largely and positively associated with the perception of the benefits of risky activities (Fishbein & Ajzen, 1975).
- Anxiety and Management Theory argues that primary assessment processes focus on threat assessment and secondary assessment focuses on perceived management skills (Lazarus & Folkman, 1984).
- Sociological Theory views behaviour as a function of self-efficacy expectations, i.e., whether individuals think they can take the necessary actions (Bandura, 1986) and
- Theory of Protection Mobilization considers that self-defence behaviour is determined by the risk or vulnerability to the threat, the probability of the threat, the degree to which an action is possible and the considered effectiveness of that action (Rogers, 1983).

The degree to which people interact with risk information and whether they decide to change their behaviour is governed by their feeling of personal vulnerability and risk severity, according to the Precautionary Adoption Process Model.

### ***Types of perceived risk***

The types of perceived risk according to Schiffman and Kanuk are the following (Schiffman and Kanuk, 2004):

1. **Operational risk (performance risk)** is defined as the uncertainty and consequence of a product failing to perform at the expected level that may result from a poor product selection due to the consumer's inability to properly assess product quality.
2. **Physical risk** refers to the likelihood that a purchased product will cause natural damage

as well as potential harm to their safety, physical health, and well-being.

3. **Financial risk** is defined as the possibility of monetary loss related to purchasing a product. Alternatively, defined as the likelihood that the product will not be worth the financial cost and will be offered more cheaply elsewhere (not value for money). Furthermore, there contains the risk of not receiving the product at all, even after paying for it, as well as the risk of one's credit card information being abused.
4. **Social risk** represents the individual's dissatisfaction with friends and family in the event of a bad product or service purchase decision, as well as the likelihood that the society will make others think less favourably of the customer. It is also related to their ego.
5. **Psychological risk** reflects a person's dissatisfaction with himself as a result of a bad product or service purchase decision. It is also defined as the possibility that the market is incompatible with the consumer's personality or self-image and that a poor product choice would hurt the consumer's ego.
6. **Time risk** occurs when time limits a product's ability to meet the requirements, such as when a product quickly becomes obsolete. It also refers to the prospect of purchase taking a long time or wasting a lot of time on returning or exchanging goods, as well as any technological issues.

Each of the above dimensions can be approached both in terms of the uncertainty it gives rise to and in terms of the consequences, it is likely to have of a wrong purchasing decision. For example, perceived time risk consists of the uncertainty about whether valuable time will be lost and the significance of this loss of time for the consumer.

### ***Definition of Consumer's Perceived Risk***

Perceived risk is a psychological notion that relates to the uncertainty and risk that customers sense while acquiring items or services (Jeon et al., 2020). In academic circles, the influence of perceived risk on unpleasant emotions has been examined, such as in research by Zheng et al (2019).

Perceived risk, according to Bauer, is the consumer's subjective impression that he will lose money in the pursuit of a favourable outcome (Zhang and Prybutok, 2005). Perceived risk is also referred to as subjective risk and is contrasted with actual (objective) risk. The motivation for consumer behaviour is this perceived risk and not the actual risk, which the average consumer cannot accurately calculate in advance. The fact that it is impossible to measure the actual risk is since the average consumer has at his disposal limited information, a small number of tests and not exceptionally reliable memory and in many cases makes completely new product purchases, for which he does not know. Therefore, consumers are only affected by risks that they perceive whether they are real or not. Actual risks, which are not perceived, do not affect consumer behaviour, no matter how significant.

According to the research (Schiffman & Kanuk, 2004), when customers are unable to predict the consequences of their purchases, they sense risk. There are several definitions of risk in the literature, but there is unanimity that uncertainty is a major component (Stampfl, 1978).

According to Bauer (1960), the consumer does not face the risk, but only that part of the risk that he perceives and that he realizes exists. This is because people, and hence customers, behave based on their perceptions rather than facts. Perception is described as the process through which a person integrates external inputs and generates an image of reality (selection, organisation, translation).

In addition to the above definitions of perceived risk, there are other definitions in the literature (Mitchell, 1999). The bigger the perceived risk, the more convinced the customer is about the possibility of the loss. In a similar vein, perceived risk is described by Stampfl (1978) as a function of uncertainty in connection to the economic, functional, social, and psychological repercussions of a purchase decision, as well as the significance of that decision for the customer.

According to Mitchell (1999), perceived risk consists of two components: the first is the amount that will be lost if the implications of the purchase choice are negative, and the second is the subjective consumer's sense of conviction that the repercussions will be negative. To calculate the risk, the components can be combined either additively or multiplicatively, although the additive model is considered superior in most cases (Mitchell, 1999).

Similarly, according to Cox in *Risk Handling in Consumer Behaviour - An Intensive Study of Two Cases*, perceived risk is a function of uncertainty and ramifications. As Cox wrote, uncertainty is related to the product itself, to the place and manner of purchase and the subjective view of the consumer.

Consumer uncertainty, according to Mitchell, stems from a lack of understanding of their actual needs and goals, the inability to predict future performance, the inability to determine the range of alternative decisions (knowledge uncertainty), the impossibility of, the possible dissimilarity between the expected and actual experience of the result, and finally the consumer's capacity to appropriately assess the degrees of result he has obtained is important (Mitchell, 1999).

Bauer and Cunningham (1978) focused on financial risk, but Cox added two additional forms of risk: perceived functional risk, often known as performance risk, and perceived psychological risk.

Roselius accepted the definition of perceived risk based on the two components, as originally proposed by Bauer, namely uncertainty and consequences (Stampfl, 1978). Roselius in his article, "Consumer rankings of risk-reduction methods", suggests that there are four diverse types of perceived risk: hazard loss, economic loss, loss of self-esteem and loss of time (Cases, 2002). In general, even though there is a vast variety of definitions of perceived risk by various authors, the vast majority converge on the acceptance of perceived risk as a multidimensional variable consisting of two components.

For the first type of personality, the priority is to avoid bad choices while for the second type of personality, the priority is the range of available options. The method of transaction, i.e., whether

the transaction is performed through a traditional channel or over the internet, has an impact on the consumer's perception of risk.

Furthermore, risk perception differs depending on the product. This risk is known as product category risk, as opposed to product risk. According to various polls, consumers perceive more risk in the decision to buy services than in the decision to purchase goods. The perceived social, physical, and psychological threat is amplified in this context. This is due to the non-tangible nature of services, which are made and consumed concurrently, significantly include the human factor, and are diverse.

The perceived risk in a transaction is reduced by the creation of a climate of confidence. In markets with an elevated level of growth, the consumer also perceives a significant risk and follows intense processing of information. The level of development determines the level of motivation and interest of the consumer for the specific purchase operation. A high degree of growth indicates that a buyer who plans to buy a product makes a concerted effort to learn about the product category and the individual brand.

### ***Perceived Risk Measurement Models***

Perceived risk measurement models (before purchasing the product or service) can be categorized into basic models (simple models), complex models, and multi-parameter models. Of the basic models, the first proposed in 1967 is the Cunningham model (Mitchell, 1999). In this model, the total risk equals the product of consumer uncertainty about the risk of adverse effects. According to the second basic model, that of Peter and Ryan (1976), the total risk is the probability of having a negative impact due to a market made by the consumer on the significance of the negative consequences for each dimension of the risk.

That is, the following mathematical formula applies:

Total risk =, where  $P_i$  is the likelihood of negative outcomes for the perceived risk dimension  $I$  (e.g., the perceived financial risk dimension) and  $C_i$  is the importance of these consequences for the same dimension (Stampfl, 1978).

These inquiries are about the expectations of consumers regarding the product market, the degree of uncertainty that the consumer perceives, the magnitude of the risk they perceive when they try a product brand that they have not tried before, the belief that a brand that the customer has never tried would be just as good as someone who has tested the consumer's confidence in determining product quality and the importance to the consumer of the degree of happiness with the product. The amount of money and time the customer is willing to commit to obtaining the product, the extent to which the client's incentives for purchasing the product are obvious, and the product's performance and quality projection. The numerical result of three separate sophisticated formulae for evaluating perceived risk is calculated using the responses to these questions.

The first formula measures risk and uncertainty, the second formula measures the component of uncertainty at perceived risk, and the third formula is the most complete and combines the

consequences, uncertainty, and degree of satisfaction of the buying target, combining the answers both cumulatively and multipliers. (Stem et al.).

## ***The Proposed Model***

Perceived Risk Theory (PRT), which is based on the negative effects of uncertainty on the market decision-making process, and Planned Behaviour Theory (TPB), which is an extension of the Theory of Reasoned Action (Ajzen and Fishbein, 1980). (Bauer, 1960). The relationship between attitude and behaviour is also emphasized which was introduced by Ajzen as an extension of his previous theory of reasoned action. It has been used to examine the relationships between beliefs, attitudes, behavioural intentions, and behaviours in several areas (Ajzen, 1991).

TPB was created due to studies that - contradicting the theory of justified action - showed that the behaviour and actual behaviour is not so precise, since the intent of behaviour does not always lead to behaviour due to the existence of occasional constraints. As a result, a new type of influence was introduced: due to apparent behavioural control, the idea of planned behaviour evolved.

Individuals strive to do a given behaviour (in this case, the consumer's desire to purchase), and the established assumptions attempt to uncover and explain the driving factors that drive this behaviour (Ajzen, 1991).

Cunningham (1967) proposed that the magnitude of perceived risk is proportional to the size of the prospective loss. According to Bauer (1960), customers create or adopt risk-reduction methods in order to minimize uncertainty when information is insufficient, and they do not foresee favourable outcomes throughout the purchase process.

## ***Emotions and Perceived Risk***

Risk perception is a personal thing. Perceived risk, according to Cui (2015), has six dimensions: body, performance, property, time, society, and psychology.

Although the three categories are not identical, emotions are sometimes confused with feelings and moods. The American Psychological Association (APA) defines emotion as "a complex response pattern integrating experiential, present, and physiological components." Emotions are how people deal with key challenges or occurrences in their lives. Emotional experiences include a subjective experience, a physiological response, and a behavioural or expressive response. (2019, UWA)

Customer emotion may be divided into five dimensions, according to Westbrook and Oliver (1991).

pleasant surprise,  
unpleasant surprise,  
anger,  
happiness, and  
melancholy or apathy.

# *Chapter 3*

## *Consumer Profile and Knowledge*

### *Consumer Profile*

Consumers form lasting perceptions or images that are particularly important for the study of their behaviour. These perceptions and images include images that consumers create of themselves and images that they create for brands, products, stores, and producers. MacInnis and Price (1987) present images, and representation as a way of processing information which is obtained from many sources of senses and synthesized in a complete form of gestalt which is imprinted in the memory of the individual. As a result, understanding irregular customer branding processes, the probability and timing of their purchases, and the nature of their symbolic consumer experiences are crucial for MKT.

Certification labels, a valuable tool for consumers, are also an essential tool for entrepreneurs who use them properly. Product certification serves as a barometer of a product's safety, dependability, and quality, but deciphering all the numerous certificates may be challenging. Many of the most prevalent credentials are OSHA-recognized, which we have included below. Government procurement regulations often need product certification.

### *Consumer Behaviour*

According to the American Marketing Association, consumer behaviour is the dynamic interaction of emotion, knowledge, behaviour, and the environment through which people conduct business in their lives. On the contrary, research has found that most consumers (95 %) utilized insufficient hygiene measures owing to a lack of information or a failure to apply recognized food safety protocols. (Griffith et al., 1998)

### *Procedure for Making a Purchase*

In an increasingly competitive business world, scholars and practitioners are interested in understanding the impact that actions can have on consumers during their purchasing processes, which shape their consumption behaviour (Engel, Blackwell, & Miniard, 1995). As a result, understanding the process that guides consumers to make a purchase decision is critical. Firms have used their understanding of consumer behaviour at various stages of the purchase decision-making process to make business decisions.

In an increasingly competitive corporate world, scholars and professionals are interested in understanding the influence that activities might have on customers in their purchase processes, which affect their consumer behaviour (Engel, Blackwell, & Miniard, 1995). As a result, knowing the process that leads to a purchase choice by a customer is crucial. In truth, corporations have

made commercial decisions based on their understanding of customer behaviour at various phases of the purchasing decision-making process.

Furthermore, because customers construct the initial consideration set, those collected impressions become crucial during this process (Edelman, 2010). Professional study on the consumer decision-making process has been conducted in the literature, and there is now agreement in the literature on the importance of paying attention to business certification systems that impact this process. As a result, we begin by deconstructing past beliefs before moving on to describe what occurs in the market decision-making process now that buyers know the business's certification processes in the decision-making process.

### ***Information Search Theoretical Approaches***

Because information search plays a determining role in decision making and choice, the literature on consumer information search is extensive and has been of study interest for decades (Peterson & Merino, 2003).

As previously stated, Engel et al. (1995) research gives a holistic picture of consumer behaviour by describing the full purchasing decision-making process. The following stage after perceiving a need, according to this study, is an inward search into memory. It is claimed that when the knowledge stored in memory is inadequate to decide, an external information search is necessary.

According to Peterson and Merino (2003), internal and external information retrieval are related because exterior information retrieval is dependent on and impacted by internal information retrieval.

### ***Consumer Behaviour Theory and Perceived Risk***

In his fundamental work, Bauer (1960) developed perceived risk, which emphasizes that all consumer behaviour entails risk and, as a result, consumer choice and decision-making are governed by consumers' risk aversion or risk inclination.

According to Chaudhuri (2000), it is the likelihood of loss in a product category as a result of an overall assessment of customers' past understanding of the rational and emotional implications of utilizing a product.

Perceived risk, as described by Grant et al. (2007), is a consumer's inherent inclination to avoid losses (financial, performance, social) through buying behaviour.

### ***Customer satisfaction***

Customer satisfaction is crucial since it influences many elements of a business. The first factor is whether a customer will be loyal to the business and return to buy again. Furthermore, about what customers publish online, customer satisfaction has grown in relevance in the digital era. Another issue that is sometimes ignored is how much money they may spend with your business in the

future. Understanding the elements that influence customer satisfaction is the first step in improving it, followed by knowing how to act on those aspects. **Consumer perceived quality, value, and service** are the three key variables that influence current customer satisfaction. You can give pleasant, consistent customer experiences and build real customer loyalty by using these elements. Let us look at the most frequent elements that influence customer happiness across sectors. (Sprockets, 2019).

The highly competitive worldwide economy, rising customer demands for quality products, today's enormous difficulties, and inventive solutions are continually putting fresh strains on businesses. At the same time, unexpected developments, or exogenous factors, such as the coronavirus pandemic, can overturn the status quo at any time, and in an unpredictable way. Certification (of products, processes, systems, or individuals) is an asset for businesses in this context: it guarantees security, promotes quality, and enhances trust.

### ***Consumer trust***

Numerous research in a variety of sectors, including economics, management, technology, and social and institutional contexts, have looked at various aspects of trust. Psychology and consumer behaviour (Kim et al., 2008).

Trust is even more crucial for online merchants than for offline retailers because customers perceive higher risk in e-commerce owing to their inability to visit a real shop and evaluate the goods, they are interested in purchasing (Li et al., 2014). In contrast, the largest obstacle to customers doing online transactions is a lack of trust (Urban et al., 2009).

### ***Perception of risk and trust***

Consumer risk perception is a crucial barrier for customers evaluating whether or not to make a transaction, and trust becomes the essential method for minimizing uncertainty in an uncontrolled future (Kim, Ferrin & Rao, 2008).

Mayer et al. (1995) suggested a model in which the seller's trust or perception is adequate, the seller's goodness and integrity are sufficient, and trust develops in the seller, but if the amount of trust in a firm surpasses a particular perceived risk, the management is involved in a trust-related risk.

### ***Purchase intention***

When a risk is perceived in a market setting, there appears to be evidence that the perception of risk has a detrimental impact on subsequent consumer behaviour, since consumers sense risk when faced with ambiguity and unanticipated market repercussions (Bauer, 1967).

McKnight, Cummings, and Chervany (1998) found that when perceived risk is high, the likelihood of purchasing is low.

Consumer confidence has a positive association with attitudes and readiness to buy, according to

Teo and Liu (2005), and trust enables customers to focus more on positive motivation because of their relationship and identification with the brand.

## *Chapter 4*

### *Definition of Certification*

Certification can be considered as a kind of communication throughout the supply chain. A third certification body certifies in writing that a product, process, or service meets specific requirements. The certificate shows the consumer that the provider meets specific requirements, which may be more compelling than if the guarantee were offered directly by the supplier (fao.org., N.d.)

The certification body is the entity that performs the certification. The certifying body may do the inspection directly or hire an inspector or inspection body to do so. The inspection report is used to make the certification decision, which includes information from various sources (Gantz, S.D., 2014).

A third party always performs certification. The verification is finished, and the guarantee is offered by a party with no direct financial interest in the supplier-buyer relationship. Internal control is a first-party verification. A buyer checks that a supplier follows a standard through a second-party verification.

A buyer uses third-party verification to ensure that a supplier is adhering to a standard.

Third-party verification does not ensure impartiality or the absence of a conflict of interest. At first, any party can establish standards. Because the producer (first component) has the ability to create the standard, the producer's interests are more likely to be represented in the standard. Furthermore, the buyer (second portion) can define the standard, which will represent the buyer's financial aspirations. If the standards and certification bodies are the same, there may be conflicts of interest. The Standards Service's ideological leaning toward particular sorts of manufacturers may impact certification decisions. Furthermore, there may be issues about who pays for certification costs. Credentials compete with other competitors and being too stringent might result in a loss of business (compareethics.com., N.d.).

### *Accreditation*

The certification program refers to the collection of rules, techniques, and management that govern certification, as well as the requirements that it must meet. A single certifying authority can manage many certification programs. An approved entity evaluates and accredits certifying bodies to ensure that they can conduct certification programs. Accreditation of certification bodies may be needed by a government or parastatal authority that evaluates conformity with ISO, the European Union, or the operating standards of another certification and inspection organization (Iso.org., 2015).

Furthermore, regulators have the authority to authorize certification bodies within the scope of their particular standards. Once regulatory standards have been established, the standardization

body will determine if the certification body's standard is consistent with the general standard and whether it is happy with the verification procedure. Accreditation and certification are not free. Standardization normally necessitates an investment, although it can occasionally result in cheaper long-term manufacturing costs (fao.org., N.d.).

## ***Labels***

A certification label is a label or symbol that demonstrates standard compliance. The standard-setting body normally governs the usage of the label. When certification bodies certify against their standards, the certification body may retain ownership of the label. The certificate serves as a means of communication between the seller and the buyer, whereas the label serves as a means of communication with the end consumer. For this message to be effective, the label must be relevant. A meaningful label is backed not only by a strong certification system devoid of conflicts of interest but also by a transparent system that makes information about the content and the Organisation behind the label publicly available, as well as chances for public participation (fao.org., n.d.).

## ***Quality in the Greek and Cypriot Community***

The concept of quality, as a characteristic of human activities, has been significant for Greek culture since antiquity. It was about art, music, theatre, architecture, and mathematics. For centuries it was the most vital component of what we now call "classical Greek culture," and it reached its highest point during the 5th century BC.

## ***The Importance of Quality in the past***

Throughout history, many efforts have been made to improve quality in various human activities, at specific periods and in geographical areas. As the vines require unique climatic and soil conditions to create excellent quality wine, we see a number of critical characteristics that have played a crucial role in its emergence in many sectors of society, thus setting new degrees of perfection. Such an era was known as the Renaissance in art. In the 17th and 18th centuries, Vienna was the centre of classical music, while Paris was the centre of literature in the 19th and early 20th centuries. Historically, excellent quality has been a hallmark of Greek art (including sculpture), architecture, literature, theatre, mathematics, and philosophy. It was adopted by the Roman Empire after its founding by the old classical Greek Civilization and remained a characteristic feature of all human activities after its fall and the formation of the Byzantine Empire.

## ***Quality Importance - New Greek Period***

Due to the 400-year-old Turkish colonization, quality as a concept of basic importance has ceased to be a key problem for Greek society. After the victorious uprising for independence in 1821, the successive Greek administrations tried for the next 140 years to build the fundamental infrastructure of a new state and reclaim all the territories under foreign rule. Consequently, it was inevitable to give priority to the necessity of survival and restoration of the Greek state, which remained not only during World War II but also afterwards.

## ***Quality Importance In The Past***

As the country began to expand rapidly industrially in the late 1950s, quality as a productivity

issue emerged in many sectors of the economy. The presence of American and European companies, which began operating in Greece after World War II, increased customer interest in the quality of imported products. However, progress towards improving quality, a critical aspect of increasing the competitiveness of Greek companies, has been modest. The application of high tariffs was a crucial factor in this. Another key factor was the ridiculously huge and inefficient public sector.

## ***The Consequences of Participation of Cyprus In The European Union***

Cyprus' entry into the EU on 1 May 2004 was the impetus for a reorientation of business governance into productivity combined with quality. As a result, there were no barriers in the commercial sector for Greek products, as well as the competitiveness of Greek producers. This has created significant requirements for improving business performance, both in the manufacturing and services sectors. At this time, we can identify only a few individual quality improvement efforts ("quality islands"). These few individual quality improvement efforts are attributed to the offering and action of a few capable and charismatic leaders (at the business and academic level), rather than a systematic Quality Management approach (mfa.gov.cy., n.d.).

## ***Recent Developments***

Cypriot companies, in order to survive in the current increasingly competitive market, must be able to produce competitive products, both in price and quality. Especially when the barriers in the EU disappear completely and the laws that protect products within the country cease to exist, Greek companies will remain completely exposed and unprotected against well-organized competitors in Western European countries. The Cypriot export-oriented economy saw the negative consequences of the growing gap between productivity and quality as a result of market globalization, but also the benefits of increased international competitiveness.

Cypriot consumers preferred high-quality foreign products over Cypriot products. This, of course, drew the attention of those in charge to take seriously issues related to productivity and quality. However, there is still a significant delay in trying to improve quality. For the post-war decades, this was due to the adverse effects of the large and inefficient public sector as well as the corresponding public services (energy, communications, public transport, etc.). Further isolation from international competition in the global market has been exacerbated by some efforts by companies and employees to obtain increased incomes and tax exemptions (Cyprus-mail.com., N.d.).

Cypriot companies are now in the middle of "quality control" and "quality assurance". However, due to their sensitivity and genuine commitment to excellence, many of these organizations have an excellent "brand". The barrier for these businesses is insignificant, as global ISO standards give them nothing new or new. Only a small change in their quality system will be required to comply with the standard.

## ***Basic Certifications - ISO Standards***

### ***Quality Management Systems (ISO 9001)***

ISO 9001 is a well-known quality assurance standard. The ISO 9001 standard is now a worldwide communication code, used to explain how the entire Organisation is organized and conducted, as well as to certify to customers that the product fulfils the required criteria and so meets the customer's expectations. The requirements span the entire range of an organisation's operations, from product creation and development through after-sales support (Iso.org. n.d.)

### ***Occupational Health & Safety System (ISO 45001)***

ISO 45001 is the International Organisation for Standardization's first global standard for workplace health and safety (ISO). It establishes a framework for all businesses to actively reduce workplace risk and improve employee health and happiness. Following the installation, implementation, and certification of an Occupational Health and Safety Management System, the Organisation implements a policy and objectives that take into account current legislation as well as information on occupational hazards in terms of the scope and scale of concerns and the nature of each business' operation. (Bsigroup.com).

### ***Environmental Management Systems (ISO 14001)***

The ISO 14001:2015 standard is designed for environmentally conscious businesses. Defines the requirements for a business's environmental management system, which is used to enhance the business's environmental performance. ISO 14001: 2015 assists the organisation in identifying environmental objectives and achieving desired results in order to deliver environmental value to the business and all stakeholders (customers, suppliers, auditors) (Asq.org.)

### ***Information Security System (ISO 27001)***

ISO 27001 is a standard that defines the specifications for an Information Security Management System verifying that the organisation has created and implemented adequate and suitable confidentiality controls, information integrity and availability in order to safeguard "stakeholders" information and data (Wikipedia contributors, 2021)

### ***Business Continuity Management Systems (ISO 22301)***

The ISO 22301 standard is intended to keep the Organisation running in the most difficult and unexpected circumstances. Many organisations are required, for a variety of reasons, to provide "continuous" operations after a downtime at specified intervals. A business continuity management system is designed to help companies plan for the worst-case scenario: IT outages, staff or telecommunications incidents, terrorism, and severe weather. ISO 22301 ensures a consistent level of service to customers and other stakeholders by establishing defined processes

for a speedy recovery. Indicatively, the interested parties can be customers, other companies, or partners. (Isoqsltd.com, 2020)

### ***Energy Management Systems (ISO 50001)***

The wider application of this international standard contributes to the most efficient use of available energy sources, which may include renewable, non-renewable, and renewable energy. It is especially useful in an industry or a business that operates with many branches and facilities, consuming substantial amounts of energy (Wikipedia contributors, 2021a).

### ***Medical Technology Products (ISO 13485)***

It is addressed to companies that are active in the design, production, marketing, installation, and technical support of medical devices. The standard focuses on the risks connected with ITP's" safety and performance, as well as their regulatory compliance (Wikipedia contributors, 2021a).

### ***Food Safety Management Systems (ISO 22000)***

It is a system for managing product safety and hygiene. The HACCP (Hazard Analysis and Critical Control Points) concept, traceability, and food-related regulations are all in business ISO 22000 is a preventive standard that focuses on food and product safety rather than quality requirements. It applies to all companies that are directly or indirectly involved in the food chain: From the primary sector and the production of feed, food, processing, storage, transportation, distribution, retail, and consumer distribution, as well as enterprises that provide services or supply food businesses with equipment, packaging materials, cleaning, and disinfection products, and so on. (Qmsuk.com, 2021)

### ***Road Safety Management System (ISO 39001: 2012)***

ISO 39001: 2012 establishes the specifications for a Road Safety Management System, which is implemented by organisations that engage with the road traffic system or network. It focuses on the implementation of the business's Road Safety Policy and procedures in order to avoid and eradicate any type of road accident involving business employees or other users of the road network where the business's vehicles travel during their business. It mostly affects businesses that oversee fleet management (Fleet Management (Iso.org, 2018)

### ***HACCP system certification***

The ISO 9001 standard was used to create quality management systems for many years, we have been accredited in the food industry. The internationally recognized standard for the certification of HACCP systems has not yet been developed and the standards developed by the Standardization Organisation of each country are used. Sgs.com. (2021)

Certification is linked to safety and quality as the process of obtaining it ensures compliance with certain rules and specifications based on a specific standard. Protects the health of consumers (e.g.,

through food and electricity safety requirements), the safety of workers (e.g., through health and safety requirements at work) and the environment (e.g., through requirements for measurement, analysis, and evaluation of environmental performance). In addition, it helps to upgrade the way a business operates, as it modernizes internal structures and processes (e.g., compliance with quality management system and information security), with the ultimate benefit of improving efficiency, but also protecting it from potential risks.

Consider, for example, how much more protected and prepared for the challenges posed by the corona-virus pandemic are ISO 22301: 2012 certified companies for business continuity, designed and developed precisely to minimize holiday risks that may affect the operation of an entire Organisation, or companies certified with ISO 27001: 2013 for information security, which ensures the proper management of information as a valuable asset (asset) under any conditions (e.g., teleworking).

# Chapter 5

## ***Product/Service Perception***

The way a customer sees a product/service, or how the product is positioned in the consumer's mind, is more crucial than its core attributes for its success. It is critical for the organisation to understand, which features of the items it sells are vital to customers, and which of these customers may be negotiated with, making compromises because they are not extremely interested. What people believe about a brand, its products, services, and quality are known as consumer perception. In other words, the customer's perspective on the business, his feelings about your brand, and one's direct/indirect experiences.

Perception is frequently linked to expectation. Consumer expectations are constantly changing, and the outcomes of evaluations tend to shift over time. Evaluation varies from person to person over time. What one individual regard as excellent quality may be rejected by another (Girnar Care, 2021).

## ***Quality Perception related to Certification***

Consumers often evaluate the quality of a product based on the numerous information associated with it. The interiors include specific features of the product, such as size, colour, taste, and aroma. External features include the price, the image of the store from which the product is sold, the image of the brand and the advertising message. Whether each of the features individually or in combination, such data are given to the consumer based on the formation of perceptions about the quality of the product. In short, quality is a derivative of perceptual processes (Zeithaml, 1988).

Research attention has been paid to measuring consumer risk perception with the quality of the service (product) provided. The SERVQUAL model, which is for Service Quality Model, is a research method for capturing and analysing consumer expectations and perceptions of service (Marketing91., 2021).

The SERVQUAL model was developed to determine the amount of satisfaction associated with the quality of service. The difference between two values is defined as satisfaction in this paradigm (perceptions - expectations) (Marketing91., 2021)

## **The difference and therefore the satisfaction measured by the model is based on five axes:**

Personal needs - important conditions for the good physical or psychological condition of the consumer.

Perceived alternative services - consumer perceptions regarding the existence of other alternative services (products) better in this case

Self-perception of the service's function - that is, customers' opinions of how much they can affect the level of service they receive

Incidental factors, which clients believe are beyond the control of the service provider, and

Previous exposure to similar services.

External cues influence the consumer's risk perception.

Mitchell & Boustani (1994) argued that pre-and post-market risk perceptions are different for the consumer himself, and therefore risk mitigation mechanisms should be different before and after the product purchase. Examples that support these differences are as follows.

### ***Quality***

Next, we will not only list why a consumer's opinion matters to businesses and why this opinion-reaction is intertwined with the term quality (ISO 9000), but we will emphasize the consumer benefits from the application of ISO 9000. Businesses of all kinds with the ISO 9000-mark, OE, and the E symbols with the corresponding numbers of each additive flood the market. Entrepreneurs, executives, staff, the state, and certification bodies are now struggling, anxious and interested worldwide in one simple word and concept: Quality.

And why all this? But of course, for the consumer who is his future judge, the goal of all this and now the focus of business interest. The certification first helped to develop an administrative framework and documentation system for environmental management, consumer safety, staff safety and facility safety, as well as to map all the business's processes and operations.

Certification is inextricably linked to safety and quality, as the process that leads to its acquisition ensures compliance with specific requirements and specifications set based on a specific standard. Protects the health of consumers (e.g., through food and electricity safety requirements), the safety of workers (e.g., through health and safety requirements at work) and the environment (e.g., through requirements for measurement, analysis, and environmental performance assessment). Certification is now becoming a consumer criterion: while consumers are more interested in responsible business behaviour (e.g., security, environment, business governance, corruption, social supply).

Standards are a "common language of communication" that ensures compatibility, comparability, and functionality, but also legal certainty and equal competition. They are set up by standardization bodies (international, European, or national), usually at the initiative of stakeholders (e.g., companies, public administration, academia, and research community) who deem it necessary, through multi-year consultations held at the Technical Committee level. Reliability and reliability play a role in the signal certification process, both for the way in which any requirements have been set and for their technical competence.

### ***Risk perception assessment***

Perry and Hamm (1968) used social and economic aspects to estimate the magnitude of perceived risk, whereas Barach (1969) sought to organize the table tool to get customers to perceive the size of the significance of the product or service.

Bettman (1971) offered mature risk assessment techniques based on the Cunningham Research, and his measure of the perceived risk changed from the third system is the system, because of which the addition to may be determined using the magnitude of both perceived risk multiplication.

The evaluation phase of environmental variables in the customer's purchasing decision-making process. The logical model that guides the significance of the route describes the further examination of the logic associated with the two types of environmental elements and variability and on this basis, the design of the perceived risk assessment is presented.

### ***Consumers' risk assessment***

A risk (not to be confused with a hazard) is composed of two elements:

Amount of damage: the larger the negative repercussions, the higher the perceived risk.

Probability of occurrence: the larger the perceived threat, the more likely negative effects.

As a result, in their risk assessment, consumers consider two dimensions:

potential damage and  
likelihood of occurrence.

Consumers evaluate the risk of a given circumstance in their manner. Each person reacts differently to perceived risk. Risk does not exist objectively; it is always determined by people's subjective assessments. As a result, risk perception is a branch of psychology that analyses how people perceive risk. Risk is always subjectively interpreted based on the underlying premise.

# Chapter 6

## *Research Methodology - Theory*

### *The concept of variable*

The term "variable" means anything that changes and varies. And this "everything" can be a characteristic, a quality, an ability or finally a factor that interests us in the context of the social research we conduct. In the Social Sciences, there is a growing need for measurement. But measurement without the use of variables, nowhere, that is, in any research context, is not possible. We want, for example, to measure the intelligence of some people, monitor the development of patients, record the attitudes and general political behaviour of certain social groups, evaluate the abilities of some students, measure the reaction time to a stimulus, to record will of the electorate, etc. (Embibe Exams., 2021).

All this, of course, requires us to enter a measurement process using variables. In practice, when we talk about a variable, we distinguish two things in it: its name and its value.

The variables, then, have names and take values, which as we will see below come from a specific measurement scale. However, the names of the variables cannot be any. From now on, however, it is necessary to point out that the name of a variable is an indivisible, unified and compact entity of alphabetical and numerical characters, which is not interrupted by spaces.

But why do we need variables? And what exactly are we interested in from them? Is it the way or the rate at which prices move or change? How are they affected or interact? Or is it their degree, the direction of their correlation or the intensity of their interdependence? Or, finally, their contribution to a statistical model for the exchange of integrated information? The answer cannot be one-word. It depends on the type, quality, and depth of the statistical analysis we undertake. The better we know one of the above, the deeper we can delve into the texture and relationships of the variables involved in our research, and the richer the Social Science information we cultivate. Gender, nationality, family situation, and other qualitative variables are those that alter in kind. Quantitative variables are quantities that can be modified numerically, such as age and type. The choice of the most appropriate unit of measurement, which allows individual results to be compared, is a unique feature (Statistics How, 2016).

Quantitative variables are divided into two categories: continuous and discrete. All estimates of a given value contain continuous (quantitative) variables, with a minimum of the minimum value and a maximum of the maximum value of any real number (real numbers). The occasional (quantitative) variables have a set of values that must all be integers (Stattrek.com., 2019).

Differentiation and classification of variables are both independent and dependent variables. This type is often used in the design of research initiatives, especially in the development of case studies.

Most of the dependent variables are affected by the independent variable. Some (statistical) studies or independent variables are categorized as predictive variables because they predict the value of a dependent variable that affects it. The dependent variable is one whose values vary when the independent variable changes. The result (variable result/response) of certain (statistical) studies and dependent variables is determined (Stattrek.Com, 2019).

## ***Selection Of A Research Plan***

We may divide scientific research into three types based on the goal: exploratory, descriptive, and experimental. Investigative research seeks to create an issue in order to investigate or create cases, as well as to prioritize and analyse catastrophic situations. It is crucial since the primary goal of exploratory research is to find and develop. Their adaptability is what sets them apart. Descriptive surveys are used to identify and analyse the characteristics of a situation. These surveys look for a systematic link between two variables, such as whether one variable always appears parallel to another or whether changes in one variable are accompanied by changes in the other. A physical or technical experiment is used in experimental research to check the validity of a hypothesis. (2020 Statistics Solutions)

## ***Selection Of Method (Collection Of Data)***

There are two approaches to gathering data. There are both primary and secondary sources used. Data from primary and secondary surveys are exported separately. The most important feature is the topic or topics being discussed. That is, they have been condensed for specific goals such as answering research questions. Their data collection takes longer and is more complicated than secondary data, but the outcomes are more accurate. Choosing the strategy and technique to utilize for research and data collecting is an important component of the process. The gathering of these metrics and methodologies is critical for improving data collecting and research topics. For various sorts of information research, several data gathering processes are necessary. To be more desired, a qualitative, or quantitative study is necessary. In-depth interviews are instances of qualitative research, whereas surveys are examples of quantitative research (Tll.mit.edu, 2020).

## ***Sampling Procedure***

The sampling procedure consists of six stages.

**Population definition:** Population definition is one of the most difficult problems in research. The population includes all potential respondents, and they are all considered eligible to participate in the study.

**Establishing the sampling frame:** The sampling box is a list of all potential respondents from whom the sample will be taken.

**Name of sampling unit:** A sampling unit is a fundamental entity (such as a business, family, or organisation) that contains data (that is, potential respondents) from the population from which the sample will be taken.

**Sampling approach:** The sampling strategy describes how the sample population will be selected.

**Sample size determination:** Sample design, required estimation accuracy, and resource constraints all play a role in determining sample size. The sample size for a given design can be determined by the degree of accuracy required or the acceptable confidence interval for a given confidence level (Cochran, 1977).

**Execution:** Data analysis is a critical phase in the process. To reach such findings, all objects must be evaluated and decoded. A basic condition of research and its objectives must always be considered. The first step will be to gather all the information for each answer. Then they sit down at tables and discuss the idea of combining some of the questions. We can take data from two separate questions to create combined answers. For example, suppose you asked a question and wanted to know the answers by gender and then by age or something. Once everything is completed, we will proceed to a statistical analysis of the data. The researcher should use his / her judgment to evaluate the data, which he/she can then integrate with the hypothesis and the study of the subject. The drafting of the conclusions will be the next phase (Frost Hubbard, 2020).

## ***Research Questions***

As mentioned earlier, while there is a growing interest in the literature in understanding the consumer decision-making process as it relates to perceived risk, many features of this information retrieval stage remain unknown when it comes to the use of information, resulting in a series of surveys that analyse the buying process in settings. In addition, the present empirical study works contain inconsistencies regarding the relationship between perceived risk and information retrieval in market processes.

Thus, considering the new patterns of behaviour identified in the current literature, which also proposes a model of perceived risk processing and the contradictory findings on the expected interactions between perceived risk in relation to business certification schemes and information search in environments discovered in recent studies, we ask:

In terms of risk perception dynamics during purchasing processes:

RQ 1: Level of Awareness and impact of consumers regarding business certification schemes, and the most common ISO certificates.

RQ 2: Consumers perceive risk: impact (attitude, intention, trust, understanding, information, commitment, influence, cost, habits)?

RQ3: How does customers' perceived risk interact with information retrieval before purchasing in the context of business certification schemes?

RQ4: Consumers' purchase decision making and level of knowledge in certified products/services.

RQ5: Consequences on consumers' purchase decision-making process and their perceived risk in relation to business certification schemes.

RQ6: What proposals, unique ideas, links, and concepts can be found to affect customers' perceived risk of the business certification system?

RQ7: How does perceived risk and its relationship with information search and answering that questionnaire, will change or not, consumers purchasing behaviour in relation to business certification schemes?

# *Chapter 7*

## *Data Collection*

### *Selection Of The Sample Frame*

Survey research is used to estimate the distribution of characteristics in a population within specified confidence levels. (Dillman, D., Smyth, J. and Christian, L., 2014).

### *Data Collection Method*

Understanding the nature of research, positivism is the most advantageous research model for conducting quantitative research, going beyond interpretive, transformative, and critical approaches. Because the model aims to match ideas with perceived causes, this study used a modern explanatory study with a self-administered questionnaire.

For this study, I gathered the respondents' views on the variables of a perceived risk that affect the buying behaviour of Cypriots and other nationalities using a self-administered questionnaire.

### *Population & Sample*

This study selected the appropriate sample, i.e., consumers with the shopping experience in Cyprus and abroad, to meet the purpose of the present study and to avoid biased results.

Data for this study were collected based on the convenience of customer buyers in Cyprus and around the world, from consumers making purchases from local and international markets. The information was collected in early April 2022 (within a period of 2 weeks). I uploaded my questionnaire via social media i.e., Facebook and LinkedIn. The responses were taken from users on my social media. (203 in total). I performed calculations based on the total data and then, I did a comparison between data with Cypriot nationality (103 responses) and 97 from other nationalities. The sample size for the study was set at 203 participants, with a simple sampling approach based on incredible sampling techniques.

### *Data Collection Instrument*

A systematic questionnaire with relatively short questions was developed, and respondents were given a list of options to choose from. The questionnaire is divided into two sections. The first section concerns the evaluation criteria, while the second the demographic data of the respondents.

The search was created using Google's online search form tool, which was then distributed to various business websites. As a result, I shared my questionnaire on social networking sites, most notably LinkedIn, and later Facebook, Twitter, and Instagram. I received 203 in less than two weeks (my goal was to reach 200, and I started analysing the data). 106 of them are Cypriot citizens and the rest are from all over the world. I compared the data from Cypriots (106 answers) with data from other countries (97 answers). I started by evaluating and comparing each question separately.

Demographic questions on the form include gender, age, nationality, current location, educational qualifications, marital status, income range, and family budget expenditure per month. In the present study, the independent variable is the perceived risk, while the dependent variable is the purchasing behaviour in relation to the business's certification programs. A total of 74 questions were generated, with each question containing 2 to 8 alternatives.

This survey contains a total of 74 questions, including demographics. The survey was completed by 203 people and all data were completed accurately. The questionnaire was designed in such a way that each question had to be answered before moving on to the next. If they left a blank somewhere, the questionnaire would not allow them to proceed. This was done to avoid blank answers. Therefore, a total of 203 responses were collected for data analysis.

### ***Data Analysis Plan***

The received data is immediately recorded in a Google spreadsheet and then exported for cross-checking through Excel.

The data set was then divided into two categories based on the nationality of the respondents. Two spreadsheets were created for analysis and then comparison. The first sample was of Cypriot citizenship and was 106 in total. The second was for other nationalities, with a total of 97. First, I analysed all the data (203 in total) and then separately the two categories I mentioned above. T tests were used to validate the data for factor analysis.

### ***Correlation Analysis***

Examines relationships between two or more continuous (quantitative) Variables

E.g., Relationship between weight and body mass index

E.g., Relationship between depression and quality of life

Correlation = covariance, the interdependence of two variables, no causal relationship (Causal relationship presupposes that cause precedes result)

Pearson Correlation Coefficient  $r$

Parametric criterion

The most used correlation index

## Interpretation of Pearson's correlation index r

Pearson's correlation index r consists of three components:

1) From a positive or negative sign (positive omitted)

When one variable increases and the other increases at the same time, then we have a positive correlation (positive sign)

When one variable decreases and the other decreases, then we have a positive correlation (positive sign)

When one variable increases and the other decreases, then we have a negative correlation (negative sign)

2) From a Numerical value ranging from -1.00 to 1.00

3) From the level of importance

For a relationship to be statistically significant, it must be  $p < .05$  or  $p < .001$  (Sig 2-tailed)

If  $p > 0.05$ , then we say that there is NO statistically significant relationship between the examined variables

When is a correlation considered low, moderate, or high?

Very low: Pearson's r ranges from 0 - 0.19

Low: Pearson's r ranges from .20 - 0.39

Medium: Pearson's r ranges from .40 - 0.59

High: Pearson's r ranges from .60 - 0.79

Very high: Pearson's r ranges from .80 - 1.00 (Evans, 1996)

E.g.,  $r = 0.25$ ,  $p < 0.05$  (low correlation)

E.g.,  $r = 0.45$ ,  $p < 0.05$  (moderate correlation)

E.g.,  $r = 0.72$ ,  $p < 0.05$  (high correlation)

Zero Case (H0)

There will be no statistically significant relationship between weight, Height, and Body Mass Index (BMI)

Alternative Case (H1)

There will be a statistically significant relationship between weight and height and Body Mass Index (BMI)

Zero Case (H0)

There will be no statistically significant relationship between the jump in long length (m) and speed (sec)

Alternative Case (H1)

There will be a statistically significant relationship between the jump in long length (m) and speed (sec)

## *Hypothesis*

Estimation, standard errors (S.E.), critical ratios (C.R.), and P-Value (P) is used to generate the hypothesis findings for this study, with the P value deciding whether the hypotheses are acceptable or are rejected (Filho et al., 2013).

Perhaps the most important part of Statistical Science. It helps us to conclude the parameter values of the population from the random sample we have taken from the population. It is a Statistical methodology by which we reject or do not reject a statistical hypothesis. We define as a statistical hypothesis the hypothesis we claim for the probability distribution of a random variable. As a random variable, we define the variable that refers to a characteristic of this population. In the hypothesis test, we compare the difference between the sample value of a statistical parameter and the initial value that we set or that is known from other surveys.

For the control process of a statistical hypothesis, we first define the statistical hypothesis, then we calculate the control statistical data and the rejection area, and finally, we decide on the case based on the indication we have from the sample.

Statistical hypothesis

The statistical hypothesis can be any "statistical" statement (for population distributions, stochastic processes, etc.) that we check based on observations, but here we will only deal with hypotheses that refer to any of the known parameters.

We assume that the parameter can take a certain value and this hypothesis, which we call the null hypothesis  $H_0$  and  $H_0: \theta = \theta_0$ .

The alternative  $H_1$  hypothesis we accept if we reject  $H_0$  may be

$H_1: \theta \neq \theta_0$ , i.e., the parameter must be less than or greater than the value  $\theta_0$ . Thus, we cover the whole set of possible values of  $\theta$ .

$H_1: \theta < \theta_0$ , i.e., the parameter must be less than the value  $\theta_0$  (unilateral control). Here we limit the set of possible values of  $\theta$  to  $\theta_0$  ( $H_0: \theta = \theta_0$ ) and the smallest of  $\theta_0$  ( $H_1: \theta < \theta_0$ ). Therefore, it is more correct in this case to assume that  $H_0: \theta \geq \theta_0$ , even if in practice I cannot get values greater than  $\theta_0$ .

$H_1: \theta > \theta_0$ , as before, but for values greater than  $\theta_0$ . The choice of one-sided or double-sided control depends on the research we want to do and whether we can predict the result of the research.

When we test hypotheses for the difference of a parameter in the sample and the value we have assumed, and the difference is statistically significant, then it is understood that this difference is real and is not interpreted by the random variants of the sampling we do.

### **Formulation of statistical hypotheses**

The statistical assumptions are always formulated in pairs and divide the total of the parametric space  $\Theta$  into two foreign subsets  $\Theta_1$  and  $\Theta_2$  so that  $\Theta = \Theta_1 + \Theta_2$  and

The first of the two hypothesis ( $H_0$ ) is known as the null hypothesis or controlled hypothesis, while the second ( $H_1$ ) is known as the alternative or research hypothesis.

$H_0$  shows the non-difference between the value of the statistical function of the sample and the corresponding parameter of the population.

$H_1$  shows the difference between the value of the statistical function of the sample and the corresponding population parameter.

A simple hypothesis specifies the value of a parameter and has the following form:  $H_0: \mu = \mu_0$

We define a complex hypothesis, the hypothesis that does not fully determine the value of the population parameter and has the form.

The wording of  $H_0$  and  $H_1$  is of the utmost importance, as it will be possible to draw safer and more accurate conclusions.

In a case study, there are the following possible situations:

Discard  $H_0$  or not

$H_0$  to be right or wrong

So based on these four possibilities, in two of them, there is a statistical error. Specifically, we define these two types of errors below.

The usefulness of the statistical control function is great because

It shows us an indication of the absolute difference of the sample estimate from the hypothetical value of the population parameter.

We can compute the likelihood that the statistical control function will have values more than or less than the significance level in the sense we know its distribution. Thus, with the function of statistical control and the limits we set for it, the parametric space of the population is divided into two areas, the acceptance area, and the rejection area.

The reject range is the range in which the value of the statistical control function is found, we reject the null hypothesis  $H_0$ .

The acceptance area is the area in which the value of the statistical control function is found, we do not reject the null hypothesis  $H_0$ .

It is worth mentioning here that the term "we accept the null hypothesis  $H_0$ " is not controllable and is avoided in Statistics. We use the terms "reject" and "do not reject".

### **Determining the level of importance**

The value we set for the level of statistical significance depends on the nature of the problem we are studying, and generally on the existing knowledge and information we have about it. Thus, given sample size in the correct value for a will minimizes the possibility of making a type II error.

In Statistics, it has prevailed to set  $\alpha = 5\% = 0.05$ .

### **The real level of trust**

We define as the actual confidence level or critical magnitude of the control, the probability that the statistical control function takes a value as extreme or more extreme than it had for this sample in the null hypothesis  $H_0$ . We symbolize the real level of confidence as a p-value.

**If the null hypothesis  $H_0$  is true, we reject it.**

### **Relationship between trust intervals and case audits**

Essentially, estimating a confidence interval can help us identify the acceptable assumptions we need to test. This is because the value we control may or may not be contained in the corresponding  $(1-\alpha)\%$ , so we can conclude whether our assumptions are rejected.

A test must always indicate the level of statistical significance at which we performed the test so that we know the probability of making a type II error for a given sample size  $n$ .

### ***Calculation of mean score.***

Most quantitative experimental surveys, on the other hand, do not include data from the general population (except when we have census data). As a result, although the importance of qualities and cultural values between countries is interesting, this can only be achieved through sampling data. The purpose of this statistical approach is to demonstrate the technical methods by which a researcher can provide a sample of final findings for which, based on demographic characteristics, a researcher can provide a sample of conclusions (Courses.lumenlearning.com, 2021).

### ***Statistical Methodology between two diverse groups is a Two-sample t-test***

This type of t-test may be used to see if the means (averages) of two separate sets of data differ.

The following processes are depicted for deriving conclusions using control t:

Verifying the data's normalcy (necessary for any t-test).

Determination of the initial (zero) hypothesis that there is no difference between a medium's population and a specific value. The alternate case has been determined.

The significant level is defined.

Executing the control t

Obtaining a p-value

P-level vs. significance level comparison:

When defining the level of significance, we reject the first scenario, which states that there is a statistically significant difference between the average population and the required value at the stated level of significance; otherwise, we accept the second case.

We reject the original instance if there is a statistically significant discrepancy between the average population and the reported figure at the given level of significance.

If your t-statistic is bigger than your critical value, your difference is significant. Your two numbers are statistically indistinguishable if your t-statistic is less than one. 2020 (Courses.lumenlearning.com)

### ***What is T-Test Used for***

The t-test is used to compare two means (averages) to see if they vary and, if so, how significant the difference is. It also aids in determining if the discrepancies may have happened by accident (Zwan, Hans van der. n.d.)

### ***Calculate the t-statistic***

As seen above, each of the three types of t-tests has a unique equation for obtaining the t-statistic value. A two-sample t-test has the following formula:

Two-sample t-test

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S_{X_1 X_2} \cdot \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \quad df = n_1 + n_2 - 2$$

Where:

t is the t-statistic

x1 is the mean value for sample 1

x2 is the mean value for sample 2

n1 is the number of participants from the 1<sup>st</sup> sample who responded to the survey.

n2 is the number of people from the 2<sup>nd</sup> sample who responded to the survey

sx1x2 is the standard deviation

Calculation of standard deviation (sx1x2) is:

$$S_{X_1 X_2} = \sqrt{\frac{(n_1 - 1) S_{X_1}^2 + (n_2 - 1) S_{X_2}^2}{n_1 + n_2 - 2}}$$

 LeadQuizzes

Where:

sx1 is the standard deviation for sample 1

sx2 is the standard deviation for sample 2

## ***Calculate the degrees of freedom***

The number of independent pieces of information that were evaluated while creating the estimate is referred to as degrees of freedom. The number of independent items in a sample is not the same thing. Simply subtract one from the total number of items in the sample to calculate the degrees of freedom.

The df calculation is different since we are doing a two-sample t-test (as we have two samples instead of one). Here it is:

$$df = n_1 + n_2 - 2$$

## ***Determine the critical value***

The critical value is the point at which the difference between two values becomes statistically significant. You may find the crucial value in the t-distribution table using the degrees of freedom determined in the previous step.

*If no alpha level is supplied, 0.05 should be used (5 %). Remember that most analysts currently employ a two-tailed t-test rather than a one-tailed one.*

If the computed t-score equals or exceeds the value of t given in the table, I may conclude that the relationship between the two variables exists and cannot be modified, and I reject the null hypothesis.

# Chapter 8

## *Analysis and Findings*

### *Demographics Analysis*

All the results are presented in Appendix A analytically.

203 valid and credible respondents responded to a total of 203 questionnaires given in Cyprus and overseas, resulting in a total of 100% data gathered.

#### **In Summary,**

**Gender:** most of the responders (134 out of 203 in total) were men (64%). Among Cypriots, 57.5% were men and among other nationalities were 75.3%.

**Age Group:** most of the respondents are between 25-55 years old. None of the respondents was under 18 years old. Among Cypriots, the majority (37.7%) are between 25-35 years old. On the other hand, in other nationalities majority are 35-45 years old (34%)

**Marital status:** Most of the respondents 54.7% stated that they are married, followed by singles with 23.2%. Among Cypriots, the highest %ages are married (50%) and single (21.7%). Other nationalities: married (60.8%) and single (23.7%).

**Nationality:** 203 respondents in total from **35** different nationalities. However, 106 (52.2%) are Cypriot and 97 have other nationalities. Based on this I have separated the respondents into two groups to compare the results.

**Location:** most of the respondents (124 in total – 61.1%) are currently located in Cyprus. However, the rest of the respondents are spread all over the world covering 32 countries.

**Educational level:** More than half of the respondents have a master's degree (52.2% of the total), while those with a bachelor's 29.1% and a Doctorate Degree 8.9% respectively. Among Cypriots, 54.7% have a master's degree and in other nationalities, 48.5% have a master's degree.

**Employment/professional situation:** The vast majority (122 respondents – 60.1%) are private employees followed by 37 (18.20%) who are businessman/woman. Among Cypriots, 60.4% are private employees and other nationalities 58.8% respectively.

**People living in the same house:** 59 responders (29.10%) are living with 1 more person in the same house and 41 (22.2%) are living with two more persons in the same house. Among Cypriots, 31.1% are living with 1 more person and other nationalities 26.8% respectively.

**Monthly Income:** 84 (41%) of respondents are from the highest monthly income group which is €5,000 and above. Among Cypriots, 41.5% are from the highest monthly income group and other nationalities 41.2% respectively.

**Monthly household shopping expenditure:** 62 responders (30.5%) spend from €100 - €500, followed by 55 (27.10%) who spent €500 - €1,000 and 50 (24.60%) who spent from €1,000 – €1,500. Among Cypriots 35% spend from €100 - €500 and for other nationalities, 25.8% spend from €500 - €1,000.

### ***Findings regarding the main section***

The findings of the study regarding consumers' familiarity with the business certification schemes indicated that only 26 (12.8%) of them are very familiar while, 8 (3.9%) are extremely familiar. 13 Cypriots (12.3%) are very familiar and 1 (0.9%) is extremely familiar 13 from other nationalities (13.34%) are very familiar and 7 (7.2%) are extremely familiar (these numbers are higher than the Cypriots but still low.

Among 25 different ISO Standards, shows that all consumers' awareness (203 in total) has answered positively for more than 50% only aware of  
ISO 9001:2015 - Quality Management - 162 (79.8%)  
ISO 45001:2018 - Occupational Health & Safety 134 (66%)  
ISO 14001:2015 - Environmental Management – 117 (57.6%)

In addition, the Cypriots respondents regarding ISO 27001:2017 - Information Security Management (55 – 51.9%) answered positively.

Regarding the importance of the Business certification schemes prior to a purchase of a product/service, 72 (35.5%) responders (from 203 in total) consider it important (among them, 34 (32.1%) out of 106 in total were Cypriots), and 37 (38.1%) were from other nationalities.

Regarding consumers' awareness about the way companies design and manage Business Certification Schemes indicated that the majority 113 (55.7%) of them are not aware. Among them, 62 Cypriots (58.5%)  
50 from other nationalities (51.5%)

The majority of the 203 respondents who were above 90 (45%), agree that the business certification schemes, strengthen the consumer's critical knowledge and intelligence in measuring perceived risk, enhance consumers' knowledge and effectiveness in understanding existing risks and making relevant decisions and finally, empower consumers' effective decisions and manage to perceive risk significantly. Among them, more than 56 (53%) Cypriots and more than 35 (36%) from other nationalities agree with the above statements.

The majority of the 203 respondents, which was above 90 (45%), agree that the business certification schemes, such as quality standards, guide consumers in order to reduce the risks involved and increase their level of satisfaction with each other. Furthermore, sustainable certification increases the ability of consumers to meet the needs and requirements of sustainability

and strategic management allows consumers to acquire the appropriate knowledge of strategic management tools and techniques. Among them, more than 51 (48%) Cypriots and more than 34 (32%) from other nationalities agree with the above statements.

113 (55.7%) out of 203 respondents agree that providing effective information about business certification schemes can reduce consumers' perception of risk in relation to search costs and lead consumers to make better purchasing decisions. Among them, 67 (63.2) Cypriots and more than 46 (47.4%) from other nationalities agree with the above statement.

Regarding perceived Risk of product/service quality has a positive impact on the attitude of consumers towards business certification programs and on the intention to buy from certified companies, at least 135 (66.5%) out of 203 respondents agree. Among them, 73 (69%) Cypriots and more than 62 (64%) from other nationalities agree with the above statement. There is a convergence of views between the two groups of nationalities.

More than 100 (51%) out of 203, agreed that:

The perceived risk in a transaction is reduced by creating a climate of trust.

As a consumer, you perceive the increased risks when you have limited understanding and experience of product categories, variables, and certifications.

The usefulness of information has a positive impact on your perception of risk.

Consumers avoid perceived risks by staying true to a brand they were happy with in the past instead of buying new or untested products.

Those who perceive high risk are less likely to buy new products or brands and are more likely to stay with their old brands.

Consumer risk perception is influenced by the amount at risk in the purchase decision

Strong consumer and community trust in a brand can reduce the risk perceived by the consumer.

Among them, more than 50 (51.5%) were Cypriots and more than 44 (45.4%) were from other nationalities.

In the questions below, the respondents, in most of them, agreed by a %age exceeding 42% (at least 85 out of 203):

if they were willing to pay more when a product/service is certified,

making decisions about whether to make a purchase based on the information they have access to, the prices of products/services affect their purchase habits

their risks and level of confidence in the sources of information and the suggestions and ratings provided influence their purchase choice.

Among them, more than 50% were Cypriots and more than 45% were from other nationalities.

113 respondents (55.7%) out of 203 in total, when making a purchase, sometimes, they choose certified products/services. Among them, more than 62% were Cypriots and more than 50% were from other nationalities.

The respondents (112- 58 % out of 203) who stated that they prefer certified products/services when making a purchase indicated that they prefer certified products/services due to high-quality

items. Among them, more than 55% were Cypriots and more than 56% were from other nationalities. There is a convergence of views between the two groups of nationalities.

The vast majority of the 203 respondents (156 – 76.8%) stated that certified product/service is those with a special label and certificate number. Among them, more than 83% were Cypriots and more than 71% were from other nationalities.

When compared to the standard product/service, 109 out of 203 (53.7 %) are ready to spend up to 25% extra for certified items. More than 66% of them were Cypriots, while more than 51% were of other nationalities.

Most respondents (113 out of 203 – 55.7 %) answered that they occasionally look on the label/brochure whether a product/service is certified or not before making a purchase. Among them, 55% were Cypriots, while 56% were of other nationalities. There is a convergence of views between the two groups of nationalities.

In response to the question, "How do they promote demand for certified Products / Services in their country?" 67 of 203 respondents (33%) answered that is due to the development and approval of the legislative and regulatory framework, and 50 (24.6%) for reasonable prices. Cypriots accounted for 34% of the total, with other nationalities accounting for 22%.

In response to the question "Why is there a need to further develop a certified product/service?" 75 out of 203 (36.9%) was, consumption of a certified product/service will ensure a high quality of life nowadays the quality of food is not satisfactory. Cypriots accounted for 37.7% of the total, with other nationalities accounting for 37.1%. There is a convergence of views between the two groups of nationalities.

In response to the question "What do they think are the current issues in the certified product's market?" 127 out of 203 (62.6%) said that is the insufficient awareness of consumers about the concept of "certified goods" and a lack of desire to buy them. Cypriots accounted for 65.1% of the total, with other nationalities accounting for 59.8%. There is a convergence of views between the two groups of nationalities.

More than 90 out of 203 (45%) stated the questions "Do they think that if a product/service they buy is certified, they will not have any problems with that product/service" and "for Label: Can they rely on certification to provide them with more ethical products?" they answered respectively "maybe". Cypriots accounted for 50% of the total, with other nationalities accounting for 40%. There is a convergence of views between the two groups of nationalities.

In the Questions, "Along with a number of other interventions, certification serves as an additional level of verification?" 56 out of 203 (27.6%) answered "maybe". Cypriots accounted for 32% of the total, with other nationalities accounting for 23%.

In the Questions, "Consumer behaviour knowledge and subjective knowledge related to the business certification scheme influence your behaviour or purchasing decision" and "Your accumulated impression of a product or service is crucial to shaping your initial thinking and future

actions.” They agree with more than 90 respondents (45%). Among them, Cypriots accounted for 46% of the total, with other nationalities accounting for an average of 45%. There is a convergence of views between the two groups of nationalities.

In the Question “After completing this research, how do they plan to change their purchasing behaviour in relation to the business certification program, more than 95 respondents (47%) replied positively on whether they will prefer certified products or services, they will read food labels more carefully and they will choose the well-known and more trusted brands. Among them, Cypriots accounted for more than 50% of the total, with other nationalities accounting for an average of 50%. There is a convergence of views between the two groups of nationalities.

### **Theory for calculation of t test**

Popular degrees of significance include 10% (0.1), 5% (0.05), 1% (0.01), 0.5 % (0.005), and 0.1 % (0.001). If a p-value less than or equal to the significance level is obtained from a test of significance, the null hypothesis is rejected at that level. Such outcomes are said to as ‘statistically significant (at the  $p = 0.05$  level, for example).’

1.96 is the crucial number for a 95 % two-tailed test.

The p-value is exceptionally low (around 0), indicating that our data give extremely strong evidence to reject the hypothesis. $H_0$ .

We find that consumers' perceptions of risk impact their purchase of a product or service regarding business certification systems where the test was done, which in our instance was Cypriots.

If the P-value is more than 0.10, the data is not dependable

## ***Calculation of T-test and Results***

Different tables have been used to gather and calculate data. Please see Appendices A, B, C, D, E, F & G for the full report and references, which include all tables and figures.

### **t-Test: Two-Sample Assuming Unequal Variances (Conclusions)**

Please refer to Appendix F for detailed calculations

#### **Q1**

<b>t Stat</b>	0.24
<b>P(T&lt;=t) two-tail</b>	0.82

The t-value is 0.24.

The p-value is 0.82

If  $p > \alpha$  ( $0.82 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

#### **Q2**

<b>t Stat</b>	0.11
<b>t Critical two-tail</b>	4.30

The t-value is 0.11.

The p-value is 0.93

$p > \alpha$  ( $0.93 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

#### **Q3**

<b>t Stat</b>	0.39
<b>P(T&lt;=t) two-tail</b>	0.76

The t-value is 0.39.

The p-value is 0.76

$p > \alpha$  ( $0.76 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

#### **Q4**

<b>t Stat</b>	0.20
<b>P(T&lt;=t) two-tail</b>	0.86

The t-value is 0.20.

The p-value is 0.86

$p > \alpha$  ( $0.86 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q5**

<b>t Stat</b>	0.91
<b>P(T&lt;=t) two-tail</b>	0.53

The t-value is 0.91.

The p-value is 0.53

$p > \alpha$  ( $0.53 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q6**

<b>t Stat</b>	0.28
<b>P(T&lt;=t) two-tail</b>	0.80

The t-value is 0.28.

The p-value is 0.80

$p > \alpha$  ( $0.80 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q7**

<b>t Stat</b>	0.23
<b>P(T&lt;=t) two-tail</b>	0.84

The t-value is 0.23.

The p-value is 0.84

$p > \alpha$  ( $0.84 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q8**

<b>t Stat</b>	0.10
<b>P(T&lt;=t) two-tail</b>	0.93

The t-value is 0.10.

The p-value is 0.93

$p > \alpha$  ( $0.93 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q9**

<b>t Stat</b>	0.11
<b>P(T&lt;=t) two-tail</b>	0.92

The t-value is 0.11.

The p-value is 0.92

$p > \alpha$  ( $0.92 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q10**

<b>t Stat</b>	0.16
<b>P(T&lt;=t) two-tail</b>	0.89

The t-value is 0.16.

The p-value is 0.89

$p > \alpha$  ( $0.89 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q11**

<b>t Stat</b>	0.08
<b>P(T&lt;=t) two-tail</b>	0.94

The t-value is 0.08.

The p-value is 0.94

$p > \alpha$  ( $0.94 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q12**

<b>t Stat</b>	0.10
<b>P(T&lt;=t) two-tail</b>	0.93

The t-value is 0.10.

The p-value is 0.93

$p > \alpha$  ( $0.93 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q13**

<b>t Stat</b>	0.12
<b>P(T&lt;=t) two-tail</b>	0.92

The t-value is 0.12. The p-value is 0.92

$p > \alpha$  ( $0.86 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q14**

<b>t Stat</b>	0.14
<b>P(T&lt;=t) two-tail</b>	0.91

The t-value is 0.14.

The p-value is 0.91

$p > \alpha$  ( $0.91 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q15**

<b>t Stat</b>	0.11
<b>P(T&lt;=t) two-tail</b>	0.92

The t-value is 0.11.

The p-value is 0.92

$p > \alpha$  ( $0.92 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q16**

<b>t Stat</b>	0.13
<b>P(T&lt;=t) two-tail</b>	0.91

The t-value is 0.213.

The p-value is 0.91

$p > \alpha$  ( $0.91 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q17**

<b>t Stat</b>	0.10
<b>P(T&lt;=t) two-tail</b>	0.93

The t-value is 0.10.

The p-value is 0.93

$p > \alpha$  ( $0.93 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q18**

<b>t Stat</b>	0.12
<b>P(T&lt;=t) two-tail</b>	0.91

The t-value is 0.12. The p-value is 0.91

$p > \alpha$  ( $0.91 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q19**

<b>t Stat</b>	0.13
<b>P(T&lt;=t) two-tail</b>	0.91

The t-value is 0.13.

The p-value is 0.91

$p > \alpha$  ( $0.91 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q20**

<b>t Stat</b>	0.11
<b>P(T&lt;=t) two-tail</b>	0.92

The t-value is 0.11.

The p-value is 0.92

$p > \alpha$  ( $0.92 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q21**

<b>t Stat</b>	0.83
<b>P(T&lt;=t) two-tail</b>	0.49

The t-value is 0.83.

The p-value is 0.49

$p > \alpha$  ( $0.49 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q22**

<b>t Stat</b>	0.23
<b>P(T&lt;=t) two-tail</b>	0.84

The t-value is 0.23.

The p-value is 0.84

$p > \alpha$  ( $0.84 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q23**

<b>t Stat</b>	1.24
<b>P(T&lt;=t) two-tail</b>	0.43

The t-value is 1.24.

The p-value is 0.43

$p > \alpha$  ( $0.43 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q24**

<b>t Stat</b>	0.19
<b>P(T&lt;=t) two-tail</b>	0.86

The t-value is 0.19.

The p-value is 0.86

$p > \alpha$  ( $0.86 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q25**

<b>t Stat</b>	0.14
<b>P(T&lt;=t) two-tail</b>	0.90

The t-value is 0.14.

The p-value is 0.90

$p > \alpha$  ( $0.90 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q26**

<b>t Stat</b>	0.16
<b>P(T&lt;=t) two-tail</b>	0.89

The t-value is 0.16.

The p-value is 0.89

$p > \alpha$  ( $0.89 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q27**

<b>t Stat</b>	0.35
<b>P(T&lt;=t) two-tail</b>	0.74

The t-value is 0.35.

The p-value is 0.74

$p > \alpha$  ( $0.74 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q28**

<b>t Stat</b>	0.49
<b>P(T&lt;=t) two-tail</b>	0.71

The t-value is 0.49.

The p-value is 0.71

$p > \alpha$  ( $0.71 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q29**

<b>t Stat</b>	0.16
<b>P(T&lt;=t) two-tail</b>	0.88

The t-value is 0.16.

The p-value is 0.88

$p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q30**

<b>t Stat</b>	0.16
<b>P(T&lt;=t) two-tail</b>	0.88

The t-value is 0.16.

The p-value is 0.88

$p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q31**

<b>t Stat</b>	0.17
<b>P(T&lt;=t) two-tail</b>	0.87

The t-value is 0.17.

The p-value is 0.87

$p > \alpha$  ( $0.87 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q32**

<b>t Stat</b>	0.16
<b>P(T&lt;=t) two-tail</b>	0.88

The t-value is 0.16.

The p-value is 0.88

$p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q33**

<b>t Stat</b>	0.15
<b>P(T&lt;=t) two-tail</b>	0.88

The t-value is 0.15.

The p-value is 0.88

$p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q34**

<b>t Stat</b>	0.18
<b>P(T&lt;=t) two-tail</b>	0.86

The t-value is 0.18.

The p-value is 0.86

$p > \alpha$  ( $0.86 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q35**

<b>t Stat</b>	0.12
<b>P(T&lt;=t) two-tail</b>	0.90

The t-value is 0.12.

The p-value is 0.90

$p > \alpha$  ( $0.90 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q36**

<b>t Stat</b>	0.11
<b>P(T&lt;=t) two-tail</b>	0.91

The t-value is 0.11.

The p-value is 0.91

$p > \alpha$  ( $0.91 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q37**

<b>t Stat</b>	0.11
<b>P(T&lt;=t) two-tail</b>	0.92

The t-value is 0.11.

The p-value is 0.92

$p > \alpha$  ( $0.92 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q38**

<b>t Stat</b>	0.15
<b>P(T&lt;=t) two-tail</b>	0.89

The t-value is 0.15.

The p-value is 0.89

$p > \alpha$  ( $0.89 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q39**

<b>t Stat</b>	0.15
<b>P(T&lt;=t) two-tail</b>	0.88

The t-value is 0.15.

The p-value is 0.88

$p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q40

<b>t Stat</b>	0.16
<b>P(T&lt;=t) two-tail</b>	0.87

The t-value is 0.16.

The p-value is 0.87

$p > \alpha$  ( $0.87 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q41

<b>t Stat</b>	0.16
<b>P(T&lt;=t) two-tail</b>	0.87

The t-value is 0.16.

The p-value is 0.87

$p > \alpha$  ( $0.87 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q42

<b>t Stat</b>	0.15
<b>P(T&lt;=t) two-tail</b>	0.89

The t-value is 0.15.

The p-value is 0.89

$p > \alpha$  ( $0.89 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q43

<b>t Stat</b>	0.15
<b>P(T&lt;=t) two-tail</b>	0.89

The t-value is 0.15. The p-value is 0.89

$p > \alpha$  ( $0.89 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q44

<b>t Stat</b>	0.15
<b>P(T&lt;=t) two-tail</b>	0.89

The t-value is 0.15.

The p-value is 0.89

$p > \alpha$  ( $0.89 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q45**

<b>t Stat</b>	0.20
<b>P(T&lt;=t) two-tail</b>	0.85

The t-value is 0.20.

The p-value is 0.85

$p > \alpha$  ( $0.85 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q46**

<b>t Stat</b>	0.14
<b>P(T&lt;=t) two-tail</b>	0.90

The t-value is 0.14.

The p-value is 0.90.

$p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q47**

<b>t Stat</b>	0.14
<b>P(T&lt;=t) two-tail</b>	0.89

The t-value is 0.14.

The p-value is 0.89

$p > \alpha$  ( $0.89 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q48**

<b>t Stat</b>	0.14
<b>P(T&lt;=t) two-tail</b>	0.89

The t-value is 0.14.

The p-value is 0.89

$p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q49**

<b>t Stat</b>	0.14
<b>P(T&lt;=t) two-tail</b>	0.90

The t-value is 0.14.

The p-value is 0.90

$p > \alpha$  ( $0.90 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q50**

<b>t Stat</b>	-0.06
<b>P(T&lt;=t) two-tail</b>	0.95

The t-value is -0.06.

The p-value is 0.95

$p > \alpha$  ( $0.95 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q51**

<b>t Stat</b>	0.29
<b>P(T&lt;=t) two-tail</b>	0.78

The t-value is 0.29.

The p-value is 0.78

$p > \alpha$  ( $0.78 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q52**

<b>t Stat</b>	0.20
<b>P(T&lt;=t) two-tail</b>	0.85

The t-value is 0.20.

The p-value is 0.85

$p > \alpha$  ( $0.85 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q53**

<b>t Stat</b>	0.13
<b>P(T&lt;=t) two-tail</b>	0.90

The t-value is 0.13.

The p-value is 0.90

$p > \alpha$  ( $0.90 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q54**

<b>t Stat</b>	0.20
<b>P(T&lt;=t) two-tail</b>	0.85

The t-value is 0.20.

The p-value is 0.85

$p > \alpha$  ( $0.85 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q55**

<b>t Stat</b>	0.83
<b>P(T&lt;=t) two-tail</b>	0.43

The t-value is 0.83.

The p-value is 0.43

$p > \alpha$  ( $0.43 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q56**

<b>t Stat</b>	0.55
<b>P(T&lt;=t) two-tail</b>	0.59

The t-value is 0.55.

The p-value is 0.59

$p > \alpha$  ( $0.55 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q57**

<b>t Stat</b>	0.18
<b>P(T&lt;=t) two-tail</b>	0.87

The t-value is 0.18.

The p-value is 0.87

$p > \alpha$  ( $0.87 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q58**

<b>t Stat</b>	0.18
<b>P(T&lt;=t) two-tail</b>	0.86

The t-value is 0.18.

The p-value is 0.86

$p > \alpha$  ( $0.86 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q59**

<b>t Stat</b>	0.13
<b>P(T&lt;=t) two-tail</b>	0.90

The t-value is 0.13.

The p-value is 0.90

$p > \alpha$  ( $0.90 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q60**

<b>t Stat</b>	0.15
<b>P(T&lt;=t) two-tail</b>	0.88

The t-value is 0.16.

The p-value is 0.88

$p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q61**

<b>t Stat</b>	0.15
<b>P(T&lt;=t) two-tail</b>	0.88

The t-value is 0.15.

The p-value is 0.88

$p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q62**

<b>t Stat</b>	0.18
<b>P(T&lt;=t) two-tail</b>	0.87

The t-value is 0.18.

The p-value is 0.87

$p > \alpha$  ( $0.87 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q63**

<b>t Stat</b>	0.14
<b>P(T&lt;=t) two-tail</b>	0.90

The t-value is 0.14.

The p-value is 0.90

$p > \alpha$  ( $0.89 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q64**

<b>t Stat</b>	0.19
<b>P(T&lt;=t) two-tail</b>	0.86

The t-value is 0.19.

The p-value is 0.86

$p > \alpha$  ( $0.86 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q65**

<b>t Stat</b>	-1.05
<b>P(T&lt;=t) two-tail</b>	0.35

The t-value is -1.05.

The p-value is 0.35

$p > \alpha$  ( $0.35 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q66**

<b>t Stat</b>	0.17
<b>P(T&lt;=t) two-tail</b>	0.87

The t-value is 0.17.

The p-value is 0.87

$p > \alpha$  ( $0.87 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q67**

<b>t Stat</b>	-0.06
<b>P(T&lt;=t) two-tail</b>	0.95

The t-value is -0.06.

The p-value is 0.95

$p > \alpha$  ( $0.95 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q69**

<b>t Stat</b>	1.45
<b>P(T&lt;=t) two-tail</b>	0.20

The t-value is 1.45.

The p-value is 0.20

$p > \alpha$  ( $0.20 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q70**

<b>t Stat</b>	0.12
<b>P(T&lt;=t) two-tail</b>	0.91

The t-value is 0.12.

The p-value is 0.91

$p > \alpha$  ( $0.91 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q71**

<b>t Stat</b>	0.11
<b>P(T&lt;=t) two-tail</b>	0.91

The t-value is 0.11.

The p-value is 0.91

$p > \alpha$  ( $0.91 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q72**

<b>t Stat</b>	1.71
<b>P(T&lt;=t) two-tail</b>	0.13

The t-value is 1.71.

The p-value is 0.13

$p > \alpha$  ( $0.13 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q73**

<b>t Stat</b>	0.18
<b>P(T&lt;=t) two-tail</b>	0.86

The t-value is 0.18.

The p-value is 0.86

$p > \alpha$  ( $0.86 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

**Q74**

<b>t Stat</b>	0.20
<b>P(T&lt;=t) two-tail</b>	0.84

The t-value is 0.20.

The p-value is 0.84

$p > \alpha$  ( $0.84 > 0.05$ ), then we fail to reject the null hypothesis

Is not statistically significant and suggests that the null hypothesis is strongly supported.

# Chapter 9

## *Managing perceived risk and ways to reduce it*

The purchasing decision-making process consists of 5 steps according to Mitchell (1992). These stages include

problem identification,  
information search,  
choice evaluation,  
purchasing decision, and  
post-purchase consumer behaviour.

The stage of understanding the problem is where the perceived risk comes into play. Consumers are recognizing the problem through perceived risk and trying to reduce perceived risk through the information seeking stage, which will also help them evaluate the alternatives available. Consumers, therefore, before choosing the product and settling on a purchasing decision, subject themselves to a process of reducing the perceived risk. Some strategies can be used to reduce the perceived risk before a product or service is purchased until the perceived risk reaches a level that the buyer can tolerate.

According to Stampfl (1978), the consumer can choose to reduce each dimension of perceived risk either the uncertainty or the significance of the consequences. Reducing uncertainty is considered an easier operation that can happen through the search by the consumer for accurate and useful information. In this way, the perceived risk can be reduced for the dimensions of the operational and financial risk. Attempting to lessen the impact of a consumer's incorrect purchase is more challenging since it necessitates the development of specific abilities, such as defect rectification skills for the items purchased. Roselius made the most complete reference to Reducing Perceived Risk Methods in his article "Consumer Rankings of Risk Reduction Methods" (1971). The methods proposed by Roselius aim to reduce both the uncertainty and the mitigation of the consequences of the consumer's choice. Roselius according to Roselius are the following (Stem et al.):

Advertising the product through advertising, promotes the opinion of experts or celebrities.

Loyalty to the Flea, the consumer buys products or services that have satisfied him in the past

The reputation of a brand influences customer perception of a trademark.

The customer purchases things that he knows have been tested by testing companies.

The store where the consumer buys the product is displayed. The consumer believes in the store's reputation.

Using a free sample

Money-back guarantee/assurance

Inspection by government agencies. The consumer purchases the goods after learning that it has passed government testing and inspections.

Conducting market research by comparing the characteristics and price-quality ratios for assorted products.

Purchasing the most expensive or latest model of the product

Advice and suggestions from friends and relatives.

To reduce perceived risk, consumers seek out information about products and product categories from friends, family, acquaintances, and the media. The greater the consumer's knowledge of the various alternatives available, the more predictable the potential outcomes and the lower the perceived risk. Consumers now have easier access to more information on the internet, where they can easily compare assorted products and read reviews from other consumers about a specific product, they are interested in. Trust in a brand creates the perception that the product's quality is guaranteed, and thus the perceived risk is reduced. Furthermore, when no other information is available, consumers rely on the store's image, i.e., the way the shop is perceived by the consumer based on functional (pricing, comfort, product variety) and psychological factors.

### **Avoiding perceived risk**

According to Barach (1969) on perceived risk aversion tactics and research methodologies, advertising is a less effective approach to lowering customer perceived risk. Tan (1999) discovered via an empirical study that reputation to develop, guarantee certificate, brand loyalty strategy the validity of the efficacy of better than money return guarantee.

While most academics are focused on the actual buy phase of consumer business features the creation of technical techniques and processes, this model depicts the underlying logic coherent structural relationship.

Path difference and technology research, on the other hand, is used to analyze the stage of decision-making based on risk assessment findings to extend the effective study. It is based on perceptions of business environment elements and risk avoidance techniques.

This risk assessment research regarded the content of the absence of a direct causal link between the logical model and risk aversion as plausible because of the lack of a direct causal relationship between the logical model and risk aversion. Concurrently, we may identify the contents of the business certification scheme, which will be the subject of the study on customer perceptions of risk management systems.

To begin, risk perception should be established on both legal and technological levels, because a single technical solution cannot address the consumer's perceived risk. There is no safety and risk awareness, and no business certification scheme can play a role in management, integration processes, and legal methods to safeguard customers. Now, consumers purchasing decision process features of the phases in the environment based on risk prevention strategies and methods for consumer perceived risk against the primary path of study has not yet begun.

# Conclusion

This study analysed the concept of consumer risk perception regarding business certification schemes. The results of the analysis highlighted the need to find ways to reduce perceived risk. Typically, risk and consumer risk perception regarding business certification schemes are assessed as the likelihood of a risk occurring and its consequences.

The present dissertation had a dual purpose. The primary goal was to familiarize the reader with the concept of consumer risk in business certification schemes and to review the research that has been done up to this point about it. I wanted to show the research's historical evolution, methodology or approaches employed, and, of course, the end conclusions on risk perception. The second purpose was to include the most important data into a single consumer market decision framework that outlines how ordinary people perceive risk in relation to business certification schemes and how to reduce it.

Useful conclusions emerged from the whole course of study and writing of this dissertation. The initial finding from the study of risk perception is that so far, no single and comprehensive theory can explain clearly, and precisely which factors influence and shape the perception of risk and in which way. However, research to this point has yielded significant results that shed light on various aspects of perceived risk.

These are:

the perception of personal vulnerability,

the degree of harm perceived by the consumer, that is, the severity if something goes wrong and the consumer's perception of the long-term risks arising from his purchase.

However, if we want to have a predictive model of the consumer's risk perception regarding the business certification schemes, we should only include the degree of harm perceived by the consumers and their perception of the long-term risks arising from their purchase decision making.

The majority of responders said that they were **unfamiliar** with certification programs. Regarding the importance of certification schemes before purchasing a product/service, few people consider it important. Among the 25 different ISO standards, it was found that, from the 203 responders, the total consumer awareness, by more than 50%, was that they know of only 3 of the ISO standards.

It was found that most consumers are unaware of how companies design and manage Business Certification Schemes. The majority of the 203 respondents also agree that certification schemes improve consumers' critical thinking and intelligence in assessing risk, improve consumer knowledge and effectiveness in understanding existing risks and decision-making, and, as a result, improve consumers' ability to make effective decisions and manage risk. They also agree that certification systems, such as quality standards, guide them to reduce the risks involved. In addition, sustainable certification increases the ability of consumers to meet the needs and requirements of sustainability and strategic management allows them to acquire the appropriate knowledge of management tools and technical strategies.

More than half of the respondents agree that providing effective information about certification schemes instead of products can reduce consumers' risk in relation to the cost of searching and getting them to get better products. They also intend to buy from certified companies in the future, recognizing that quality has a positive impact on the attitude of consumers towards certification

programs in relation to the reduction of perceived risk.

Most of the participants agreed also that the perceived risk in a transaction is reduced by creating a climate of trust. In addition, they perceive increased risks when they have limited understanding and experience of product categories, variables, and certifications. and that the usefulness of the information has a positive impact on their perception of risk. The majority admitted that they can avoid perceived risks by staying true to a brand they were happy with in the past instead of buying new or untested products. Those who perceive a higher risk are less likely to buy new products or brands and are more likely to stay with their old brands. Consumer risk perception is affected by the amount at risk in the purchase decision. Most of them agreed that strong consumer and community confidence in a market can reduce the risk perceived by the consumer.

On the other hand, respondents admitted that they are not willing to pay much more when a product/service is certified, and no decisions are made about whether to buy based on the information they have access to. The prices of the products/services do not affect the buying habits significantly. Risks and the level of trust in the sources of information and the suggestions and evaluations provided do not affect the majority in their choice of purchase. When making a purchase, they sometimes, choose certified products/services, and the reason is that they believe are of higher quality.

The vast majority stated that certified products/services are those with a special label and certificate number and are willing to spend up to 25% extra on certified items. In addition, they occasionally look at the label/brochure to see if a product/service is certified or not before making a purchase.

More than half stated that they demand certified products/services in their country to be available at reasonable prices. On the other hand, the majority believe that there is not much need for further development of a certified product/service. However, it was found that there is insufficient awareness regarding current issues in the certification market.

They do not consider that, along with several other interventions, certification serves as an additional level of verification. Few believe that consumer behaviour knowledge and subjective knowledge relates to the business certification scheme that influences their behaviour or purchasing decision.” Their accumulated impression of a product or service is crucial to shaping their initial thinking and future actions.

Finally, 90 out of 203 responders, replied positively on whether they will prefer certified products or services than not, they will read food labels more carefully and they will choose the well-known and more trusted brands.

## ***Research Limitations***

The results of the research concern the attitude and intention of consumers to perceive the risk in relation to business certification schemes and refer to a small sample (203 people). For this reason, we should not generalize or try to explain consumer behaviour in the way they perceive risk. The research was also conducted during a pandemic (which, unfortunately, is not over yet, and there are still restrictions in some countries), which means that this rapid lifestyle change has a huge impact on consumer behaviour and is not a continuous custom and market trend.

Therefore, a unified theory remains an issue today. Until such a theory emerges, which can fully systematize and model the perception of risk, I can rely on what I have come up with so far. The

conclusion, in relation to the investigation of perceived risk, is that some available approaches cannot highlight all the factors that affect the risk impression of the consumer. However, all techniques, without exception, have given some significant results.

The (individual) perceived risk is influenced and therefore shaped by a wide range of psychological, social, cultural, and demographic factors. Consequently, society should not be treated as an entity, since within it there are groups of people with different perceptions of risk.

## ***Proposals For Future Research***

It is proposed to conduct future similar research with a long-term approach, as, according to researchers, time can affect the perception of risk (Rodriguez-Garzon et al., 2015). I believe that the findings of the study can be the basis for other studies that can provide additional information and contribute to the development and design of new risk mitigation strategies.

The field of perceived risks by consumers in relation to business certification systems is of great research interest nowadays, as they move towards a growing need for quality and safety. This study aims to generalize the characteristics that influence consumers to perceive risk and the need to understand and familiarize themselves with business certification systems before acquiring them, in order to reduce risk. Although it is difficult to find a common set of factors that can be generalized to such an extent that they are related to different types of consumers, development levels of countries, etc. This is an area that needs additional research, testing and validation of existing models and consumer decision-making. The same, of course, applies to tools that assess readiness.

Another suggestion could be whether consumers are aware of the risk in the forex, fintech, gaming and casino industries, whether they are certified or not, and knowledge of certification by official bodies that regulate, approve, and supervise these industries for compliance purposes with their current legislation, respectively. (i.e., Cyprus Securities and Exchange Commission, Cyprus Gaming and Casino Supervision Commission)

One more proposal is to conduct a survey after two years, when we hope that the Covid-19 pandemic will finally disappear, to compare the findings and investigate how customers perceive, prefer, and behave in relation to business certification programs. At the same time, in the case of an acceptable legal framework for taking market judgments, it is important to further explore the role of emotions in relation to perceived consumer risk and consumer opinion.

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# Appendix A

## Questionnaire

**A study of the effect of Business Certification Schemes on reducing the perceived risks on the side of the customer**

Dear participant,

My name is Georgia Chairalla Perikleous, and I am currently studying for my 2nd Master's degree in Enterprise Risk Management, at the Open University of Cyprus.

For my master's thesis, which is a study of the effect of Business Certification Schemes on reducing perceived risks on the side of the customer, you must complete this questionnaire. Your answers will be used exclusively for my academic research. There is no commercial purpose to this endeavor and your involvement will remain anonymous. Your answers will remain confidential.

Thank you in advance for your help in my research by providing your answers to these questions. I expect it to take about 20 minutes of your time.

Carefully read the following Questionnaire and answer the questions accordingly.

Best Regards

Georgia Chairalla Perikleous

---

**Are you familiar with the Business Certification Scheme?**

- Not at all familiar
- Slightly familiar
- Moderately familiar
- Very familiar
- Extremely familiar

**Are you aware of the following ISO standards?**

Yes / No

ISO 9001:2015 - Quality Management
ISO 14001:2015 - Environmental Management
ISO 45001:2018 - Occupational Health & Safety
ISO 27001:2017 - Information Security Management
ISO 22301:2019 - Business Continuity
ISO 50001:2011 - Energy Management
ISO 13485:2016 - Medical Devices
ISO 20121:2012 - Event Sustainability
ISO 20000:2018 - IT Service Management

Yes / No

ISO 6 - Camera Film Speed
ISO 639 – Language Codes
ISO 4217 - Currency Codes
ISO 8601 - Date and Time format
ISO 9660 - ISO Images for Computer Files
ISO 13216 – ISO Fix Child Seats for Cars
ISO 13485 - Medical Devices
ISO 14000 – Family Environmental Management
ISO/IEC 17025 - Testing and Calibration Laboratories
ISO 20121 - Sustainable Events
ISO 22000 - Food Safety Management
ISO 26000 - Social Responsibility
ISO 31000 - Risk Management
ISO 37001 - Anti-Bribery Management Systems
ISO 3166 - Country Codes
ISO 50001 - Energy Management

**As a Consumer, how important do you think is for you, the Business Certification Schemes, prior to a purchase of a product/service?**

- Not Important
- Slightly Important
- Moderately Important
- Important
- Very Important

**Are you aware of the way companies design and manage Business Certification Schemes?**

- Yes
- No

**The business certification schemes:**

	I completely disagree	Disagree	I neither agree nor disagree	Agree	I totally agree
<b>strengthen the consumer's critical knowledge and intelligence in measuring perceived risk.</b>					
<b>enhancing consumers' knowledge and effectiveness in understanding existing risks and making relevant decisions.</b>					
<b>empower consumers' effective decisions and manage to perceive risk significantly.</b>					

**Business certification schemes such as:**

	I completely disagree	Disagree	I neither agree nor disagree	Agree	I totally agree
<b>quality standards, guide consumers in order to reduce the risks involved and increase their level of satisfaction with each other.</b>					
<b>sustainable certification increases the ability of consumers to meet the needs and requirements of sustainability.</b>					
<b>strategic management allows consumers to acquire the appropriate knowledge of strategic management tools and techniques</b>					

**Providing effective information about business certification schemes can reduce consumers' perception of risk in relation to search costs and lead consumers to make better purchasing decisions.**

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

**Perceived Risk of product/service quality has a positive impact:**

	Yes	No	Not sure
On the attitude of consumers towards business certification programs			
On the intention to buy from certified companies			

	I completely disagree	Disagree	I neither agree nor disagree	Agree	I totally agree
<b>The perceived risk in a transaction is reduced by creating a climate of trust.</b>					
<b>As a consumer, you perceive the increased risks when you have limited understanding and experience of product categories, variables, and certifications.</b>					
<b>The usefulness of information has a positive impact on your perception of risk.</b>					
<b>Consumers avoid perceived risks by staying true to a brand they were happy with in the past instead of buying new or untested products.</b>					

	I completely disagree	Disagree	I neither agree nor disagree	Agree	I totally agree
<b>Those who perceive high risk are less likely to buy new products or brands and are more likely to stay with their old brands.</b>					
<b>Consumer risk perception is influenced by the amount at risk in the purchase decision</b>					
<b>Strong consumer and community trust in a brand can reduce the risk perceived by the consumer.</b>					

	I completely disagree	Disagree	I neither agree nor disagree	Agree	I totally agree
<b>You are willing to pay more when a product/service is certified.</b>					
<b>You make decisions about whether to make a purchase based on the information you have access to.</b>					
<b>The prices of products/services affect your consumer habits</b>					
<b>Your risks and level of confidence in the sources of information and the suggestions and ratings provided, influence your purchase choice.</b>					

**When making a purchase, do you choose certified products/services?**

- Yes
- No
- Sometimes

**If yes, indicate one choice why do you prefer certified products/services?**

- N/A
- high-quality goods
- healthy
- safe for the environment
- it is fashionable
- safe for me
- All the above
- Other

**Which product/service do you consider certified?**

- Those with a special label and the certificate number
- Those with a specific label without a certified number
- I don't know
- Other

**Are you willing to pay more, for certified goods compared to the usual product/service (in percentage)?**

- No
- 1-10%.
- 10% - 25%
- 26–50%.
- 51–100%.
- More than 100%.

**I would read on the label/brochure whether a product/service is certified or not before I make a purchase.**

- Yes
- No
- Sometimes
- It is not important

**How, in your opinion, do you stimulate the demand for certified products / Services in your country?**

- reasonable prices
- media advertising
- availability in the trading network
- the development and approval of the legislative and regulatory framework
- I don't know
- Other

**Why is there a need to further develop a certified product/service?**

- Consumption of a certified product/service will ensure a high quality of life nowadays the quality of food is not satisfactory
- For the sake of future generations
- Safety
- I don't know
- Other

**What do you think are the current issues in the certified product's market?**

- Insufficient awareness of consumers about the concept of "certified goods" and lack of desire to buy them
- Lack of sales channels for products/services
- Absence of a full variety of products/services that consumers would like to see
- Lack of state support
- I don't know
- Other

	Yes	No	Maybe	I don't know
<b>Do you think that if a product/service you buy is certified, you will not have any problems with that product/service?</b>				
<b>Label: Can we rely on certification to provide us with more ethical products?</b>				
<b>Along with a number of other interventions, certification serves as an additional level of verification?</b>				

	I completely disagree	Disagree	I neither agree nor disagree	Agree	I totally agree
<b>Consumer behaviour knowledge and subjective knowledge related to the business certification scheme influence your behaviour or purchasing decision.</b>					
<b>Your accumulated impression of a product or service is crucial to shaping your initial thinking and future actions.</b>					

**After completing this research, how do you plan to change your purchasing behaviour in relation to the business certification program?**

	Yes	No	I will think about it
I will prefer certified products or services			
I will read food labels more carefully			
I will choose the well-known and more trusted brands			

**Demographics**

**What gender are you?**

- 1. Man
- 2. Woman
- 3. Non-Binary

**Your age**

- Under 18 years old
- 18-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65 or older

**Marital Status**

- Single
- Living with a partner
- Cohabitation agreement
- Married
- Divorced
- Separated
- Widowed
- In a relation

**What is your Nationality?**

.....

**In which country are you located now?**

.....

**What is the highest degree or level of school you have completed?**

- Elementary (6th Grade)
- Intermediate (9th Grade)
- Higher (12th Grade)
- College degree
- Bachelor's degree
- Master's degree
- Doctorate degree

**Employment / Professional situation**

- Government employee
- Private employee
- Businessman / woman
- Self-employed
- College student
- Unemployed
- Other

**Number (i.e., 1,2,3, etc.) of people living in the house (including you)**

.....

**What is the monthly income range of your family (total gross monthly income of all family members that contributes to the budget and stays in the same house)?**

- Less than €1,000
- €1,000 to €1,499
- €1,500 to €1,999
- €2,000 to €2,499
- €2,500 to €2,999
- €3,000 to €3,499
- €3,500 to €3,999
- €4,000 to €4,999
- €5,000 and above

**How much do you spend on shopping every month (as an individual or as a family)?**

- Less than €100
- €100 to €500
- €500 to €1,000
- €1,000 to €1,500
- €1,500 to €2,000
- €2,000 to €2,500
- €2,500 to €3,000
- More than €3,000

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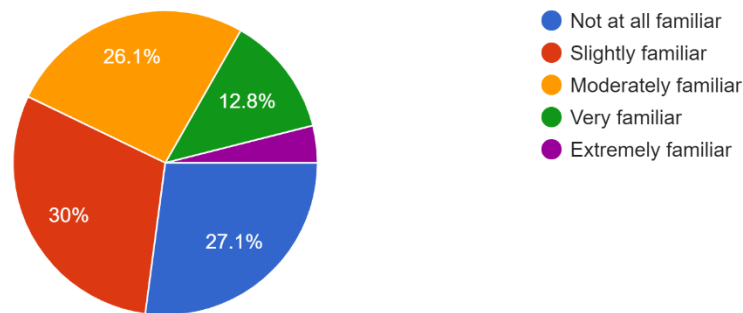
# Appendix B

## Tables for 203 respondents (Worldwide)

**Table: Data collected among 203 responses from countries (worldwide) Q1**

Are you familiar with the Business Certification Scheme?

203 responses

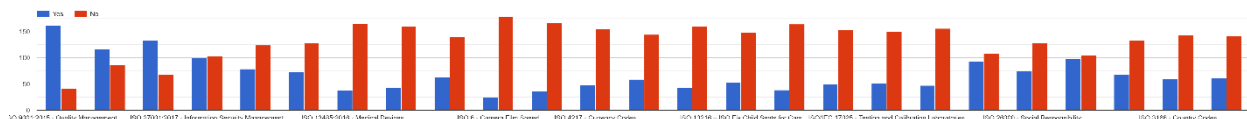


Are you familiar with the Business Certification Scheme?						
1	1 = Not at all familiar	2 = Slightly familiar	3 = Moderately familiar	4 = Very familiar	5 = Extremely familiar	Verification
	55	61	53	26	8	203
	27.1%	30.0%	26.1%	12.8%	3.9%	100.0%

Calculation: mean score (Q1)

1	1	2	3	4	5	Total	m01
	55	61	53	26	8	203	2.36
	55	122	159	104	40	480	

Are you aware of the following ISO standards?



Are you aware of the following ISO standards?			
2	[ISO 9001:2015 - Quality Management]	1 - Yes	2 - No
		162	41
		79.8%	20.2%
Verification			
		203	
100.0%			
3	[ISO 14001:2015 - Environmental Management]	1 - Yes	2 - No
		117	86
		Verification	
		203	

		57.6%	42.4%	<b>100.0%</b>
<b>4</b>	[ISO 45001:2018 - Occupational Health & Safety]	1 - Yes 134 66.0%	2 - No 69 34.0%	<b>Verification</b> <b>203</b> <b>100.0%</b>
<b>5</b>	[ISO 27001:2017 - Information Security Management]	1 - Yes 100 49.3%	2 - No 103 50.7%	<b>Verification</b> <b>203</b> <b>100.0%</b>
<b>6</b>	[ISO 22301:2019 - Business Continuity]	1 - Yes 79 38.9%	2 - No 124 61.1%	<b>Verification</b> <b>203</b> <b>100.0%</b>
<b>7</b>	[ISO 50001:2011 - Energy Management]	1 - Yes 74 36.5%	2 - No 129 63.5%	<b>Verification</b> <b>203</b> <b>100.0%</b>
<b>8</b>	[ISO 13485:2016 - Medical Devices]	1 - Yes 38 18.7%	2 - No 165 81.3%	<b>Verification</b> <b>203</b> <b>100.0%</b>
<b>9</b>	[ISO 20121:2012 - Event Sustainability]	1 - Yes 43 21.2%	2 - No 160 78.8%	<b>Verification</b> <b>203</b> <b>100.0%</b>
<b>10</b>	[ISO 20000:2018 - IT Service Management]	1 - Yes 63 31.0%	2 - No 140 69.0%	<b>Verification</b> <b>203</b> <b>100.0%</b>
<b>11</b>	[ISO 6 - Camera Film Speed]	1 - Yes 24 11.8%	2 - No 179 88.2%	<b>Verification</b> <b>203</b> <b>100.0%</b>
<b>12</b>	[ISO 639 – Language Codes]	1 - Yes 37 18.2%	2 - No 166 81.8%	<b>Verification</b> <b>203</b> <b>100.0%</b>
<b>13</b>	[ISO 4217 - Currency Codes]	1 - Yes 48 23.6%	2 - No 155 76.4%	<b>Verification</b> <b>203</b> <b>100.0%</b>
<b>14</b>	[ISO 8601 - Date and Time format]	1 - Yes 59 29.1%	2 - No 144 70.9%	<b>Verification</b> <b>203</b> <b>100.0%</b>

15	[ISO 9660 - ISO Images for Computer Files]	1 - Yes	2 - No	<b>Verification</b>
		43	160	<b>203</b>
		21.2%	78.8%	<b>100.0%</b>
16	[ISO 13216 – ISO Fix Child Seats for Cars]	1 - Yes	2 - No	<b>Verification</b>
		54	149	<b>203</b>
		26.6%	73.4%	<b>100.0%</b>
17	[ISO 13485 - Medical Devices]	1 - Yes	2 - No	<b>Verification</b>
		39	164	<b>203</b>
		19.2%	80.8%	<b>100.0%</b>
18	[ISO 14000 – Family Environmental Management]	1 - Yes	2 - No	<b>Verification</b>
		49	154	<b>203</b>
		24.1%	75.9%	<b>100.0%</b>
19	[ISO/IEC 17025 - Testing and Calibration Laboratories]	1 - Yes	2 - No	<b>Verification</b>
		52	151	<b>203</b>
		25.6%	74.4%	<b>100.0%</b>
20	[ISO 20121 - Sustainable Events]	1 - Yes	2 - No	<b>Verification</b>
		47	156	<b>203</b>
		23.2%	76.8%	<b>100.0%</b>
21	[ISO 22000 - Food Safety Management]	1 - Yes	2 - No	<b>Verification</b>
		94	109	<b>203</b>
		46.3%	53.7%	<b>100.0%</b>
22	[ISO 26000 - Social Responsibility]	1 - Yes	2 - No	<b>Verification</b>
		75	128	<b>203</b>
		36.9%	63.1%	<b>100.0%</b>
23	[ISO 31000 - Risk Management]	1 - Yes	2 - No	<b>Verification</b>
		98	105	<b>203</b>
		48.3%	51.7%	<b>100.0%</b>
24	[ISO 37001 - Anti-Bribery Management Systems]	1 - Yes	2 - No	<b>Verification</b>
		69	134	<b>203</b>
		34.0%	66.0%	<b>100.0%</b>
25	[ISO 3166 - Country Codes]	1 - Yes	2 - No	<b>Verification</b>
		60	143	<b>203</b>
		29.6%	70.4%	<b>100.0%</b>

<b>26</b>	[ISO 50001 - Energy Management]	1 - Yes	2 - No	<b>Verification</b>
		61	142	<b>203</b>
		30.0%	70.0%	<b>100.0%</b>

**Calculation: mean score (Q2-Q26)**

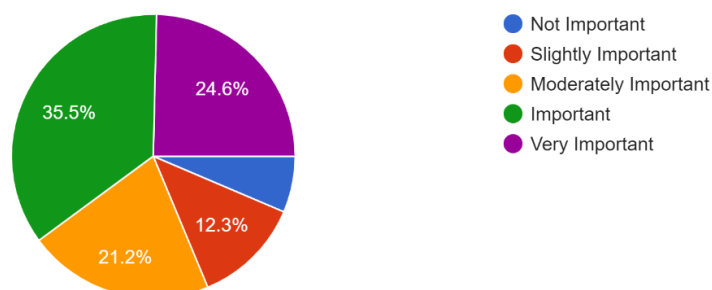
<b>2</b>	1	2	<b>Total</b>	<b>m02</b>
	162	41	<b>203</b>	<b>1.21</b>
	162	82	<b>245</b>	
<b>3</b>	1	2	<b>Total</b>	<b>m03</b>
	117	86	<b>203</b>	<b>1.43</b>
	117	172	<b>290</b>	
<b>4</b>	1	2	<b>Total</b>	<b>m04</b>
	134	69	<b>203</b>	<b>1.35</b>
	134	138	<b>273</b>	
<b>5</b>	1	2	<b>Total</b>	<b>m05</b>
	100	103	<b>203</b>	<b>1.51</b>
	100	206	<b>308</b>	
<b>6</b>	1	2	<b>Total</b>	<b>m06</b>
	79	124	<b>203</b>	<b>1.62</b>
	79	248	<b>329</b>	
<b>7</b>	1	2	<b>Total</b>	<b>m07</b>
	74	129	<b>203</b>	<b>1.64</b>
	74	258	<b>334</b>	
<b>8</b>	1	2	<b>Total</b>	<b>m08</b>
	38	165	<b>203</b>	<b>1.82</b>
	38	330	<b>370</b>	
<b>9</b>	1	2	<b>Total</b>	<b>m09</b>
	43	160	<b>203</b>	<b>1.80</b>
	43	320	<b>365</b>	
<b>10</b>	1	2	<b>Total</b>	<b>m10</b>
	63	140	<b>203</b>	<b>1.70</b>
	63	280	<b>345</b>	

<b>11</b>	1	2	<b>Total</b>	<b>m11</b>
	24	179	<b>203</b>	<b>1.89</b>
	24	358	<b>384</b>	
<b>12</b>	1	2	<b>Total</b>	<b>m12</b>
	37	166	<b>203</b>	<b>1.83</b>
	37	332	<b>371</b>	
<b>13</b>	1	2	<b>Total</b>	<b>m13</b>
	48	155	<b>203</b>	<b>1.77</b>
	48	310	<b>360</b>	
<b>14</b>	1	2	<b>Total</b>	<b>m14</b>
	59	144	<b>203</b>	<b>1.72</b>
	59	288	<b>349</b>	
<b>15</b>	1	2	<b>Total</b>	<b>m15</b>
	43	160	<b>203</b>	<b>1.80</b>
	43	320	<b>365</b>	
<b>16</b>	1	2	<b>Total</b>	<b>m16</b>
	54	149	<b>203</b>	<b>1.74</b>
	54	298	<b>354</b>	
<b>17</b>	1	2	<b>Total</b>	<b>m17</b>
	162	41	<b>203</b>	<b>1.21</b>
	162	82	<b>246</b>	
<b>18</b>	1	2	<b>Total</b>	<b>m18</b>
	49	154	<b>203</b>	<b>1.77</b>
	49	308	<b>359</b>	
<b>19</b>	1	2	<b>Total</b>	<b>m19</b>
	52	151	<b>203</b>	<b>1.75</b>
	52	302	<b>356</b>	
<b>20</b>	1	2	<b>Total</b>	<b>m20</b>
	47	156	<b>203</b>	<b>1.78</b>
	47	312	<b>361</b>	
<b>21</b>	1	2	<b>Total</b>	<b>m21</b>
	94	109	<b>203</b>	<b>1.54</b>
	94	218	<b>314</b>	
<b>22</b>	1	2	<b>Total</b>	<b>m22</b>

	75	128	<b>203</b>	<b>1.64</b>
	75	256	<b>333</b>	
<b>23</b>	1	2	<b>Total</b>	<b>m23</b>
	98	105	<b>203</b>	<b>1.52</b>
	98	210	<b>310</b>	
<b>24</b>	1	2	<b>Total</b>	<b>m24</b>
	69	134	<b>203</b>	<b>1.67</b>
	69	268	<b>339</b>	
<b>25</b>	1	2	<b>Total</b>	<b>m25</b>
	60	143	<b>203</b>	<b>1.71</b>
	60	286	<b>348</b>	
<b>26</b>	1	2	<b>Total</b>	<b>m26</b>
	61	142	<b>203</b>	<b>1.71</b>
	61	284	<b>347</b>	

As a Consumer, how important do you think is for you, the Business Certification Schemes, prior to a purchase of a product/service?

203 responses



**As a Consumer, how Important do you think is for you, the Business Certification Schemes, prior to a purchase of a product/service?**

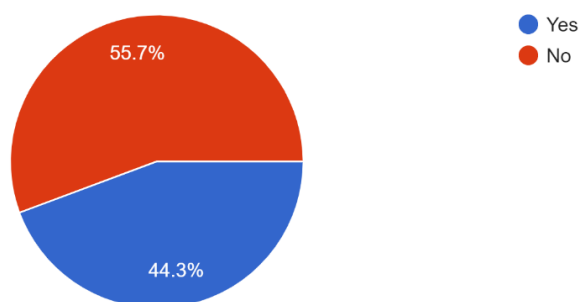
27	1 - Not Important	2 - Slightly Important	3 - Moderately Important	4 - Important	5 - Very Important	Verification
	13	25	43	72	50	<b>203</b>
	6.4%	12.3%	21.2%	35.5%	24.6%	<b>100.0%</b>

**Calculation: mean score (Q27)**

27	1	2	3	4	5	Total	m27
	13	25	43	72	50	<b>203</b>	<b>3.60</b>
	13	50	129	288	250	<b>730</b>	

Are you aware about the way companies design and manage Business Certification Schemes?

203 responses

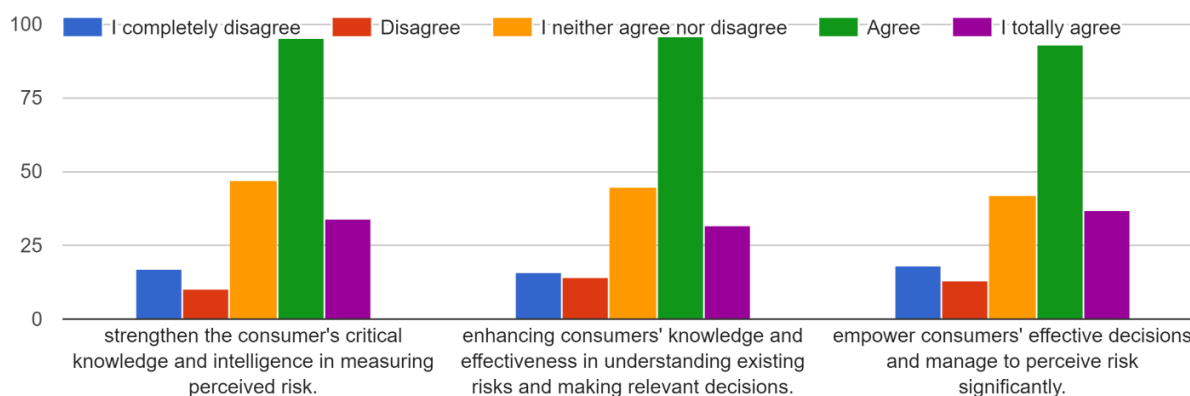


Are you aware of the way companies design and manage Business Certification Schemes?			
	1 - Yes	2 - No	Verification
28	90	113	203
	44.3%	55.7%	100.0%

Calculation: mean score (Q28)

	1	2	Total	m28
28	90	113	203	1.56
	90	226	318	

The business certification schemes:



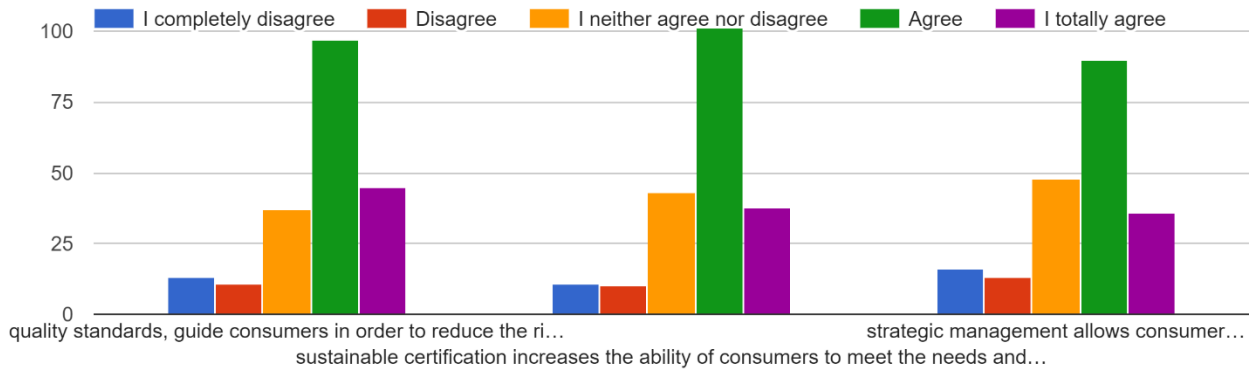
The business certification schemes:							
29	[strengthen the consumer's critical knowledge and	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	knowledge and	17	10	47	95	34	203

	<b>intelligence in measuring perceived risk.]</b>	8.4%	4.9%	23.2%	46.8%	16.7%	<b>100.0%</b>
<b>The business certification schemes:</b>							
<b>30</b>	<b>[enhancing consumers' knowledge and effectiveness in understanding existing risks and making relevant decisions.]</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
		16	14	45	96	32	<b>203</b>
		7.9%	6.9%	22.2%	47.3%	15.8%	<b>100.0%</b>
<b>The business certification schemes:</b>							
<b>31</b>	<b>[empower consumers' effective decisions and manage to perceive risk significantly.]</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
		18	13	42	93	37	<b>203</b>
		8.9%	6.4%	20.7%	45.8%	18.2%	<b>100.0%</b>

**Calculation: mean score (Q29-Q31)**

<b>29</b>	1	2	3	4	5	<b>Total</b>	<b>m29</b>
	17	10	47	95	34	<b>203</b>	<b>3.59</b>
	17	20	141	380	170	<b>728</b>	
<b>The business certification schemes:</b>							
<b>30</b>	1	2	3	4	5	<b>Total</b>	<b>m30</b>
	16	14	45	96	32	<b>203</b>	<b>3.56</b>
	16	28	135	384	160	<b>723</b>	
<b>The business certification schemes:</b>							
<b>31</b>	1	2	3	4	5	<b>Total</b>	<b>m31</b>
	18	13	42	93	37	<b>203</b>	<b>3.58</b>
	18	26	126	372	185	<b>727</b>	

Business certification schemes such as:



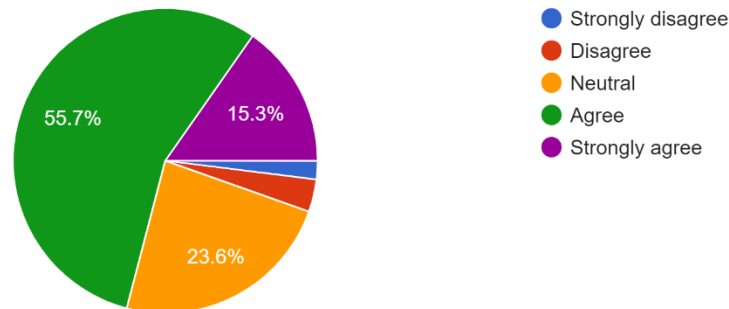
Business certification schemes such as:							
32	[quality standards, guide consumers in order to reduce the risks involved and increase their level of satisfaction with each other.]	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
		13	11	37	97	45	203
		6.4%	5.4%	18.2%	47.8%	22.2%	100.0%
Business certification schemes such as:							
33	[sustainable certification increases the ability of consumers to meet the needs and requirements of sustainability.]	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
		11	10	43	101	38	203
		5.4%	4.9%	21.2%	49.8%	18.7%	100.0%
Business certification schemes such as:							
34	[strategic management allows consumers to acquire the appropriate knowledge of strategic management tools and techniques]	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
		16	13	48	90	36	203
		7.9%	6.4%	23.6%	44.3%	17.7%	100.0%

**Calculation: mean score (Q32-Q34)**

32	1	2	3	4	5	<b>Total</b>	<b>m32</b>
	13	11	37	97	45	203	3.74
	13	22	111	388	225	759	
33	1	2	3	4	5	<b>Total</b>	<b>m33</b>
	11	10	43	101	38	203	3.71
	11	20	129	404	190	754	
34	1	2	3	4	5	<b>Total</b>	<b>m34</b>
	16	13	48	90	36	203	3.58
	16	26	144	360	180	726	

Providing effective information about business certification schemes can reduce consumers' perception of risk in relation to search costs and...ad consumers to make better purchasing decisions.

203 responses



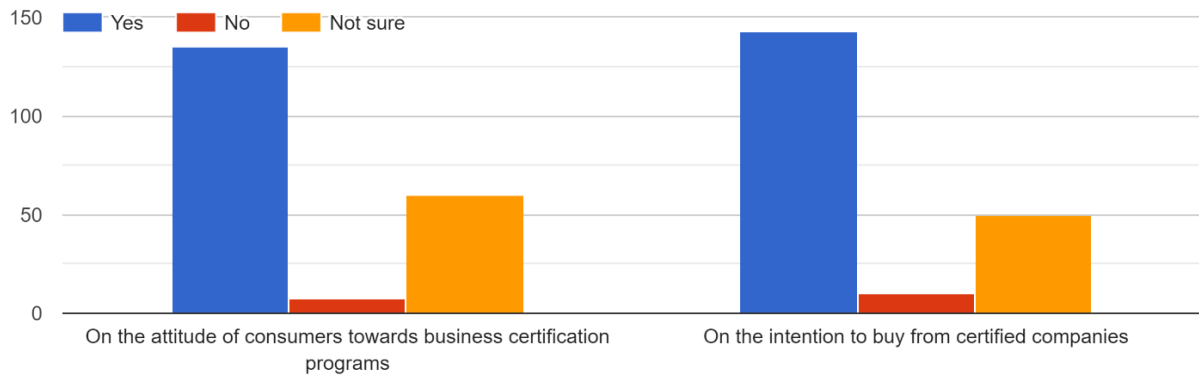
**Providing effective information about business certification schemes can reduce consumers' perception of risk in relation to search costs and lead consumers to make better purchasing decisions.**

35	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
	4	7	48	113	31	<b>203</b>
	2.0%	3.4%	23.6%	55.7%	15.3%	<b>100.0%</b>

**Calculation: mean score (Q35)**

35	1	2	3	4	5	<b>Total</b>	<b>m35</b>
	4	7	48	113	31	203	3.79
	4	14	144	452	155	769	

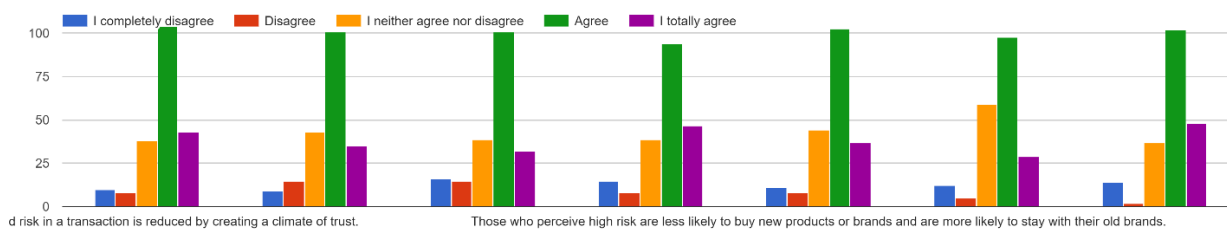
Perceived Risk of product/service quality has a positive impact:



Perceived Risk of product/service quality has a positive impact:					
36	[On the attitude of consumers towards business certification programs]	1 - Yes	2 - No	3 – Not sure	<b>Verification</b>
		135	8	60	<b>203</b>
		66.5%	3.9%	29.6%	<b>100.0%</b>
Perceived Risk of product/service quality has a positive impact:					
37	[On the intention to buy from certified companies]	1 - Yes	2 - No	3 – Not sure	<b>Verification</b>
		143	11	49	<b>203</b>
		70.4%	5.4%	24.1%	<b>100.0%</b>

Calculation: mean score (Q36-Q37)

36	1	2	3	<b>Total</b>	<b>m36</b>
	135	8	60	203	1.63
	135	16	180	331	
37	1	2	3	<b>Total</b>	<b>m37</b>
	143	11	49	203	1.54
	143	22	147	312	



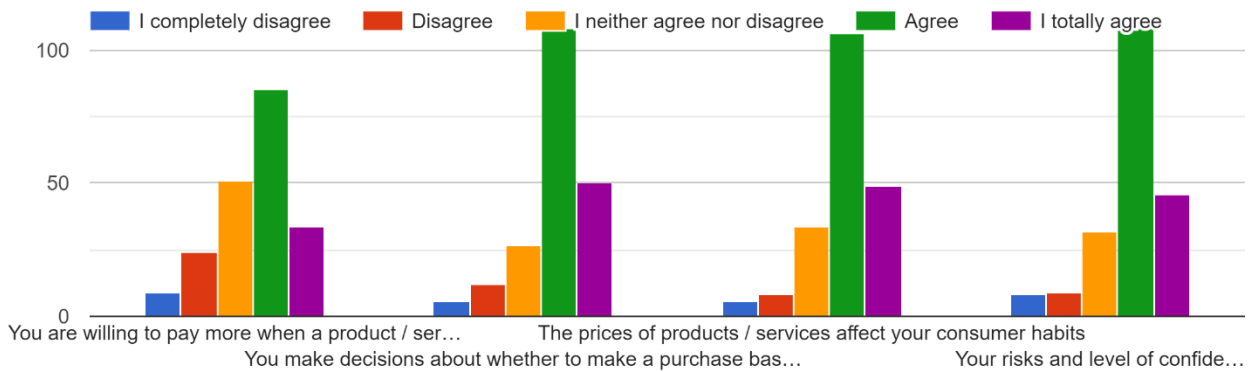
<b>[The perceived risk in a transaction is reduced by creating a climate of trust.]</b>						
<b>38</b>	<b>1 - I completely Disagree</b>	<b>2 - Disagree</b>	<b>3 - I neither Agree nor Disagree</b>	<b>4 - Agree</b>	<b>5 - I totally Agree</b>	<b>Verification</b>
	10	8	38	104	43	<b>203</b>
	4.9%	3.9%	18.7%	51.2%	21.2%	<b>100.0%</b>
<b>[As a consumer, you perceive the increased risks when you have limited understanding and experience of product category, variables, and certifications.]</b>						
<b>39</b>	<b>1 - I completely Disagree</b>	<b>2 - Disagree</b>	<b>3 - I neither Agree nor Disagree</b>	<b>4 - Agree</b>	<b>5 - I totally Agree</b>	<b>Verification</b>
	9	15	43	101	35	<b>203</b>
	4.4%	7.4%	21.2%	49.8%	17.2%	<b>100.0%</b>
<b>[The usefulness of information has a positive impact on your perception of risk.]</b>						
<b>40</b>	<b>1 - I completely Disagree</b>	<b>2 - Disagree</b>	<b>3 - I neither Agree nor Disagree</b>	<b>4 - Agree</b>	<b>5 - I totally Agree</b>	<b>Verification</b>
	16	15	39	101	32	<b>203</b>
	7.9%	7.4%	19.2%	49.8%	15.8%	<b>100.0%</b>
<b>[Consumers avoid perceived risks by staying true to a brand they were happy with in the past instead of buying new or untested products.]</b>						
<b>41</b>	<b>1 - I completely Disagree</b>	<b>2 - Disagree</b>	<b>3 - I neither Agree nor Disagree</b>	<b>4 - Agree</b>	<b>5 - I totally Agree</b>	<b>Verification</b>
	15	8	39	94	47	<b>203</b>
	7.4%	3.9%	19.2%	46.3%	23.2%	<b>100.0%</b>
<b>[Those who perceive high risk are less likely to buy new products or brands and are more likely to stay with their old brands.]</b>						
<b>42</b>	<b>1 - I completely Disagree</b>	<b>2 - Disagree</b>	<b>3 - I neither Agree nor Disagree</b>	<b>4 - Agree</b>	<b>5 - I totally Agree</b>	<b>Verification</b>
	11	8	44	103	37	<b>203</b>
	5.4%	3.9%	21.7%	50.7%	18.2%	<b>100.0%</b>
<b>[Consumer risk perception is influenced by the amount at risk in the purchase decision]</b>						
<b>43</b>	<b>1 - I completely Disagree</b>	<b>2 - Disagree</b>	<b>3 - I neither Agree nor Disagree</b>	<b>4 - Agree</b>	<b>5 - I totally Agree</b>	<b>Verification</b>
	12	5	59	98	29	<b>203</b>
	5.9%	2.5%	29.1%	48.3%	14.3%	<b>100.0%</b>

**[Strong consumer and community trust in a brand can reduce the risk perceived by the consumer.]**

<b>44</b>	<b>1 - I completely Disagree</b>	<b>2 - Disagree</b>	<b>3 - I neither Agree nor Disagree</b>	<b>4 - Agree</b>	<b>5 - I totally Agree</b>	<b>Verification</b>
	14	2	37	102	48	<b>203</b>
	6.9%	1.0%	18.2%	50.2%	23.6%	<b>100.0%</b>

**Calculation: mean score (Q38-Q44)**

<b>38</b>	1	2	3	4	5	<b>Total</b>	<b>m38</b>
	10	8	38	104	43	203	3.80
	10	16	114	416	215	771	
<b>39</b>	1	2	3	4	5	<b>Total</b>	<b>m39</b>
	9	15	43	101	35	203	3.68
	9	30	129	404	175	747	
<b>40</b>	1	2	3	4	5	<b>Total</b>	<b>m40</b>
	16	15	39	101	32	203	3.58
	16	30	117	404	160	727	
<b>41</b>	1	2	3	4	5	<b>Total</b>	<b>m41</b>
	15	8	39	94	47	203	3.74
	15	16	117	376	235	759	
<b>42</b>	1	2	3	4	5	<b>Total</b>	<b>m42</b>
	11	8	44	103	37	203	3.72
	11	16	132	412	185	756	
<b>43</b>	1	2	3	4	5	<b>Total</b>	<b>m43</b>
	12	5	59	98	29	203	3.63
	12	10	177	392	145	736	
<b>44</b>	1	2	3	4	5	<b>Total</b>	<b>m44</b>
	14	2	37	102	48	203	3.83
	14	4	111	408	240	777	



<b>[You are willing to pay more when a product/service is certified.]</b>						
<b>45</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	9	24	51	85	34	203
	4.4%	11.8%	25.1%	41.9%	16.7%	100.0%
<b>[You make decisions about whether to make a purchase based on the information you have access to.]</b>						
<b>46</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	6	12	27	108	50	203
	3.0%	5.9%	13.3%	53.2%	24.6%	100.0%
<b>[The prices of products/services affect your consumer habits]</b>						
<b>47</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	6	8	34	106	49	203
	3.0%	3.9%	16.7%	52.2%	24.1%	100.0%
<b>[Your risks and level of confidence in the sources of information and the suggestions and ratings provided, influence your purchase choice.]</b>						
<b>48</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	8	9	32	108	46	203
	3.9%	4.4%	15.8%	53.2%	22.7%	100.0%

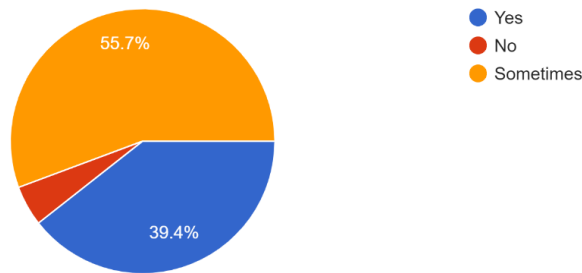
**Calculation: mean score (Q45-Q48)**

45	1	2	3	4	5	<b>Total</b>	<b>m45</b>
	9	24	51	85	34	203	
	9	48	153	340	170	720	3.55
46	1	2	3	4	5	<b>Total</b>	<b>m46</b>
	6	12	27	108	50	203	
	6	24	81	432	250	793	3.91

	1	2	3	4	5	Total	m47
47	6	8	34	106	49	203	3.90
	6	16	102	424	245	793	
	1	2	3	4	5	Total	
48	8	9	32	108	46	203	3.86
	8	18	96	432	230	784	
	1	2	3	4	5	Total	

When making a purchase, do you choose certified products / services?

203 responses



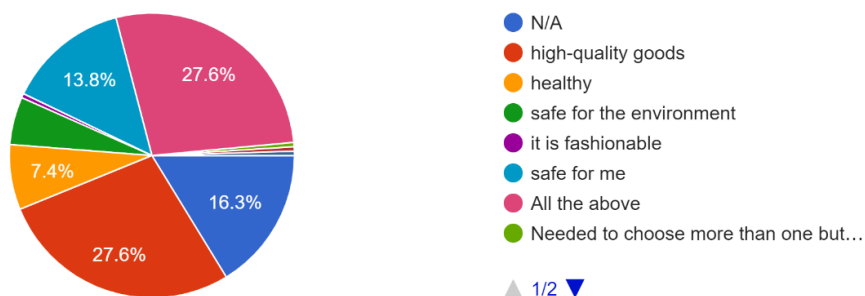
When making a purchase, do you choose certified products/services?				
49	1 - Yes	2 - No	Sometimes	Verification
	80	10	113	203
	39.4%	4.9%	55.7%	100%

Calculation: mean score (Q49)

49	1	2	3	Total	m49
	80	10	113	203	2.16
	80	20	339	439	

If yes, indicate one choice why you prefer certified products / services?

203 responses



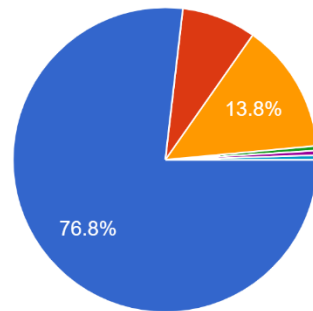
If yes, indicate one choice why you prefer certified products/services?				
50	7	All the above	56	27.6%
	2	high-quality goods	56	27.6%
	1	N/A	33	16.3%
	6	safe for me	28	13.8%
	3	healthy	15	7.4%
	4	safe for the environment	11	5.4%
		Other (All of the above and cruelty-free products)	1	0.5%
		Other (increased confidence (2t total))	1	0.5%
	5	it is fashionable)	1	0.5%
	7	Other (Needed to choose more than one but not all above)	1	0.5%
	<b>Verification</b>			<b>203</b>

Calculation: mean score (Q50)

50	1	2	3	4	5	6	7	8	9	10	Total	m50
	56	56	33	28	15	11	1	1	1	1	203	2.73
	56	112	99	112	75	66	7	8	9	10	554	

### Which product / service do you consider certified?

203 responses



- Those with special label and the certificate number
- Those with a specific label without certified number
- I don't know
- Those that truly make the difference holistically
- Both the first two answers
- certified certificate or written confirmation

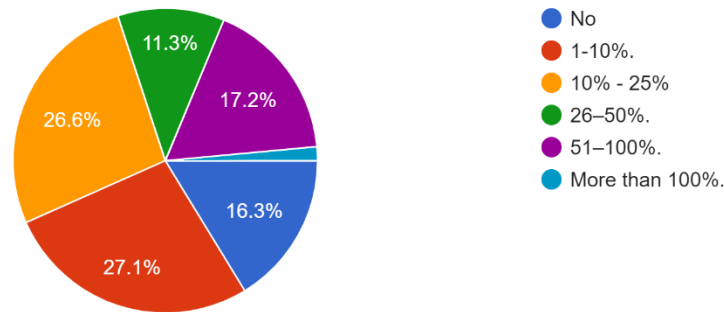
Which product/service do you consider certified?							
51	Those with special labels and the certificate number	I do not know	Those with a specific label without a certified number	Both the first two answers	certified certificate or written confirmation	Those that truly make the difference holistically	Verification
	156	28	16	1	1	1	<b>203</b>
	76.8%	13.8%	7.9%	0.5%	0.5%	0.5%	<b>23.2%</b>

### Calculation: mean score (Q51)

51	1	2	3	4	5	6	Total	m51
	156	28	16	1	1	1	<b>203</b>	<b>1.35</b>
	156	56	48	4	5	6	<b>275</b>	

Are you willing to pay more, for certified goods compared to the usual product / service (in percentage)?

203 responses



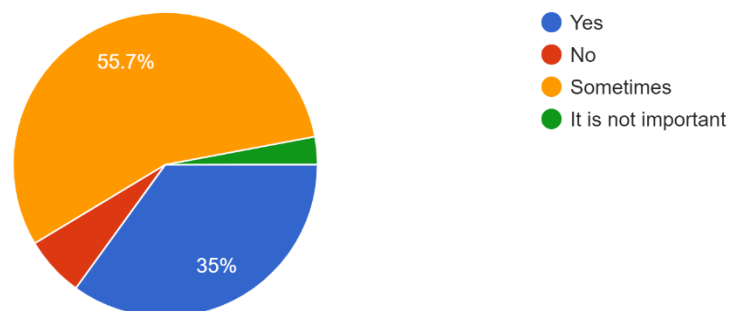
Are you willing to pay more, for certified goods compared to the usual product/service (in %age)?							
	No	10% - 25%	1-10%.	26-50%.	51-100%.	More than 100%.	Verification
<b>52</b>	33	54	55	23	35	3	<b>203</b>
	16.3%	26.6%	27.1%	11.3%	17.2%	1.5%	<b>83.7%</b>

Calculation: mean score (Q51)

	1	2	3	4	5	6	Total	m52
<b>52</b>	33	54	55	23	35	3	<b>203</b>	<b>2.91</b>
	33	108	165	92	175	18	<b>591</b>	

I would read on the label / brochure if a product / service is certified or not before I make a purchase.

203 responses



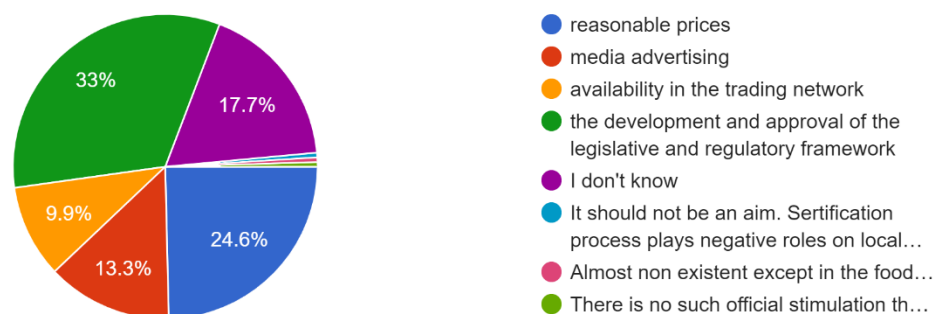
I would read on the label/brochure whether a product/service is certified or not before I make a purchase.					
	1 - Yes	2 - No	3 - Sometimes	4 - It is not Important	Verification
<b>53</b>	71	13	113	6	<b>203</b>
	35.0%	6.4%	55.7%	3.0%	<b>100.0%</b>

**Calculation: mean score (Q53)**

53	1	2	3	4	<b>Total</b>	<b>m53</b>
	71	13	113	6	203	2.27
	71	26	339	24	460	

How, in your opinion, do you stimulate the demand for certified Products / Services in your country?

203 responses



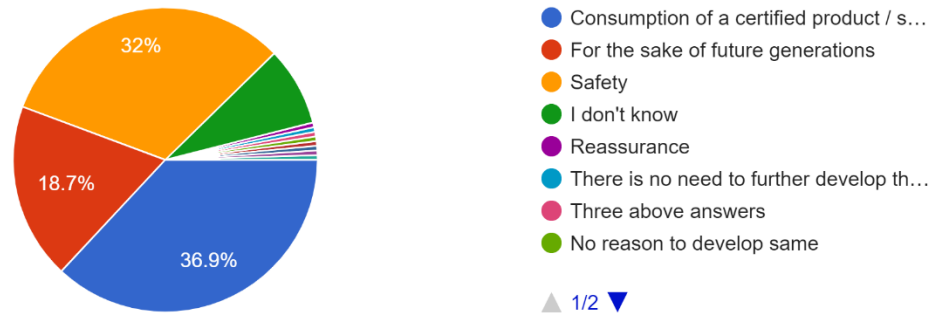
How, in your opinion, do you stimulate the demand for certified products / Services in your country?				
54	1	reasonable prices	50	24.60%
	2	media advertising	27	13.30%
	3	availability in the trading network	20	9.90%
	4	the development and approval of the legislative and regulatory framework	67	33.00%
	5	I don't know	36	17.70%
	6	It should not be an aim. The certification process plays negative role on local SMEs and slows economic growth. Customers are not stupid. If the product is not HQ, it will be not popular. Let us market regulate itself	1	0.50%
	7	Almost non-existent except in the food sector	1	0.50%
	8	There is no such official stimulation of which I am aware. Certified companies just mention it in their advertising.	1	0.50%
	<b>Verification</b>			<b>203</b>

**Calculation: mean score (Q 54)**

54	1	2	3	4	5	6	7	8	<b>Total</b>	<b>m56</b>
	50	27	20	67	36	1	1	1	203	3.12
	50	54	60	268	180	6	7	8	633	

### Why is there a need to further develop a certified product / service?

203 responses



Why is there a need to further develop a certified product/service?				
55	1	Consumption of a certified product/service will ensure a high quality of life nowadays the quality of food is not satisfactory	75	36.90%
	2	For the sake of future generations	38	18.70%
	3	Safety	65	32.00%
	4	I don't know	17	8.40%
	5	Reassurance	1	0.50%
	6	There is no need to further develop the certification	1	0.50%
	7	Three above answers	1	0.50%
	8	No reason to develop the same	1	0.50%
	9	A mix between ensuring a degree of product compliance and quality and force for good.	1	0.50%
	10	I feel that the certification process often, like for environmentally safe products, is just a way to milk more money out of the consumers, because if you have insight into how the products are made, you realize how much is behind some of the certification processes.	1	0.50%
	11	Safety and quality	1	0.50%
	12	To keep the evil out of the equation	1	0.50%
<b>Verification</b>			<b>203</b>	<b>100.00%</b>

#### Calculation: mean score (Q55)

55	1	2	3	4	5	6	7	8	9	10	11	12	<b>Total</b>	<b>m55</b>
	75	38	65	17	1	1	1	1	1	1	1	1	<b>203</b>	<b>2.37</b>
	75	76	195	68	5	6	7	8	9	10	11	12	<b>482</b>	

### What do you think are the current issues in the certified products market?

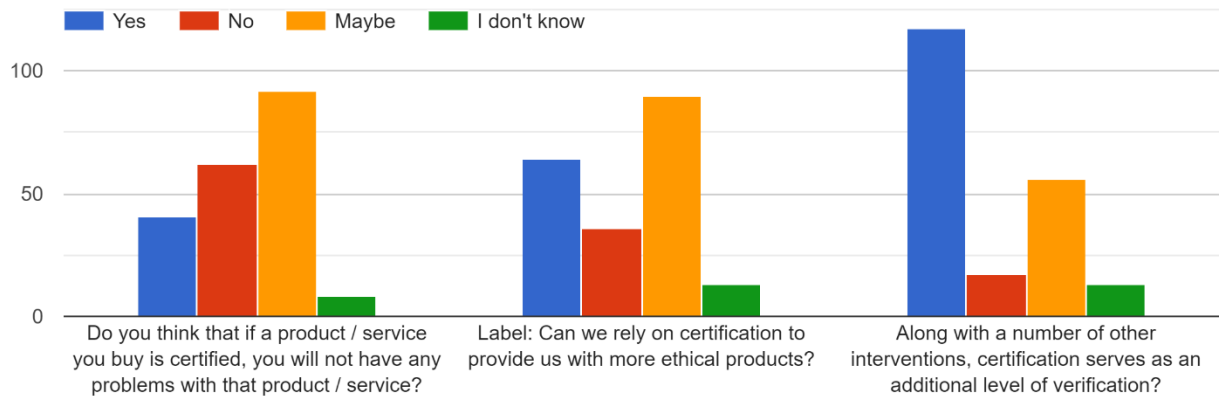
203 responses



56	1	Insufficient awareness of consumers about the concept of "certified goods" and lack of desire to buy them	127	62.60%
	2	Lack of sales channels for products/services	12	5.90%
	3	Absence of a full variety of products/services that consumers would like to see	20	9.90%
	4	Lack of state support	16	7.90%
	5	I don't know	18	8.90%
	6	All the above	1	0.50%
	7	Bribes	1	0.50%
	8	Certification ensures standard business running and good service/product is a result of that. Benefiting business, consumers, and society.	1	0.50%
	9	Lack of Transparency and Lack of information on production, storage, delivery methods as well as sourcing	1	0.50%
	10	A mix between insufficient awareness and state support.	1	0.50%
	1	Organisations that certify companies need revenue, and this leads them to lower their certifying standards.	1	0.50%
	12	people's income limits their choices, e.g., organic products	1	0.50%
	13	higher costs compared to 2n certified products	1	0.50%
	14	There is too much of an economic incentive only to have the product certified, there are no true values behind some of the certified products.	1	0.50%
	15	Three above answers	1	0.50%
<b>Verification</b>			<b>203</b>	<b>100.00%</b>

#### Calculation: mean score (Q56)

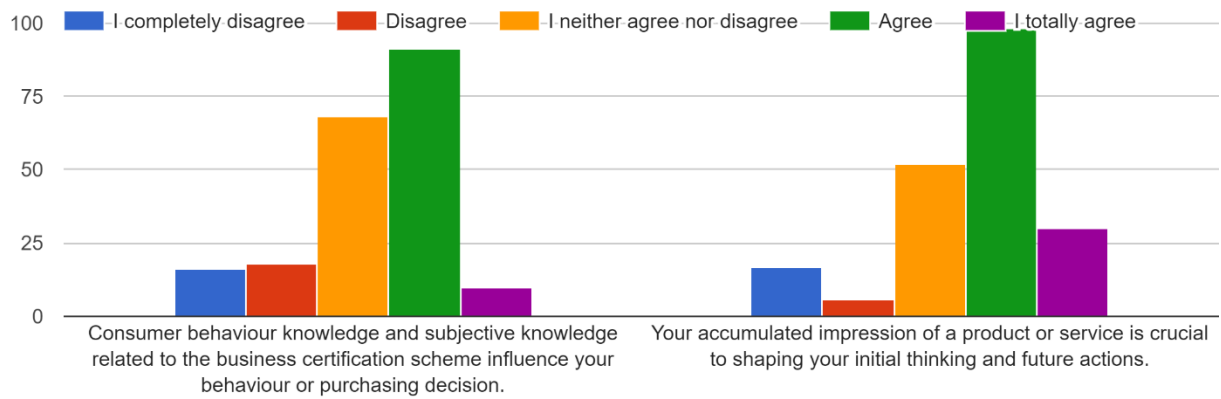
56	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	<b>Total</b>	<b>m56</b>
	127	12	20	16	18	1	1	1	1	1	1	1	1	1	1	<b>203</b>	
	12	254	60	64	90	6	7	8	9	10	11	12	13	14	15	<b>585</b>	



[Do you think that if a product/service you buy is certified, you will not have any problems with that product/service?]					
	1 - Yes	2 - No	3 - Maybe	4 - I don't know	Verification
57	41	62	92	8	203
	20.2%	30.5%	45.3%	3.9%	100%
[Label: Can we rely on certification to provide us with more ethical products?]					
	1 - Yes	2 - No	3 - Maybe	4 - I don't know	Verification
58	64	36	90	13	203
	31.5%	17.7%	44.3%	6.4%	100%
[Along with a number of other interventions, certification serves as an additional level of verification?]					
	1 - Yes	2 - No	3 - Maybe	4 - I don't know	Verification
59	117	17	56	13	203
	57.6%	8.4%	27.6%	6.4%	100%

**Calculation: mean score (Q57-Q59)**

	1	2	3	4	Total	m57
57	41	62	92	8	203	2.33
	41	124	276	32	473	
58	64	36	90	13	203	2.26
	64	72	270	52	458	
59	117	17	56	13	203	1.83
	117	34	168	52	371	

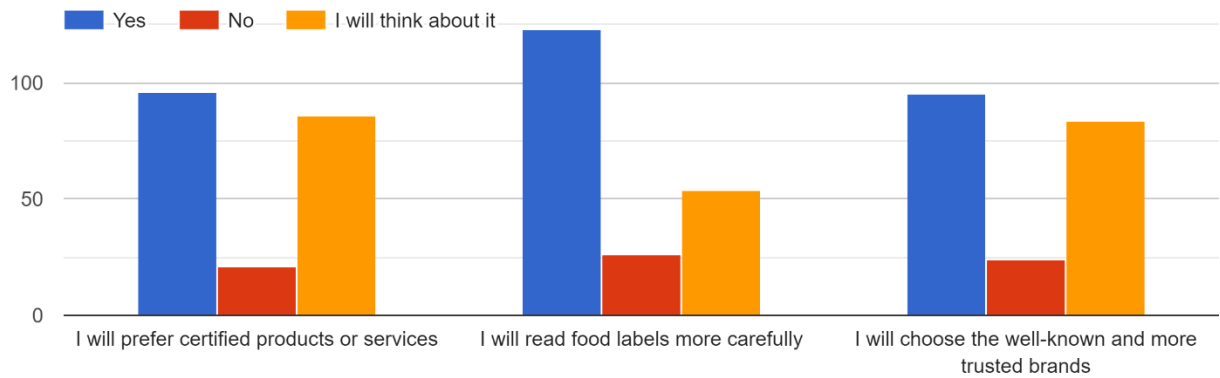


<b>[Consumer behaviour knowledge and subjective knowledge related to the business certification scheme influence your behaviour or purchasing decision.]</b>						
<b>60</b>	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	16	18	68	91	10	<b>203</b>
	7.9%	8.9%	33.5%	44.8%	4.9%	<b>100.0%</b>
<b>[Your accumulated impression of a product or service is crucial to shaping your initial thinking and future actions.]</b>						
<b>61</b>	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	17	6	52	98	30	<b>203</b>
	8.4%	3.0%	25.6%	48.3%	14.8%	<b>100.0%</b>

**Calculation: mean score (Q60-Q61)**

<b>60</b>	1	2	3	4	5	<b>Total</b>	<b>m60</b>
	16	18	68	91	10	<b>203</b>	<b>3.30</b>
	16	36	204	364	50	<b>670</b>	
<b>61</b>	1	2	3	4	5	<b>Total</b>	<b>m61</b>
	17	6	52	98	30	<b>203</b>	<b>3.58</b>
	17	12	156	392	150	<b>727</b>	

After completing this research, how do you plan to change your purchasing behavior in relation to the business certification program?



After completing this research, how do you plan to change your purchasing behaviour in relation to the business certification program?					
62	[I will prefer certified products or services]	1 - Yes	2 - No	3 – I will think about it	Verification
		96	21	86	203
		47.3%	10.3%	42.4%	100.0%
After completing this research, how do you plan to change your purchasing behaviour in relation to the business certification program?					
63	[I will read food labels more carefully]	1 - Yes	2 - No	3 – I will think about it	Verification
		123	26	54	203
		60.6%	12.8%	26.6%	100.0%
After completing this research, how do you plan to change your purchasing behaviour in relation to the business certification program?					
64	[I will choose the well-known and more trusted brands]	1 - Yes	2 - No	3 – I will think about it	Verification
		95	24	84	203
		46.8%	11.8%	41.4%	100.0%

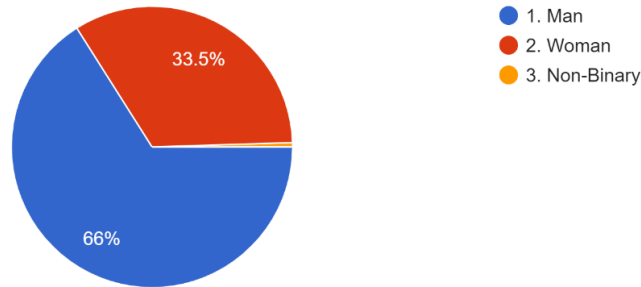
**Calculation: mean score (Q62-Q66)**

62	1	2	3	Total	m62
	96	21	86	203	1.95
	96	42	258	396	
63	1	2	3	Total	m63
	123	26	54	203	1.66
	123	52	162	337	
64	1	2	3	Total	m64
	95	24	84	203	1.95
	95	48	252	395	

## Demographic Results (203 respondents)

What gender are you?

203 responses



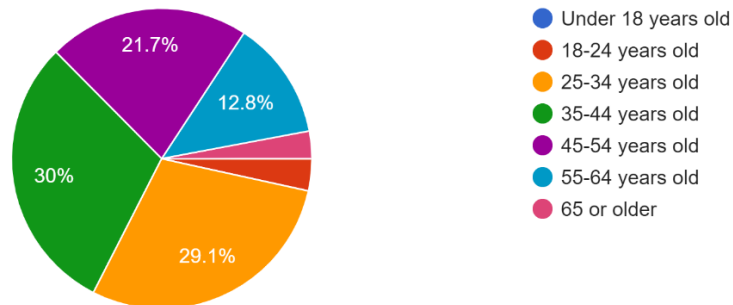
What gender are you?				
	1 – Man	2- Woman	3 – non-Binary	Verification
65	134	68	1	203
	64.0%	34.5%	1.5%	100.0%

### Calculation: mean score (Q65)

	1	2	3	Total	m65
65	134	68	1	203	1.34
	134	136	3	273	

Your age

203 responses



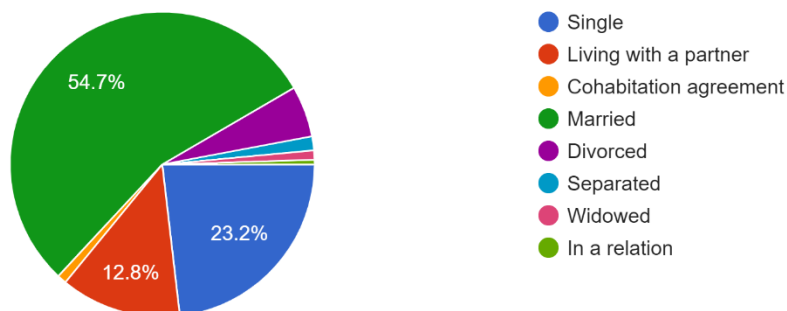
Your age								
	1 – Under 18 years old	2 – 18-24 years old	3 – 25-34 years old	4 – 35-44 years old	5 – 45-54 years old	6 – 55-64 years old	7 – 65 or older	Verification
66	0	7	59	61	44	26	6	203
	0%	3.4%	29.1%	30.0%	21.7%	12.8%	3.0%	15.8%

### Calculation: mean score (Q66)

66	1	2	3	4	5	6	7	<b>Total</b>	<b>m66</b>
	0	7	59	61	44	26	6	<b>203</b>	<b>4.20</b>
	0	14	177	244	220	156	42	<b>853</b>	

### Marital Status

203 responses



Marital Status				
67	1	Single	47	23.2%
	2	Living with a partner	26	12.8%
	3	Cohabitation agreement	2	1.0%
	4	Married	111	54.7%
	5	Divorced	11	5.4%
	6	Separated	3	1.5%
	7	Widowed	2	1.0%
	8	In a relation	1	0.5%
<b>Verification</b>			<b>203</b>	<b>100.0%</b>

### Calculation: mean score (Q67)

67	1	2	3	4	5	6	7	8	<b>Verification</b>	<b>m67</b>
	47	26	2	111	11	3	2	1	<b>203</b>	<b>3.17</b>
	47	52	6	444	55	18	14	8	<b>644</b>	

## What is your Nationality?

203 responses

68	What is your Nationality?		
1	American	3	1.5%
2	American/ Greek	1	0.5%
3	Australian	2	1.0%
4	British	14	6.9%
5	British Cypriot	1	0.5%
6	Bulgarian	1	0.5%
7	Canadian	3	1.5%
8	Congolese	1	0.5%
9	Cypriot	106	52.2%
10	Czechia	1	0.5%
11	Danish	1	0.5%
12	Ethiopian	1	0.5%
13	Filipino	1	0.5%
14	French	3	1.5%
15	German	2	1.0%
16	German/ Cypriot	1	0.5%
17	Greek	30	14.8%
18	Indian	6	3.0%
19	Indonesia	1	0.5%
20	Iranian	1	0.5%
21	Israel	1	0.5%
22	Italian	4	2.0%
23	Lebanese	2	1.0%
24	Maltese	1	0.5%
25	Nigerian	2	1.0%
26	Norwegian	1	0.5%
27	Peruvian	1	0.5%
28	Polish	2	1.0%
29	Serbian	2	1.0%
30	Singaporean	2	1.0%
31	Swedish	1	0.5%
32	Syrian	1	0.5%
33	Turkish	1	0.5%
34	Venezuelan	1	0.5%
35	Zimbabwean	1	0.5%
<b>Total</b>		<b>203</b>	<b>100.0%</b>

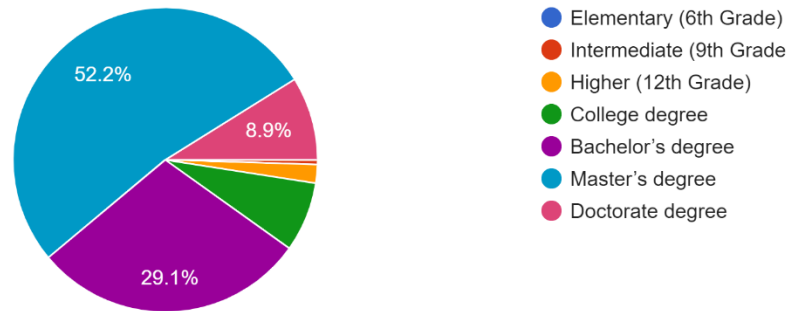
## In which country are you located now?

203 responses

69	In which country are you located now?		
1	Australia	2	1.0%
2	Canada	2	1.0%
3	China	2	1.0%
4	Congo-Brazzaville	1	0.5%
5	Cyprus	124	61.1%
6	Denmark	1	0.5%
7	Ethiopia	1	0.5%
8	France	3	1.5%
9	Germany	4	2.0%
10	Greece	20	9.9%
11	India	1	0.5%
12	Indonesia	1	0.5%
13	Iran	1	0.5%
14	Italy	2	1.0%
15	Lebanon	3	1.5%
16	Malta	3	1.5%
17	Mogadishu	1	0.5%
18	Netherlands	2	1.0%
19	Nigeria	1	0.5%
20	Norway	1	0.5%
21	Perú	1	0.5%
22	Philippines	1	0.5%
23	Republic Of Congo	1	0.5%
24	Saudi Arabia	1	0.5%
25	Singapore	3	1.5%
26	South Africa	1	0.5%
27	Spain	1	0.5%
28	Switzerland	1	0.5%
29	Turkey	1	0.5%
30	United Arab Emirates	3	1.5%
31	United Kingdom	6	3.0%
32	United States	7	3.4%
	<b>Total</b>	<b>203</b>	<b>100.0%</b>

What is the highest degree or level of school you have completed?

203 responses



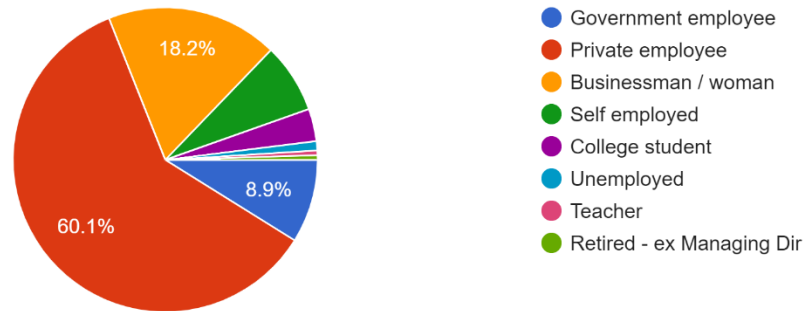
What is the highest degree or level of school you have completed?								
70	Elementary (6 <sup>th</sup> Grade)	Intermediate (9 <sup>th</sup> Grade)	Higher (12 <sup>th</sup> Grade)	College degree	Bachelor's degree	Master's degree	Doctorate degree	Verification
	0	1	4	15	59	106	18	<b>203</b>
	0%	0.50%	2.00%	7.40%	29.10%	52.20%	8.90%	<b>61.10%</b>

Calculation: mean score (Q70)

70	1	2	3	4	5	6	7	Total	m70
	0	1	4	15	59	106	18	<b>203</b>	<b>5.57</b>
	0	2	12	60	295	636	126	<b>1131</b>	

### Employment / Professional situation

203 responses



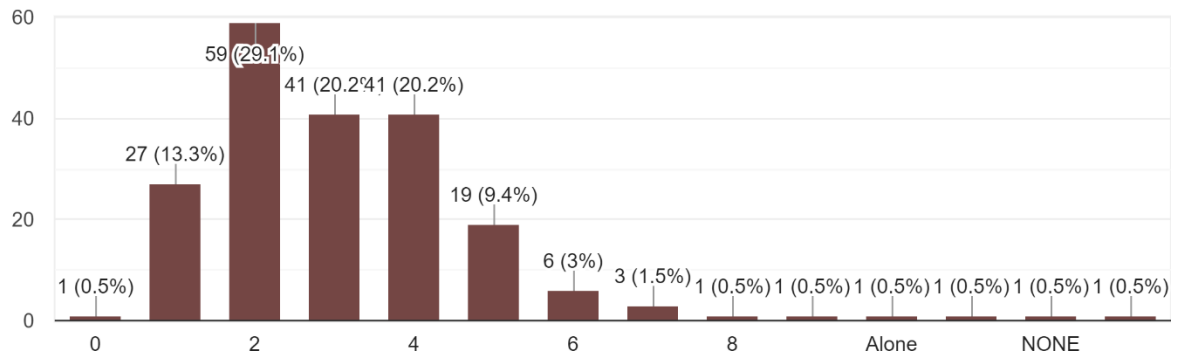
Employment / Professional Situation								
71	1 – Government employee	2 – Private employee	3 – Businessman / woman	4 – Self-employed	5 – College student	6 – Unemployed	7 – Retired – ex Managing Dir	Verification
	19	122	37	15	7	2	1	203
	9.40%	60.10%	18.20%	7.40%	3.40%	1.00%	0.50%	100.00%

### Calculation: mean score (Q71)

71	1	2	3	4	5	6	7	Total	m71
	19	122	37	15	7	2	1	203	2.40
	19	244	111	60	35	12	7	488	

Number (i.e. 1,2,3, etc.) of people living in the house (including you)

203 responses



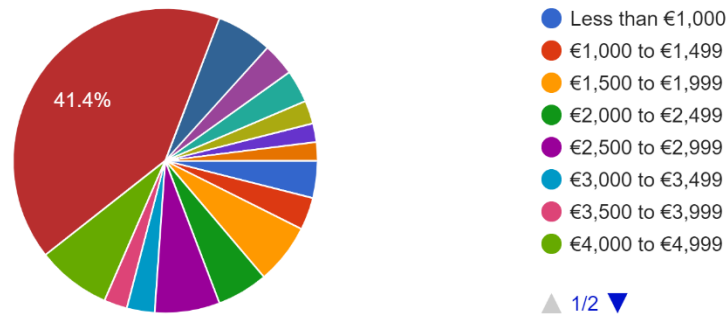
Number (i.e., 1,2,3, etc.) of people living in the house (including you)										
	1	2	3	4	5	6	7	8	12	Verification
<b>72</b>	30	59	41	43	19	6	3	1	1	<b>203</b>
	14.8%	29.1%	20.2%	21.2%	9.4%	3.0%	1.5%	0.5%	0.5%	<b>1.0%</b>

**Calculation: mean score (Q72)**

	1	2	3	4	5	6	7	8	9	10	11	12	Total	m72
<b>72</b>	30	59	41	43	19	6	3	1	0	0	0	1	<b>203</b>	<b>3.03</b>
	30	118	123	172	95	36	21	8	0	0	0	12	<b>615</b>	

What is the monthly income range of your family (total gross monthly income of all family members that contributes in the budget and stay in the same house)?

203 responses



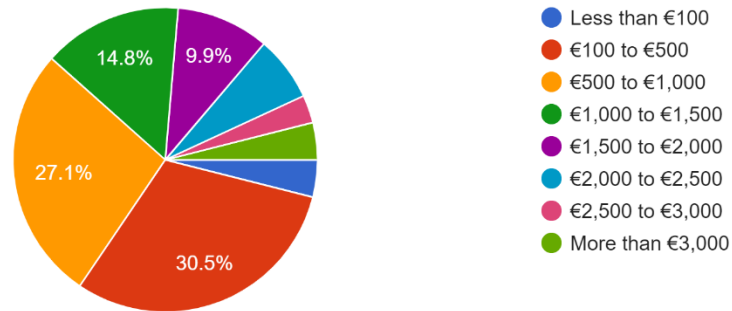
What is the monthly income range of your family (total gross monthly income of all family members that contribute to the budget and stay in the same house)?											
73	Less than €999	€1,000 to €1,499	€1,500 to €1,999	€2,000 to €2,499	€2,500 to €2,999	€3,000 to €3,499	€3,500 to €3,999	€4,000 to €4,999	€4,500 to €5,999	€5,000 and above	Verification
	8	11	20	16	21	18	5	16	4	84	203
	3.9%	5.4%	9.9%	7.9%	10.3%	8.9%	2.5%	7.9%	2.0%	41.4%	43.3%

**Calculation: mean score (Q73)**

73	1	2	3	4	5	6	7	8	9	10	Total	m73
	8	11	20	16	21	18	5	16	4	84	203	6.93
	8	22	60	64	105	108	35	128	36	840	1406	

How much do you spend on shopping every month (as an individual or as a family)?

203 responses



How much do you spend on shopping every month (as an individual or as a family)?							
74	1 – Less than €100	2 - €100 to €500	3 - €500 to €1,000	4 - €1,000 to €1,500	5 - €2,000 to €2,500	6 – More than €3,000	Verification
	8	62	55	50	20	8	<b>203</b>
	3.9%	30.5%	27.1%	24.6%	9.9%	3.9%	<b>13.8%</b>

**Calculation: mean score (Q73)**

74	1	2	3	4	5	6	Total	m74
	8	62	55	50	20	8	<b>203</b>	<b>3.18</b>
	8	124	165	200	100	48	<b>645</b>	

# Appendix C

## Tables for 106 respondents (Cypriot Nationality)

### Section 1

Are you familiar with the Business Certification Scheme?						
1	1 = Not at all familiar	2 = Slightly familiar	3 = Moderately familiar	4 = Very familiar	5 = Extremely familiar	Verification
	33	28	31	13	1	106
	31.1%	26.4%	29.2%	12.3%	0.9%	100.0%

Are you aware of the following ISO standards?				
2	[ISO 9001:no015 – Quality Management]	1	2	Verification
		83	23	106
		78.3%	21.7%	100.0%
3	[ISO 14001:no015 – Environmental Management]	1	2	Verification
		58	48	106
		54.7%	45.3%	100.0%
4	[ISO 45001:no018 – Occupational Health & Safety]			Verification
		70	36	106
		66.0%	34.0%	100.0%
5	[ISO no7001:no017 – Information Security Management]			Verification
		55	51	106
		51.9%	48.1%	100.0%
6	[ISO nono301:no019 – Business Continuity]			Verification
		41	65	106
		38.7%	61.3%	100.0%
7	[ISO 50001:no011 – Energy Management]			Verification
		36	70	106
		34.0%	66.0%	100.0%
8	[ISO 13485:no016 – Medical Devices]			Verification
		18	88	106
		17.0%	83.0%	100.0%
9	[ISO no01no1:no01no – Event Sustainability]			Verification
		21	85	106
		19.8%	80.2%	100.0%
10	[ISO no0000:no018 – IT Service Management]			Verification
		35	71	106
		33.0%	67.0%	100.0%
11	[ISO 6 – Camera Film Speed]			Verification
		9	97	106
		8.5%	91.5%	100.0%

12	[ISO 639 – Language Codes]			<b>Verification</b>
		17	89	<b>106</b>
		16.0%	84.0%	<b>100.0%</b>
13	[ISO 4no17 – Currency Codes]			<b>Verification</b>
		20	86	<b>106</b>
		18.9%	81.1%	<b>100.0%</b>
14	[ISO 8601 – Date and Time format]			<b>Verification</b>
		24	82	<b>106</b>
		22.6%	77.4%	<b>100.0%</b>
15	[ISO 9660 – ISO Images for Computer Files]			<b>Verification</b>
		18	88	<b>106</b>
		17.0%	83.0%	<b>100.0%</b>
16	[ISO 13no16 – ISO Fix Child Seats for Cars]			<b>Verification</b>
		28	78	<b>106</b>
		26.4%	73.6%	<b>100.0%</b>
17	[ISO 13485 – Medical Devices]			<b>Verification</b>
		19	87	<b>106</b>
		17.9%	82.1%	<b>100.0%</b>
18	[ISO 14000 – Family Environmental Management]			<b>Verification</b>
		22	84	<b>106</b>
		20.8%	79.2%	<b>100.0%</b>
19	[ISO/IEC 170no5 – Testing and Calibration Laboratories]			<b>Verification</b>
		23	83	<b>106</b>
		21.7%	78.3%	<b>100.0%</b>
20	[ISO no01no1 – Sustainable Events]			<b>Verification</b>
		25	81	<b>106</b>
		23.6%	76.4%	<b>100.0%</b>
21	[ISO nono000 – Food Safety Management]			<b>Verification</b>
		50	56	<b>106</b>
		47.2%	52.8%	<b>100.0%</b>
22	[ISO no6000 – Social Responsibility]			<b>Verification</b>
		42	64	<b>106</b>
		39.6%	60.4%	<b>100.0%</b>
23	[ISO 31000 – Risk Management]			<b>Verification</b>
		52	54	<b>106</b>
		49.1%	50.9%	<b>100.0%</b>
24	[ISO 37001 – Anti-Bribery Management Systems]			<b>Verification</b>
		34	72	<b>106</b>
		32.1%	67.9%	<b>100.0%</b>

25	[ISO 3166 – Country Codes]			<b>Verification</b>
		25	81	<b>106</b>
		23.6%	76.4%	<b>100.0%</b>
26	[ISO 50001 – Energy Management]			<b>Verification</b>
		31	75	<b>106</b>
		29.2%	70.8%	<b>100.0%</b>

As a Consumer, how important do you think is for you, the Business Certification Schemes, prior to a purchase of a product/service?						
27	1 = Not Important	2 = Slightly Important	3 = Moderately Important	4 = Important	5 = Very Important	<b>Verification</b>
	6	8	25	34	33	<b>106</b>
	5.7%	7.5%	23.6%	32.1%	31.1%	<b>100.0%</b>

Are you aware of the way companies design and manage Business Certification Schemes?			
28	1	2	<b>Verification</b>
	44	62	<b>106</b>
	41.5%	58.5%	<b>100.0%</b>

The business certification schemes:							
29	[strengthen the consumer's critical knowledge and intelligence in measuring perceived risk.]	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
		9	1	22	59	15	<b>106</b>
		8.5%	0.9%	20.8%	55.7%	14.2%	<b>100.0%</b>
The business certification schemes:							
30	[enhancing consumers' knowledge and effectiveness in understanding existing risks and making relevant decisions.]	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
		9	2	19	61	15	<b>106</b>
		8.5%	1.9%	17.9%	57.5%	14.2%	<b>100.0%</b>
The business certification schemes:							
31	[empower consumers' effective decisions and manage to perceive risk significantly.]	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
		9	3	19	56	19	<b>106</b>
		8.5%	2.8%	17.9%	52.8%	17.9%	<b>100.0%</b>

<b>Business certification schemes such as:</b>							
32	[quality standards, guide consumers in order to reduce the risks involved and increase their level of satisfaction with each other.]	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
		6	2	17	57	24	<b>106</b>
		5.7%	1.9%	16.0%	53.8%	22.6%	<b>100.0%</b>
<b>Business certification schemes such as:</b>							
33	[sustainable certification increases the ability of consumers to meet the needs and requirements of sustainability.]	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
		6	0	23	57	20	<b>106</b>
		5.7%	0.0%	21.7%	53.8%	18.9%	<b>100.0%</b>
<b>Business certification schemes such as:</b>							
34	[strategic management allows consumers to acquire the appropriate knowledge of strategic management tools and techniques]	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
		7	2	26	51	20	<b>106</b>
		6.6%	1.9%	24.5%	48.1%	18.9%	<b>100.0%</b>

<b>Providing effective information about business certification schemes can reduce consumers' perception of risk in relation to search costs and lead consumers to make better purchasing decisions.</b>						
35	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	3	2	17	67	17	<b>106</b>
	2.8%	1.9%	16.0%	63.2%	16.0%	<b>100.0%</b>

<b>Perceived Risk of product/service quality has a positive impact:</b>					
36	[On the attitude of consumers towards business certification programs]	1	2	3	<b>Verification</b>
		73	3	30	<b>106</b>
		68.9%	2.8%	28.3%	<b>100.0%</b>
<b>Perceived Risk of product/service quality has a positive impact:</b>					
37	[On the intention to buy from certified companies]	1	2	3	<b>Verification</b>
		76	5	25	<b>106</b>
		71.7%	4.7%	23.6%	<b>100.0%</b>

<b>[The perceived risk in a transaction is reduced by creating a climate of trust.]</b>						
38	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	3	5	19	54	25	<b>106</b>
	2.8%	4.7%	17.9%	50.9%	23.6%	<b>100.0%</b>
<b>[As a consumer, you perceive the increased risks when you have limited understanding and experience of product category, variables, and certifications.]</b>						
39	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	4	5	21	56	20	<b>106</b>
	3.8%	4.7%	19.8%	52.8%	18.9%	<b>100.0%</b>
<b>[The usefulness of information has a positive impact on your perception of risk.]</b>						
40	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	9	7	20	54	16	<b>106</b>
	8.5%	6.6%	18.9%	50.9%	15.1%	<b>100.0%</b>
<b>[Consumers avoid perceived risks by staying true to a brand they were happy with in the past instead of buying new or untested products.]</b>						
41	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	4	2	25	50	25	<b>106</b>
	3.8%	1.9%	23.6%	47.2%	23.6%	<b>100.0%</b>
<b>[Those who perceive high risk are less likely to buy new products or brands and are more likely to stay with their old brands.]</b>						
42	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	4	1	26	55	20	<b>106</b>
	3.8%	0.9%	24.5%	51.9%	18.9%	<b>100.0%</b>
<b>[Consumer risk perception is influenced by the amount at risk in the purchase decision]</b>						
43	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	5	3	33	52	13	<b>106</b>
	4.7%	2.8%	31.1%	49.1%	12.3%	<b>100.0%</b>
<b>[Strong consumer and community trust in a brand can reduce the risk perceived by the consumer.]</b>						
44	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	5	2	17	57	25	<b>106</b>
	4.7%	1.9%	16.0%	53.8%	23.6%	<b>100.0%</b>
<b>[You are willing to pay more when a product / service is certified.]</b>						
45	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	<b>Verification</b>
	2	12	27	44	21	<b>106</b>
	1.9%	11.3%	25.5%	41.5%	19.8%	<b>100.0%</b>

**[You make decisions about whether to make a purchase based on the information you have access to.]**

46	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	Verification
	1	6	14	62	23	106
	0.9%	5.7%	13.2%	58.5%	21.7%	100.0%

**[The prices of products / services affect your consumer habits]**

47	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	Verification
	1	4	20	56	25	106
	0.9%	3.8%	18.9%	52.8%	23.6%	100.0%

**[Your risks and level of confidence in the sources of information and in the suggestions and ratings provided, influence your purchase choice.]**

48	1 – I completely Disagree	2 – Disagree	3 – I neither Agree nor Disagree	4 – Agree	5 – I totally Agree	Verification
	3	3	16	63	21	106
	2.8%	2.8%	15.1%	59.4%	19.8%	100.0%

**When making a purchase, do you choose certified products / services?**

49	1 – Yes	2 – No	Sometimes	Verification
	36	5	65	106
	34.0%	4.7%	61.3%	100%

**If yes, indicate one choice why you prefer certified products / services?**

50	1 - N/A	2 – high-quality goods	3 – healthy	4 – safe for the environment	5 – it is fashionable	6 – safe for me	7 – All the above	8 – Other (All of the above and cruelty free products)	9 – Other (increased confidence not total)	Verification
	17	29	11	5	0	13	29	1	1	106
	16.0%	27.4%	10.4%	4.7%	0.0%	12.3%	27.4%	0.9%	0.9%	100.0%

**Which product / service do you consider certified?**

51	1 – Those with special label and the certificate number	2 – Those with a specific label without certified number	3 – I don't know	4 – Both the first two answers	Verification
	88	5	12	1	106
	83.0%	4.7%	11.3%	0.9%	100.0%

<b>Are you willing to pay more, for certified goods compared to the usual product / service (in %age)?</b>							
<b>52</b>	1 – none	2 – 1-10%.	3 – 11-25%.	4 – 26-50%.	5 – 50-100%.	6 – More than 100%.	<b>Verification</b>
	0	40	30	15	20	1	<b>106</b>
	0.0%	37.7%	28.3%	14.2%	18.9%	0.9%	<b>19.8%</b>

<b>I would read on the label / brochure whether a product / service is certified or not before I make a purchase.</b>					
<b>53</b>	1 – Yes	2 – No	3 – Sometimes	4 – It is not Important	<b>Verification</b>
	38	8	59	1	<b>106</b>
	35.8%	7.5%	55.7%	0.9%	<b>100.0%</b>

<b>How, in your opinion, do you stimulate the demand for certified Products / Services in your country?</b>			
<b>54</b>	1 – reasonable prices	23	21.7%
	2 – media advertising	12	11.3%
	3 – availability in the trading network	11	10.4%
	4 – the development and approval of the legislative and regulatory framework	36	34.0%
	5 – I don't know	22	20.8%
	6 – Almost 2n existent except in the food sector	1	0.9%
	7 – It should not be an aim. Certification process plays negative roles on local SME and slows economic growth. Customers are not stupid. If the product is not HQ, it will be not popular. Let's market regulate itself	1	0.9%
<b>Verification</b>		<b>106</b>	<b>100.0%</b>

<b>Why is there a need to further develop a certified product / service?</b>							
<b>55</b>	1 – Consumption of a certified product/service will ensure a high quality of life nowadays the quality of food is not satisfactory	2 – For the sake of future generations	3 – Safety	4 – I don't know	5 – Other (Reassurance)	6 – Other (Safety and quality)	<b>Verification</b>
	40	20	35	9	1	1	<b>106</b>
	37.7%	18.9%	33.0%	8.5%	0.9%	0.9%	<b>100.0%</b>

<b>What do you think are the current issues in the certified products market?</b>			
56	1 – Insufficient awareness of consumers about the concept of “certified goods” and lack of desire to buy them	69	65.1%
	2 – Lack of sales channels for products / services	7	6.6%
	3 – Absence of a full variety of products / services that consumers would like to see	11	10.4%
	4 – Lack of state support	7	6.6%
	5 – I don’t know	9	8.5%
	6 – Other (All of the above)	1	0.9%
	7 – Other (Lack of Transparency and Lack of information on production, storage, delivery methods as well as sourcing)	1	0.9%
	8 – Other (possibly higher costs compared to non-certified products)	1	0.9%
<b>Verification</b>		<b>106</b>	<b>100.0%</b>

<b>[Do you think that if a product / service you buy is certified, you will not have any problems with that product / service?]</b>					
57	1 - Yes	2 - No	3 - I don't know	4 - Maybe	<b>Verification</b>
	20	31	52	3	<b>106</b>
	18.9%	29.2%	49.1%	2.8%	<b>100.0%</b>
<b>[Label: Can we rely on certification to provide us with more ethical products?]</b>					
58	1 - Yes	2 - No	3 - I don't know	4 - Maybe	<b>Verification</b>
	33	14	53	6	<b>106</b>
	31.1%	13.2%	50.0%	5.7%	<b>100.0%</b>
<b>[Along with a number of other interventions, certification serves as an additional level of verification?]</b>					
59	1 - Yes	2 - No	3 - I don't know	4 - Maybe	<b>Verification</b>
	62	7	33	4	<b>106</b>
	58.5%	6.6%	31.1%	3.8%	<b>100.0%</b>

<b>[Consumer behaviour knowledge and subjective knowledge related to the business certification scheme influence your behaviour or purchasing decision.]</b>						
60	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
	7	7	37	50	5	<b>106</b>
	6.6%	6.6%	34.9%	47.2%	4.7%	<b>100.0%</b>
<b>[Consumer behaviour knowledge and subjective knowledge related to the business certification scheme influence your behaviour or purchasing decision.]</b>						
61	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
	7	4	32	48	15	<b>106</b>
	6.6%	3.8%	30.2%	45.3%	14.2%	<b>100.0%</b>

<b>After completing this research, how do you plan to change your purchasing behaviour in relation to the business certification program?</b>					
<b>62</b>	[I will prefer certified products or services]	1 - Yes	2 - No	3 - I will think about it	<b>Verification</b>
		51	8	47	<b>106</b>
		48.1%	7.5%	44.3%	<b>100.0%</b>
<b>After completing this research, how do you plan to change your purchasing behaviour in relation to the business certification program?</b>					
<b>63</b>	[I will read food labels more carefully]	1 - Yes	2 - No	3 - I will think about it	<b>Verification</b>
		69	9	28	<b>106</b>
		65.1%	8.5%	26.4%	<b>100.0%</b>
<b>After completing this research, how do you plan to change your purchasing behaviour in relation to the business certification program?</b>					
<b>64</b>	[I will choose the well-known and more trusted brands]	1 - Yes	2 - No	3 - I will think about it	<b>Verification</b>
		46	11	49	<b>106</b>
		43.4%	10.4%	46.2%	<b>100.0%</b>

## Tables for 106 respondents (Cypriot Nationality)

### Section B

### Demographic Results

<b>What gender are you?</b>				
<b>65</b>	1 - Man	2- Woman	3 - non-Binary	<b>Verification</b>
	61	44	1	<b>106</b>
	57.5%	41.5%	0.9%	<b>100.0%</b>

<b>Your age</b>								
<b>66</b>	1 – Under 18 years old	2=18-24 years old	3=25-34 years old	4=35-44 years old	5=45-54 years old	6=55-64 years old	7=65 or older	<b>Verification</b>
	0	2	40	29	26	9	0	<b>106</b>
	0.0%	1.9%	37.7%	27.4%	24.5%	8.5%	0.0%	<b>100.0%</b>

<b>Marital Status</b>									
<b>67</b>	1. Single	2. Living with a partner	3. Cohabitation agreement	4. Married	5. Divorced	6. Separated	7. Widowed	8. Other (In a relation)	<b>Verification</b>
	23	20	1	53	6	1	1	1	<b>106</b>
	21.7%	18.9%	0.9%	50.0%	5.7%	0.9%	0.9%	0.9%	<b>100.0%</b>

What is your Nationality?	
68	Cypriot
	106
	100%

In which country are you located now?						
69	China	Cyprus	Netherlands	Uk	United States	Verification
	1	102	1	1	1	106
	0.9%	96.2%	0.9%	0.9%	0.9%	100.0%

What is the highest degree or level of school you have completed?								
70	1 - Elementary (6th Grade)	2 - Intermediate (9th Grade)	3 - Higher (12th Grade)	4 - College degree	5 - Bachelor's degree	6 - Master's degree	7 - Doctorate degree	Verification
	0	0	1	4	33	58	10	106
	0.0%	0.0%	0.9%	3.8%	31.1%	54.7%	9.4%	100.0%

Employment / Professional situation								
71	1 - Government employee	2 - Private employee	3 - Businessman / woman	4 - Self employed	5 - College student	6 - Unemployed	7 - Retired - ex Managing Dir	Verification
	15	64	18	5	1	2	1	106
	14.2%	60.4%	17.0%	4.7%	0.9%	1.9%	0.9%	100.0%

Number (i.e., 1, no.3, etc.) of people living in the house (including you)							
72	1	2	3	4	5	6	Verification
	16	33	28	21	6	2	106
	15.1%	31.1%	26.4%	19.8%	5.7%	1.9%	100.0%

What is the monthly income of your family (total gross monthly income of all family members who contribute to the budget and live in the same house)?			
73	1 - Less than €1,000	3	2.8%
	2 - €1,000 to €1,499	7	6.6%
	3 - €1,500 to €1,999	10	9.4%
	4 - €2,000 to €2,499	7	6.6%
	5 - €2,500 to €2,999	9	8.5%
	6 - €3,000 to €3,499	2	1.9%
	7 - €3,500 to €3,999	10	9.4%
	8 - €4,000 to €4,999	14	13.2%
	9 - €5,000 and above	44	41.5%
<b>Verification</b>		<b>106</b>	<b>100.0%</b>

**How much do you spend on shopping every month (as an individual or as a family)?**

74	Less than €100	3	2.8%
	€100 to €500	37	34.9%
	€500 to €1,000	30	28.3%
	€1,000 to €1,500	14	13.2%
	€1,500 to €2,000	13	12.3%
	€2,000 to €2,500	5	4.7%
	€2,500 to €3,000	3	2.8%
	More than €3,000	1	0.9%
<b>Verification</b>		<b>106</b>	<b>100.0%</b>

# Appendix D

Calculations of the mean score (m) and standard deviation (Sd)  
for 106 respondents (Cypriot Nationality)

1					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	33	33	-1.25	1.57	51.95
2	28	56	-0.25	0.06	1.82
3	31	93	0.75	0.56	17.22
4	13	52	1.75	3.05	39.60
5	1	5	2.75	7.54	7.54
	<b>106</b>	<b>239</b>		<b>12.78</b>	<b>118.12</b>
	<b>Mean</b>	<b>2.25</b>		<b>Variance</b>	<b>1.11</b>

2					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	83	83	-0.22	0.05	3.91
2	23	46	0.78	0.61	14.10
	<b>106</b>	<b>129</b>		<b>0.66</b>	<b>18.01</b>
	<b>Mean</b>	<b>1.22</b>		<b>Variance</b>	<b>0.17</b>

3					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	58	58	-0.45	0.21	11.89
2	48	96	0.55	0.30	14.37
	<b>106</b>	<b>154</b>		<b>0.50</b>	<b>26.26</b>
	<b>Mean</b>	<b>1.45</b>		<b>Variance</b>	<b>0.25</b>

4					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	70	70	-0.34	0.12	8.07
2	36	72	0.66	0.44	15.70
	<b>106</b>	<b>142</b>		<b>0.55</b>	<b>23.77</b>
	<b>Mean</b>	<b>1.34</b>		<b>Variance</b>	<b>0.22</b>

5					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	55	55	-0.48	0.23	12.73
2	51	102	0.52	0.27	13.73
	<b>106</b>	<b>157</b>		<b>0.50</b>	<b>26.46</b>
	<b>Mean</b>	<b>1.48</b>		<b>Variance</b>	<b>0.25</b>

6					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	41	41	-0.61	0.38	15.42
2	65	130	0.39	0.15	9.72
	<b>106</b>	<b>171</b>		<b>0.53</b>	<b>25.14</b>
	<b>Mean</b>	<b>1.61</b>		<b>Variance</b>	<b>0.24</b>

7					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	36	36	-0.66	0.44	15.70
2	70	140	0.34	0.12	8.07
	<b>106</b>	<b>176</b>		<b>0.55</b>	<b>23.77</b>
	<b>Mean</b>	<b>1.66</b>		<b>Variance</b>	<b>0.22</b>

8					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	18	18	-0.83	0.69	12.41
2	88	176	0.17	0.03	2.54
	<b>106</b>	<b>194</b>		<b>0.72</b>	<b>14.94</b>
	<b>Mean</b>	<b>1.83</b>		<b>Variance</b>	<b>0.14</b>

9					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	21	21	-0.80	0.64	13.50
2	85	170	0.20	0.04	3.34
	<b>106</b>	<b>191</b>		<b>0.68</b>	<b>16.84</b>
	<b>Mean</b>	<b>1.80</b>		<b>Variance</b>	<b>0.16</b>

10					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	35	35	-0.67	0.45	15.70
2	71	142	0.33	0.11	7.74
	<b>106</b>	<b>177</b>		<b>0.56</b>	<b>23.44</b>
	<b>Mean</b>	<b>1.67</b>		<b>Variance</b>	<b>0.22</b>

11					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	9	9	-0.92	0.84	7.54
2	97	194	0.08	0.01	0.70
	<b>106</b>	<b>203</b>		<b>0.84</b>	<b>8.24</b>
	<b>Mean</b>	<b>1.92</b>		<b>Variance</b>	<b>0.08</b>

12					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	17	17	-0.84	0.70	11.98
2	89	178	0.16	0.03	2.29
	<b>106</b>	<b>195</b>		<b>0.73</b>	<b>14.27</b>
	<b>Mean</b>	<b>1.84</b>		<b>Variance</b>	<b>0.13</b>

13					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	20	20	-0.81	0.66	13.16
2	86	172	0.19	0.04	3.06
	<b>106</b>	<b>192</b>		<b>0.69</b>	<b>16.23</b>
	<b>Mean</b>	<b>1.81</b>		<b>Variance</b>	<b>0.15</b>

14					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	24	24	-0.77	0.60	14.36
2	82	164	0.23	0.05	4.20
	<b>106</b>	<b>188</b>		<b>0.65</b>	<b>18.57</b>
	<b>Mean</b>	<b>1.77</b>		<b>Variance</b>	<b>0.18</b>

15					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	18	18	-0.83	0.69	12.41
2	88	176	0.17	0.03	2.54
	<b>106</b>	<b>194</b>		<b>0.72</b>	<b>14.94</b>
	<b>Mean</b>	<b>1.83</b>		<b>Variance</b>	<b>0.14</b>

16					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	28	28	-0.74	0.54	15.16
2	78	156	0.26	0.07	5.44
	<b>106</b>	<b>184</b>		<b>0.61</b>	<b>20.60</b>
	<b>Mean</b>	<b>1.74</b>		<b>Variance</b>	<b>0.19</b>

17					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	19	19	-0.82	0.67	12.80
2	87	174	0.18	0.03	2.80
	<b>106</b>	<b>193</b>		<b>0.71</b>	<b>15.59</b>
	<b>Mean</b>	<b>1.82</b>		<b>Variance</b>	<b>0.15</b>

18					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	22	22	-0.79	0.63	13.82
2	84	168	0.21	0.04	3.62
	<b>106</b>	<b>190</b>		<b>0.67</b>	<b>17.43</b>
	<b>Mean</b>	<b>1.79</b>		<b>Variance</b>	<b>0.16</b>

19					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	23	23	-0.78	0.61	14.10
2	83	166	0.22	0.05	3.91
	<b>106</b>	<b>189</b>		<b>0.66</b>	<b>18.01</b>
	<b>Mean</b>	<b>1.78</b>		<b>Variance</b>	<b>0.17</b>

20					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	25	25	-0.76	0.58	14.60
2	81	162	0.24	0.06	4.51
	<b>106</b>	<b>187</b>		<b>0.64</b>	<b>19.10</b>
	<b>Mean</b>	<b>1.76</b>		<b>Variance</b>	<b>0.18</b>

21					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	50	50	-0.53	0.28	13.96
2	56	112	0.47	0.22	12.46
	<b>106</b>	<b>162</b>		<b>0.50</b>	<b>26.42</b>
	<b>Mean</b>	<b>1.53</b>		<b>Variance</b>	<b>0.25</b>

22					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	42	42	-0.60	0.36	15.31
2	64	128	0.40	0.16	10.05
	<b>106</b>	<b>170</b>		<b>0.52</b>	<b>25.36</b>
	<b>Mean</b>	<b>1.60</b>		<b>Variance</b>	<b>0.24</b>

23					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	52	52	-0.51	0.26	13.50
2	54	108	0.49	0.24	13.00
	<b>106</b>	<b>160</b>		<b>0.50</b>	<b>26.49</b>
	<b>Mean</b>	<b>1.51</b>		<b>Variance</b>	<b>0.25</b>

24					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	34	34	-0.68	0.46	15.69
2	72	144	0.32	0.10	7.41
	<b>106</b>	<b>178</b>		<b>0.56</b>	<b>23.09</b>
	<b>Mean</b>	<b>1.68</b>		<b>Variance</b>	<b>0.22</b>

25					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	25	25	-0.76	0.58	14.60
2	81	162	0.24	0.06	4.51
	<b>106</b>	<b>187</b>		<b>0.64</b>	<b>19.10</b>
	<b>Mean</b>	<b>1.76</b>		<b>Variance</b>	<b>0.18</b>

26					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	31	31	-0.71	0.50	15.52
2	75	150	0.29	0.09	6.41
	<b>106</b>	<b>181</b>		<b>0.59</b>	<b>21.93</b>
	<b>Mean</b>	<b>1.71</b>		<b>Variance</b>	<b>0.21</b>

27					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	6	6	-2.75	7.59	45.53
2	8	16	-1.75	3.08	24.63
3	25	75	-0.75	0.57	14.24
4	34	136	0.25	0.06	2.05
5	33	165	1.25	1.55	51.17
	<b>106</b>	<b>398</b>		<b>12.85</b>	<b>137.62</b>
	<b>Mean</b>	<b>3.75</b>		<b>Variance</b>	<b>1.30</b>

28					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	44	44	-0.58	0.34	15.05
2	62	124	0.42	0.17	10.68
	<b>106</b>	<b>168</b>		<b>0.51</b>	<b>25.74</b>
	<b>Mean</b>	<b>1.58</b>		<b>Variance</b>	<b>0.24</b>

29					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	9	9	-2.66	7.08	63.70
2	1	2	-1.66	2.76	2.76
3	22	66	-0.66	0.44	9.59
4	59	236	0.34	0.12	6.81
5	15	75	1.34	1.79	26.92
	<b>106</b>	<b>388</b>		<b>12.18</b>	<b>109.77</b>
	<b>Mean</b>	<b>3.66</b>		<b>Variance</b>	<b>1.04</b>

30					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	9	9	-2.67	7.13	64.15
2	2	4	-1.67	2.79	5.58
3	19	57	-0.67	0.45	8.52
4	61	244	0.33	0.11	6.65
5	15	75	1.33	1.77	26.54
	<b>106</b>	<b>389</b>		<b>12.24</b>	<b>111.44</b>
	<b>Mean</b>	<b>3.67</b>		<b>Variance</b>	<b>1.05</b>

31					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	9	9	-2.69	7.23	65.06
2	3	6	-1.69	2.85	8.55
3	19	57	-0.69	0.47	9.01
4	56	224	0.31	0.10	5.43
5	19	95	1.31	1.72	32.67
	<b>106</b>	<b>391</b>		<b>12.37</b>	<b>120.73</b>
	<b>Mean</b>	<b>3.69</b>		<b>Variance</b>	<b>1.14</b>

32					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	6	6	-2.86	8.17	49.03
2	2	4	-1.86	3.45	6.91
3	17	51	-0.86	0.74	12.53
4	57	228	0.14	0.02	1.14
5	24	120	1.14	1.30	31.27
	<b>106</b>	<b>409</b>		<b>13.69</b>	<b>100.88</b>
	<b>Mean</b>	<b>3.86</b>		<b>Variance</b>	<b>0.95</b>

33					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	6	6	-2.80	7.85	47.10
2	0	0	-1.80	3.25	0.00
3	23	69	-0.80	0.64	14.79
4	57	228	0.20	0.04	2.24
5	20	100	1.20	1.44	28.71
	<b>106</b>	<b>403</b>		<b>13.22</b>	<b>92.84</b>
	<b>Mean</b>	<b>3.80</b>		<b>Variance</b>	<b>0.88</b>

34					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	7	7	-2.71	7.33	51.32
2	2	4	-1.71	2.92	5.83
3	26	78	-0.71	0.50	13.02
4	51	204	0.29	0.09	4.36
5	20	100	1.29	1.67	33.41
	<b>106</b>	<b>393</b>		<b>12.50</b>	<b>107.93</b>
	<b>Mean</b>	<b>3.71</b>		<b>Variance</b>	<b>1.02</b>

35					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	3	3	-2.88	8.28	24.84
2	2	4	-1.88	3.52	7.05
3	17	51	-0.88	0.77	13.09
4	67	268	0.12	0.02	1.01
5	17	85	1.12	1.26	21.43
	<b>106</b>	<b>411</b>		<b>13.85</b>	<b>67.41</b>
	<b>Mean</b>	<b>3.88</b>		<b>Variance</b>	<b>0.64</b>

36					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	73	73	-0.59	0.35	25.79
2	3	6	0.41	0.16	0.49
3	30	90	1.41	1.98	59.28
	<b>106</b>	<b>169</b>		<b>2.49</b>	<b>85.56</b>
	<b>Mean</b>	<b>1.59</b>		<b>Variance</b>	<b>0.81</b>

37					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	76	76	-0.52	0.27	20.46
2	5	10	0.48	0.23	1.16
3	25	75	1.48	2.19	54.84
	<b>106</b>	<b>161</b>		<b>2.69</b>	<b>76.46</b>

	<b>Mean</b>	<b>1.52</b>		<b>Variance</b>	<b>0.72</b>
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38					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	3	3	-2.88	8.28	24.84
2	5	10	-1.88	3.52	17.62
3	19	57	-0.88	0.77	14.63
4	54	216	0.12	0.02	0.81
5	25	125	1.12	1.26	31.51
	<b>106</b>	<b>411</b>		<b>13.85</b>	<b>89.41</b>
	<b>Mean</b>	<b>3.88</b>		<b>Variance</b>	<b>0.84</b>

39					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	4	4	-2.78	7.75	30.98
2	5	10	-1.78	3.18	15.90
3	21	63	-0.78	0.61	12.88
4	56	224	0.22	0.05	2.64
5	20	100	1.22	1.48	29.62
	<b>106</b>	<b>401</b>		<b>13.07</b>	<b>92.01</b>
	<b>Mean</b>	<b>3.78</b>		<b>Variance</b>	<b>0.87</b>

40					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	9	9	-2.58	6.63	59.70
2	7	14	-1.58	2.48	17.37
3	20	60	-0.58	0.33	6.62
4	54	216	0.42	0.18	9.73
5	16	80	1.42	2.03	32.47
	<b>106</b>	<b>379</b>		<b>11.66</b>	<b>125.90</b>
	<b>Mean</b>	<b>3.58</b>		<b>Variance</b>	<b>1.19</b>

41					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	4	4	-2.85	8.12	32.47
2	2	4	-1.85	3.42	6.84
3	25	75	-0.85	0.72	18.02
4	50	200	0.15	0.02	1.14
5	25	125	1.15	1.32	33.12
	<b>106</b>	<b>408</b>		<b>13.60</b>	<b>91.58</b>
	<b>Mean</b>	<b>3.85</b>		<b>Variance</b>	<b>0.86</b>

42					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	4	4	-2.81	7.90	31.61
2	1	2	-1.81	3.28	3.28
3	26	78	-0.81	0.66	17.11
4	55	220	0.19	0.04	1.96
5	20	100	1.19	1.41	28.26
	<b>106</b>	<b>404</b>		<b>13.29</b>	<b>82.23</b>
	<b>Mean</b>	<b>3.81</b>		<b>Variance</b>	<b>0.78</b>

43					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	5	5	-2.61	6.83	34.14
2	3	6	-1.61	2.60	7.81
3	33	99	-0.61	0.38	12.41
4	52	208	0.39	0.15	7.78
5	13	65	1.39	1.92	25.00
	<b>106</b>	<b>383</b>		<b>11.88</b>	<b>87.14</b>
	<b>Mean</b>	<b>3.61</b>		<b>Variance</b>	<b>0.82</b>

44					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	5	5	-2.90	8.39	41.94
2	2	4	-1.90	3.60	7.19
3	17	51	-0.90	0.80	13.65
4	57	228	0.10	0.01	0.61
5	25	125	1.10	1.22	30.46
	<b>106</b>	<b>413</b>		<b>14.02</b>	<b>93.86</b>
	<b>Mean</b>	<b>3.90</b>		<b>Variance</b>	<b>0.89</b>

45					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	2	2	-2.66	7.08	14.16
2	12	24	-1.66	2.76	33.08
3	27	81	-0.66	0.44	11.77
4	44	176	0.34	0.12	5.08
5	21	105	1.34	1.79	37.69
	<b>106</b>	<b>388</b>		<b>12.18</b>	<b>101.77</b>
	<b>Mean</b>	<b>3.66</b>		<b>Variance</b>	<b>0.96</b>

46					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	1	1	-2.94	8.66	8.66
2	6	12	-1.94	3.78	22.66
3	14	42	-0.94	0.89	12.46
4	62	248	0.06	0.00	0.20
5	23	115	1.06	1.12	25.68
	<b>106</b>	<b>418</b>		<b>14.45</b>	<b>69.66</b>
	<b>Mean</b>	<b>3.94</b>		<b>Variance</b>	<b>0.66</b>

47					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	1	1	-2.94	8.66	8.66
2	4	8	-1.94	3.78	15.11
3	20	60	-0.94	0.89	17.80
4	56	224	0.06	0.00	0.18
5	25	125	1.06	1.12	27.91
	<b>106</b>	<b>418</b>		<b>14.45</b>	<b>69.66</b>
	<b>Mean</b>	<b>3.94</b>		<b>Variance</b>	<b>0.66</b>

48					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	3	3	-2.91	8.44	25.33
2	3	6	-1.91	3.63	10.89
3	16	48	-0.91	0.82	13.12
4	63	252	0.09	0.01	0.56
5	21	105	1.09	1.20	25.15
	<b>106</b>	<b>414</b>		<b>14.10</b>	<b>75.06</b>
	<b>Mean</b>	<b>3.91</b>		<b>Variance</b>	<b>0.71</b>

49					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	36	36	-1.27	1.62	58.39
2	5	10	-0.27	0.07	0.37
3	65	195	0.73	0.53	34.30
	<b>106</b>	<b>241</b>		<b>2.22</b>	<b>93.07</b>
	<b>Mean</b>	<b>2.27</b>		<b>Variance</b>	<b>0.88</b>

50					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	17	17	-3.02	9.11	154.93
2	29	58	-2.02	4.08	118.20
3	11	33	-1.02	1.04	11.42
4	5	20	-0.02	0.00	0.00
5	0	0	0.98	0.96	0.00
6	13	78	1.98	3.92	51.02
7	29	203	2.98	8.89	257.73
8	1	8	3.98	15.85	15.85
9	1	9	4.98	24.81	24.81
	<b>106</b>	<b>426</b>		<b>68.66</b>	<b>633.96</b>
	<b>Mean</b>	<b>4.02</b>		<b>Variance</b>	<b>5.98</b>

51					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	88	88	-0.30	0.09	8.02
2	5	10	0.70	0.49	2.44
3	12	36	1.70	2.88	34.60
4	1	4	2.70	7.28	7.28
	<b>106</b>	<b>138</b>		<b>10.74</b>	<b>52.34</b>
	<b>Mean</b>	<b>1.30</b>		<b>Variance</b>	<b>0.49</b>

52					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	0	0	-2.17	4.71	0.00
2	40	80	-1.17	1.37	54.74
3	30	90	-0.17	0.03	0.87
4	15	60	0.83	0.69	10.34
5	20	100	1.83	3.35	66.99
6	1	6	2.83	8.01	8.01
	<b>106</b>	<b>336</b>		<b>18.15</b>	<b>140.94</b>
	<b>Mean</b>	<b>3.17</b>		<b>Variance</b>	<b>1.33</b>

53					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	38	38	-1.22	1.48	56.28
2	8	16	-0.22	0.05	0.38
3	59	177	0.78	0.61	36.17
4	1	4	1.78	3.18	3.18
	<b>106</b>	<b>235</b>		<b>5.32</b>	<b>96.01</b>
	<b>Mean</b>	<b>2.22</b>		<b>Variance</b>	<b>0.91</b>

54					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	23	23	-2.27	5.17	118.89
2	12	24	-1.27	1.62	19.46
3	11	33	-0.27	0.07	0.82
4	36	144	0.73	0.53	19.00
5	22	110	1.73	2.98	65.57
6	1	6	2.73	7.43	7.43
7	1	7	3.73	13.89	13.89
	<b>106</b>	<b>347</b>		<b>31.69</b>	<b>245.07</b>
	<b>Mean</b>	<b>3.27</b>		<b>Variance</b>	<b>2.31</b>

55					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	40	40	-1.19	1.41	56.52
2	20	40	-0.19	0.04	0.71
3	35	105	0.81	0.66	23.04
4	9	36	1.81	3.28	29.53
5	1	5	2.81	7.90	7.90
6	1	6	3.81	14.53	14.53
	<b>106</b>	<b>232</b>		<b>27.82</b>	<b>132.23</b>
	<b>Mean</b>	<b>2.19</b>		<b>Variance</b>	<b>1.25</b>

56					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	69	69	-0.98	0.96	66.42
2	7	14	0.02	0.00	0.00
3	11	33	1.02	1.04	11.42
4	7	28	2.02	4.08	28.53
5	9	45	3.02	9.11	82.02
6	1	6	4.02	16.15	16.15
7	1	7	5.02	25.19	25.19
8	1	8	6.02	36.23	36.23
	<b>106</b>	<b>210</b>		<b>92.76</b>	<b>265.96</b>
	<b>Mean</b>	<b>1.98</b>		<b>Variance</b>	<b>2.51</b>

57					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	20	20	-1.36	1.85	36.91
2	31	62	-0.36	0.13	3.98
3	52	156	0.64	0.41	21.40
4	3	12	1.64	2.69	8.08
	<b>106</b>	<b>250</b>		<b>5.08</b>	<b>70.38</b>

	<b>Mean</b>	<b>2.36</b>		<b>Variance</b>	<b>0.66</b>
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<b>58</b>					
<b>x</b>	<b>Frequency (f)</b>	<b>fx</b>	<b>(x-mean)</b>	<b>(x-mean)<sup>2</sup></b>	<b>f(x-mean)<sup>2</sup></b>
1	33	33	-1.30	1.69	55.93
2	14	28	-0.30	0.09	1.28
3	53	159	0.70	0.49	25.83
4	6	24	1.70	2.88	17.30
	<b>106</b>	<b>244</b>		<b>5.16</b>	<b>100.34</b>
	<b>Mean</b>	<b>2.30</b>		<b>Variance</b>	<b>0.95</b>

<b>59</b>					
<b>x</b>	<b>Frequency (f)</b>	<b>fx</b>	<b>(x-mean)</b>	<b>(x-mean)<sup>2</sup></b>	<b>f(x-mean)<sup>2</sup></b>
1	62	62	-0.80	0.64	39.87
2	7	14	0.20	0.04	0.27
3	33	99	1.20	1.44	47.37
4	4	16	2.20	4.83	19.33
	<b>106</b>	<b>191</b>		<b>6.95</b>	<b>106.84</b>
	<b>Mean</b>	<b>1.80</b>		<b>Variance</b>	<b>1.01</b>

<b>60</b>					
<b>x</b>	<b>Frequency (f)</b>	<b>fx</b>	<b>(x-mean)</b>	<b>(x-mean)<sup>2</sup></b>	<b>f(x-mean)<sup>2</sup></b>
1	7	7	-2.37	5.61	39.25
2	7	14	-1.37	1.87	13.10
3	37	111	-0.37	0.14	5.01
4	50	200	0.63	0.40	19.98
5	5	25	1.63	2.66	13.32
	<b>106</b>	<b>357</b>		<b>10.68</b>	<b>90.65</b>
	<b>Mean</b>	<b>3.37</b>		<b>Variance</b>	<b>0.86</b>

<b>61</b>					
<b>x</b>	<b>Frequency (f)</b>	<b>fx</b>	<b>(x-mean)</b>	<b>(x-mean)<sup>2</sup></b>	<b>f(x-mean)<sup>2</sup></b>
1	7	7	-2.57	6.58	46.09
2	4	8	-1.57	2.45	9.81
3	32	96	-0.57	0.32	10.25
4	48	192	0.43	0.19	9.04
5	15	75	1.43	2.06	30.84
	<b>106</b>	<b>378</b>		<b>11.60</b>	<b>106.04</b>
	<b>Mean</b>	<b>3.57</b>		<b>Variance</b>	<b>1.00</b>

62					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	51	51	-0.96	0.93	47.22
2	8	16	0.04	0.00	0.01
3	47	141	1.04	1.08	50.61
	<b>106</b>	<b>208</b>		<b>2.00</b>	<b>97.85</b>
	<b>Mean</b>	<b>1.96</b>		<b>Variance</b>	<b>0.92</b>

63					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	69	69	-0.61	0.38	25.95
2	9	18	0.39	0.15	1.35
3	28	84	1.39	1.92	53.85
	<b>106</b>	<b>171</b>		<b>2.45</b>	<b>81.14</b>
	<b>Mean</b>	<b>1.61</b>		<b>Variance</b>	<b>0.77</b>

64					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	46	46	-1.03	1.06	48.64
2	11	22	-0.03	0.00	0.01
3	49	147	0.97	0.94	46.27
	<b>106</b>	<b>215</b>		<b>2.00</b>	<b>94.92</b>
	<b>Mean</b>	<b>2.03</b>		<b>Variance</b>	<b>0.90</b>

66					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	0	0	-3.00	9.00	0.00
2	2	4	-2.00	4.00	8.00
3	40	120	-1.00	1.00	40.00
4	29	116	0.00	0.00	0.00
5	26	130	1.00	1.00	26.00
6	9	54	2.00	4.00	36.00
7	0	0	3.00	9.00	0.00
	<b>106</b>	<b>424</b>		<b>28.00</b>	<b>110.00</b>
	<b>Mean</b>	<b>4.00</b>		<b>Variance</b>	<b>1.04</b>

67					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	23	23	-2.10	4.43	101.79
2	20	40	-1.10	1.22	24.37
3	1	3	-0.10	0.01	0.01
4	53	212	0.90	0.80	42.57
5	6	30	1.90	3.60	21.57
6	1	6	2.90	8.39	8.39
7	1	7	3.90	15.18	15.18
8	1	8	4.90	23.97	23.97
	<b>106</b>	<b>329</b>		<b>57.60</b>	<b>237.86</b>
	<b>Mean</b>	<b>3.10</b>		<b>Variance</b>	<b>2.24</b>

68					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	106	106	0.00	0.00	0.00
	<b>106</b>	<b>106</b>		<b>0.00</b>	<b>0.00</b>
	<b>Mean</b>	<b>1.00</b>		<b>Variance</b>	<b>0.00</b>

69					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	1	1	-1.05	1.10	1.10
2	102	204	-0.05	0.00	0.23
3	1	3	0.95	0.91	0.91
4	1	4	1.95	3.81	3.81
5	1	5	2.95	8.72	8.72
	<b>106</b>	<b>217</b>		<b>14.54</b>	<b>14.76</b>
	<b>Mean</b>	<b>2.05</b>		<b>Variance</b>	<b>0.14</b>

70					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	0	0	-4.68	21.90	0.00
2	0	0	-3.68	13.54	0.00
3	1	3	-2.68	7.18	7.18
4	4	16	-1.68	2.82	11.28
5	33	165	-0.68	0.46	15.23
6	58	348	0.32	0.10	5.97
7	10	70	1.32	1.74	17.44
	<b>106</b>	<b>602</b>		<b>47.74</b>	<b>57.09</b>
	<b>Mean</b>	<b>5.68</b>		<b>Variance</b>	<b>0.54</b>

71					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	15	15	-1.27	1.62	24.33
2	64	128	-0.27	0.07	4.79
3	18	54	0.73	0.53	9.50
4	5	20	1.73	2.98	14.90
5	1	5	2.73	7.43	7.43
6	2	12	3.73	13.89	27.77
7	1	7	4.73	22.34	22.34
	<b>106</b>	<b>241</b>		<b>48.86</b>	<b>111.07</b>
	<b>Mean</b>	<b>2.27</b>		<b>Variance</b>	<b>1.05</b>

72					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	16	16	-1.75	3.08	49.26
2	33	66	-0.75	0.57	18.80
3	28	84	0.25	0.06	1.68
4	21	84	1.25	1.55	32.57
5	6	30	2.25	5.04	30.25
6	2	12	3.25	10.53	21.06
	<b>106</b>	<b>292</b>		<b>20.83</b>	<b>153.62</b>
	<b>Mean</b>	<b>2.75</b>		<b>Variance</b>	<b>1.45</b>

73					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	3	3	-1.96	3.85	11.55
2	7	14	-0.96	0.93	6.48
3	10	30	0.04	0.00	0.01
4	7	28	1.04	1.08	7.54
5	9	45	2.04	4.15	37.37
6	2	12	3.04	9.23	18.46
7	10	70	4.04	16.30	163.03
8	14	112	5.04	25.38	355.30
9	44	396	6.04	36.45	1603.99
	<b>106</b>	<b>314</b>		<b>97.37</b>	<b>2203.74</b>
	<b>Mean</b>	<b>2.96</b>		<b>Variance</b>	<b>20.79</b>

74					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	3	3	-2.27	5.17	15.51
2	37	74	-1.27	1.62	60.01
3	30	90	-0.27	0.07	2.25
4	14	56	0.73	0.53	7.39
5	13	65	1.73	2.98	38.75
6	5	30	2.73	7.43	37.17
7	3	21	3.73	13.89	41.66
8	1	8	4.73	22.34	22.34
	<b>106</b>	<b>347</b>		<b>54.03</b>	<b>225.07</b>
	<b>Mean</b>	<b>3.27</b>		<b>Variance</b>	<b>2.12</b>

# Appendix E

## Tables for 97 respondents (Other countries)

### Section A

Are you familiar with the Business Certification Scheme?						
1	1 = Not at all familiar	2 = Slightly familiar	3 = Moderately familiar	4 = Very familiar	5 = Extremely familiar	Verification
	22	32	23	13	7	97
	22.7%	33.0%	23.7%	13.4%	7.2%	100.0%

Are you aware of the following ISO standards?				
2	[ISO 9001:2015 - Quality Management]	1 - Yes	2 - No	Verification
		79	18	97
		81.4%	18.6%	100.0%
3	[ISO 14001:2015 - Environmental Management]	1 - Yes	2 - No	Verification
		59	38	97
		60.8%	39.2%	100.0%
4	[ISO 45001:2018 - Occupational Health & Safety]	1 - Yes	2 - No	Verification
		63	34	97
		64.9%	35.1%	100.0%
5	[ISO 27001:2017 - Information Security Management]	1 - Yes	2 - No	Verification
		44	53	97
		45.4%	54.6%	100.0%
6	[ISO 22301:2019 - Business Continuity]	1 - Yes	2 - No	Verification
		38	59	97
		39.2%	60.8%	100.0%
7	[ISO 50001:2011 - Energy Management]	1 - Yes	2 - No	Verification
		38	59	97
		39.2%	60.8%	100.0%
8	[ISO 13485:2016 - Medical Devices]	1 - Yes	2 - No	Verification
		21	76	97
		21.6%	78.4%	100.0%
9	[ISO 20121:2012 - Event Sustainability]	1 - Yes	2 - No	Verification
		22	75	97
		22.7%	77.3%	100.0%
10	[ISO 20000:2018 - IT Service Management]	1 - Yes	2 - No	Verification
		27	70	97
		27.8%	72.2%	100.0%

11	[ISO 6 - Camera Film Speed]	1 - Yes	2 - No	<b>Verification</b>
		14	83	<b>97</b>
		14.4%	85.6%	<b>100.0%</b>
12	[ISO 639 – Language Codes]	1 - Yes	2 - No	<b>Verification</b>
		20	77	<b>97</b>
		20.6%	79.4%	<b>100.0%</b>
13	[ISO 4217 - Currency Codes]	1 - Yes	2 - No	<b>Verification</b>
		28	69	<b>97</b>
		28.9%	71.1%	<b>100.0%</b>
14	[ISO 8601 - Date and Time format]	1 - Yes	2 - No	<b>Verification</b>
		34	63	<b>97</b>
		35.1%	64.9%	<b>100.0%</b>
15	[ISO 9660 - ISO Images for Computer Files]	1 - Yes	2 - No	<b>Verification</b>
		25	72	<b>97</b>
		25.8%	74.2%	<b>100.0%</b>
16	[ISO 13216 – ISO Fix Child Seats for Cars]	1 - Yes	2 - No	<b>Verification</b>
		26	71	<b>97</b>
		26.8%	73.2%	<b>100.0%</b>
17	[ISO 13485 - Medical Devices]	1 - Yes	2 - No	<b>Verification</b>
		21	76	<b>97</b>
		21.6%	78.4%	<b>100.0%</b>
18	[ISO 14000 – Family Environmental Management]	1 - Yes	2 - No	<b>Verification</b>
		28	69	<b>97</b>
		28.9%	71.1%	<b>100.0%</b>
19	[ISO/IEC 17025 - Testing and Calibration Laboratories]	1 - Yes	2 - No	<b>Verification</b>
		29	68	<b>97</b>
		29.9%	70.1%	<b>100.0%</b>
20	[ISO 20121 - Sustainable Events]	1 - Yes	2 - No	<b>Verification</b>
		21	76	<b>97</b>
		21.6%	78.4%	<b>100.0%</b>
21	[ISO 22000 - Food Safety Management]	1 - Yes	2 - No	<b>Verification</b>
		44	53	<b>97</b>
		45.4%	54.6%	<b>100.0%</b>
22	[ISO 26000 - Social Responsibility]	1 - Yes	2 - No	<b>Verification</b>
		32	65	<b>97</b>
		33.0%	67.0%	<b>100.0%</b>
23	[ISO 31000 - Risk Management]	1 - Yes	2 - No	<b>Verification</b>
		45	52	<b>97</b>
		46.4%	53.6%	<b>100.0%</b>

24	[ISO 37001 - Anti-Bribery Management Systems]	1 - Yes	2 - No	<b>Verification</b>
		35	62	<b>97</b>
		36.1%	63.9%	<b>100.0%</b>
25	[ISO 3166 - Country Codes]	1 - Yes	2 - No	<b>Verification</b>
		34	63	<b>97</b>
		35.1%	64.9%	<b>100.0%</b>
26	[ISO 50001 - Energy Management]	1 - Yes	2 - No	<b>Verification</b>
		30	67	<b>97</b>
		30.9%	69.1%	<b>100.0%</b>

As a Consumer, how important do you think is for you, the Business Certification Schemes, prior to a purchase of a product/service?						
27	1 - Not Important	2 - Slightly Important	3 - Moderately Important	4 - Important	5 - Very Important	<b>Verification</b>
	8	17	18	37	17	<b>97</b>
	8.2%	17.5%	18.6%	38.1%	17.5%	<b>100.0%</b>

Are you aware about the way companies design and manage Business Certification Schemes?			
28	1 - Yes	2 - No	<b>Verification</b>
	47	50	<b>97</b>
	48.5%	51.5%	<b>100.0%</b>

..							
29	[strengthen the consumer's critical knowledge and intelligence in measuring perceived risk.]	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
		9	9	25	35	19	<b>97</b>
		9.3%	9.3%	25.8%	36.1%	19.6%	<b>100.0%</b>

The business certification schemes:							
30	[enhancing consumers' knowledge and effectiveness in understanding existing risks and making relevant decisions.]	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
		8	12	26	34	17	<b>97</b>
		8.2%	12.4%	26.8%	35.1%	17.5%	<b>100.0%</b>

<b>The business certification schemes:</b>							
<b>31</b>	[empower consumers' effective decisions and manage to perceive risk significantly.]	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
		10	10	23	36	18	<b>97</b>
		10.3%	10.3%	23.7%	37.1%	18.6%	<b>100.0%</b>
<b>Business certification schemes such as:</b>							
<b>32</b>	[quality standards, guide consumers in order to reduce the risks involved and increase their level of satisfaction with each other.]	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
		8	9	20	39	21	<b>97</b>
		8.2%	9.3%	20.6%	40.2%	21.6%	<b>100.0%</b>
<b>Business certification schemes such as:</b>							
<b>33</b>	[sustainable certification increases the ability of consumers to meet the needs and requirements of sustainability.]	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
		5	10	21	43	18	<b>97</b>
		5.2%	10.3%	21.6%	44.3%	18.6%	<b>100.0%</b>
<b>Business certification schemes such as:</b>							
<b>34</b>	[strategic management allows consumers to acquire the appropriate knowledge of strategic management tools and techniques]	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
		10	11	21	39	16	<b>97</b>
		10.3%	11.3%	21.6%	40.2%	16.5%	<b>100.0%</b>

**Providing effective information about business certification schemes can reduce consumers' perception of risk in relation to search costs and lead consumers to make better purchasing decisions.**

35	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	30	5	14	46	2	97
	30.9%	5.2%	14.4%	47.4%	2.1%	100.0%

**Perceived Risk of product/service quality has a positive impact:**

36	[On the attitude of consumers towards business certification programs]	1 - Yes	2 - No	3 - Not Sure	Verification
		62	5	30	97
		63.9%	5.2%	30.9%	100.0%

**Perceived Risk of product/service quality has a positive impact:**

37	[On the intention to buy from certified companies]	1 - Yes	2 - No	3 - Not Sure	Verification
		66	5	26	97
		68.0%	5.2%	26.8%	100.0%

**[The perceived risk in a transaction is reduced by creating a climate of trust.]**

38	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	8	3	18	50	18	97
	8.2%	3.1%	18.6%	51.5%	18.6%	100.0%

**[As a consumer, you perceive the increased risks when you have limited understanding and experience of product category, variables, and certifications.]**

39	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	6	10	21	45	15	97
	6.2%	10.3%	21.6%	46.4%	15.5%	100.0%

**[The usefulness of information has a positive impact on your perception of risk.]**

40	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	8	8	19	46	16	97
	8.2%	8.2%	19.6%	47.4%	16.5%	100.0%

**[Consumers avoid perceived risks by staying true to a brand they were happy with in the past instead of buying new or untested products.]**

41	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	11	5	14	44	23	97
	11.3%	5.2%	14.4%	45.4%	23.7%	100.0%

<b>[Those who perceive high risk are less likely to buy new products or brands and are more likely to stay with their old brands.]</b>						
<b>42</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
	7	7	17	48	18	<b>97</b>
	7.2%	7.2%	17.5%	49.5%	18.6%	<b>100.0%</b>
<b>[Consumer risk perception is influenced by the amount at risk in the purchase decision]</b>						
<b>43</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
	8	2	25	46	16	<b>97</b>
	8.2%	2.1%	25.8%	47.4%	16.5%	<b>100.0%</b>
<b>[Strong consumer and community trust in a brand can reduce the risk perceived by the consumer.]</b>						
<b>44</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
	10	0	20	44	23	<b>97</b>
	10.3%	0.0%	20.6%	45.4%	23.7%	<b>100.0%</b>
<b>[You are willing to pay more when a product / service is certified.]</b>						
<b>45</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
	8	12	24	40	13	<b>97</b>
	8.2%	12.4%	24.7%	41.2%	13.4%	<b>100.0%</b>
<b>[You make decisions about whether to make a purchase based on the information you have access to.]</b>						
<b>46</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
	5	7	13	46	26	<b>97</b>
	5.2%	7.2%	13.4%	47.4%	26.8%	<b>100.0%</b>
<b>[The prices of products / services affect your consumer habits]</b>						
<b>47</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
	5	4	14	50	24	<b>97</b>
	5.2%	4.1%	14.4%	51.5%	24.7%	<b>100.0%</b>
<b>[Your risks and level of confidence in the sources of information and in the suggestions and ratings provided, influence your purchase choice.]</b>						
<b>48</b>	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	<b>Verification</b>
	6	6	16	44	25	<b>97</b>
	6.2%	6.2%	16.5%	45.4%	25.8%	<b>100.0%</b>

<b>When making a purchase, do you choose certified products / services?</b>				
	1 - Yes	2 - No	Sometimes	<b>Verification</b>
<b>49</b>	44	5	48	<b>97</b>
	45.4%	5.2%	49.5%	<b>100.0%</b>

<b>If yes, indicate one choice why you prefer certified products / services?</b>									
	1 - N/A	2 - high-quality goods	3 - healthy	4 - safe for the environment	5 - it is fashionable	6 - safe for me	7 - All the above	8 - other (Needed to choose more than one but not all above)	<b>Verification</b>
<b>50</b>	16	27	4	6	1	15	27	1	<b>97</b>
	16.5%	27.8%	4.1%	6.2%	1.0%	15.5%	27.8%	1.0%	<b>100.0%</b>

<b>Which product / service do you consider certified?</b>						
	1 - Those with special label and the certificate number	2 - Those with a specific label without certified number	3 - I don't know	4 - Both the first two answers	5 - certified certificate or written confirmation	<b>Verification</b>
<b>51</b>	69	11	15	1	1	<b>97</b>
	71.1%	11.3%	15.5%	1.0%	1.0%	<b>100.0%</b>

<b>Are you willing to pay more, for certified goods compared to the usual product / service (in %age)?</b>							
	1 - none	2 - 1-10%.	3 - 11-25%.	4 - 26-50%.	5 - 50-100%.	6 - More than 100%.	<b>Verification</b>
<b>52</b>	22	27	23	8	15	2	<b>97</b>
	22.7%	27.8%	23.7%	8.2%	15.5%	2.1%	<b>100.0%</b>

<b>I would read on the label / brochure whether a product / service is certified or not before I make a purchase.</b>					
	1 - Yes	2 - No	3 - Sometimes	4 - It is not Important	<b>Verification</b>
<b>53</b>	33	5	54	5	<b>97</b>
	34.0%	5.2%	55.7%	5.2%	<b>100.0%</b>

<b>How, in your opinion, do you stimulate the demand for certified Products / Services in your country?</b>			
<b>54</b>	1 - reasonable prices	26	26.80%
	2 - media advertising	15	15.50%
	3 - availability in the trading network	9	9.30%
	4 - the development and approval of the legislative and regulatory framework	31	32.00%
	5 - I don't know	14	14.40%
	6 - Almost 2n existent except in the food sector	1	1.00%
	7 - It should not be an aim. Certification process plays negative roles on local SME and slows economic growth. Customers are not stupid. If the product is not HQ, it will be not popular. Let us market regulate itself	1	1.00%
	<b>Verification</b>	<b>97</b>	<b>100.00%</b>

<b>Why is there a need to further develop a certified product / service?</b>			
<b>55</b>	1 - Consumption of a certified product/service will ensure a high quality of life nowadays the quality of food is not satisfactory	36	37.1%
	2 - For the sake of future generations	18	18.6%
	3 - Safety	30	30.9%
	4 - I don't know	8	8.2%
	5 - Other (I feel that the certification process often, like for environmentally safe products, are just a way to milk more money out of the consumers, because if you have insight into how the products are made, you realize how much is behind some of the certification processes)	1	1.0%
	6 - Other (No reason to develop same)	1	1.0%
	7 - Other (There is no need to further develop the certification)	1	1.0%
	8 - Other (Three above answers)	1	1.0%
	9 - Other (To keep the evil out of the equation)	1	1.0%
	<b>Verification</b>	<b>97</b>	<b>100.0%</b>

<b>What do you think are the current issues in the certified products market?</b>			
<b>56</b>	1 - Insufficient awareness of consumers about the concept of "certified goods" and lack of desire to buy them	58	59.8%
	2 - Lack of sales channels for products / services	5	5.2%
	3 - Absence of a full variety of products / services that consumers would like to see	9	9.3%
	4 - Lack of state support	9	9.3%
	5 - I don't know	9	9.3%
	6 - Other (Bribes)	1	1.0%
	7 - Other (Certification ensures standard business running and good service/product is a result of that. Benefiting business, consumer, and society)	1	1.0%
	8 - Other (Mix between insufficient awareness and state support)	1	1.0%
	9 - Other (Organisations that certify companies are in need for revenue, and this leads them to lower their certifying standards)	1	1.0%
	10 - Other (people's income limits their choices, e.g., organic products)	1	1.0%
	11 - Other (There are too much of an economic incentive only to have the product certified, there are no true values behind some of the certified products)	1	1.0%
	12 - Other (Three above answers)	1	1.0%
	<b>Verification</b>	<b>97</b>	<b>100.0%</b>

<b>[Do you think that if a product / service you buy is certified, you will not have any problems with that product / service?]</b>					
<b>57</b>	1 - Yes	2 - No	4 - Maybe	3 - I don't know	<b>Verification</b>
	21	31	40	5	<b>97</b>
	21.6%	32.0%	41.2%	5.2%	<b>100.0%</b>
<b>[Label: Can we rely on certification to provide us with more ethical products?]</b>					
<b>58</b>	1 - Yes	2 - No	4 - Maybe	3 - I don't know	<b>Verification</b>
	31	22	37	7	<b>97</b>
	32.0%	22.7%	38.1%	7.2%	<b>100.0%</b>
<b>[Along with a number of other interventions, certification serves as an additional level of verification?]</b>					
<b>59</b>	1 - Yes	2 - No	4 - Maybe	3 - I don't know	<b>Verification</b>
	55	10	23	9	<b>97</b>
	56.7%	10.3%	23.7%	9.3%	<b>100.0%</b>

**[Consumer behaviour knowledge and subjective knowledge related to the business certification scheme influence your behaviour or purchasing decision.]**

60	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	9	11	31	41	5	97
	9%	11%	32%	42%	5%	100%

**[Consumer behaviour knowledge and subjective knowledge related to the business certification scheme influence your behaviour or purchasing decision.]**

61	1 - I completely Disagree	2 - Disagree	3 - I neither Agree nor Disagree	4 - Agree	5 - I totally Agree	Verification
	10	2	20	50	15	97
	10%	2%	21%	52%	15%	100%

**After completing this research, how do you plan to change your purchasing behaviour in relation to the business certification program?**

62	[I will prefer certified products or services]	1 - Yes	2 - No	3 - I will think about it	Verification
		45	13	39	97
		46.4%	13.4%	40.2%	100%

**After completing this research, how do you plan to change your purchasing behaviour in relation to the business certification program?**

63	[I will read food labels more carefully]	1 - Yes	2 - No	3 - I will think about it	Verification
		54	17	26	97
		55.7%	17.5%	26.8%	100%

**After completing this research, how do you plan to change your purchasing behaviour in relation to the business certification program?**

64	[I will choose the well-known and more trusted brands]	1 - Yes	2 - No	3 - I will think about it	Verification
		49	13	35	97
		50.5%	13.4%	36.1%	100%

## Tables for 97 respondents (Other Nationalities)

### Section B

#### Demographic Results

What gender are you?			
65	1 - Man	2- Woman	<b>Verification</b>
	73	24	<b>97</b>
	75.3%	24.7%	<b>100.0%</b>

Your age								
66	1 – Under 18 years old	2=18-24 years old	3=25-34 years old	4=35-44 years old	5=45-54 years old	6=55-64 years old	7=65 or older	<b>Verification</b>
	0	4	19	33	18	17	6	<b>97</b>
	0.0%	4.1%	19.6%	34.0%	18.6%	17.5%	6.2%	<b>100%</b>
Marital Status								
67	1. Single	2. Living with a partner	3. Cohabitation agreement	4. Married	5. Divorced	6. Separated	7. Widowed	<b>Verification</b>
	23	6	1	59	5	2	1	<b>97</b>
	23.7%	6.2%	1.0%	60.8%	5.2%	2.1%	1.0%	<b>100.0%</b>

		<b>What is your Nationality?</b>		
<b>68</b>	<b>1</b>	American	3	3.1%
	<b>2</b>	American/ Greek	1	1.0%
	<b>3</b>	Australian	2	2.1%
	<b>4</b>	British	14	14.4%
	<b>5</b>	British Cypriot	1	1.0%
	<b>6</b>	Bulgarian	1	1.0%
	<b>7</b>	Canadian	3	3.1%
	<b>8</b>	Congolese	1	1.0%
	<b>9</b>	Czechia	1	1.0%
	<b>10</b>	Danish	1	1.0%
	<b>11</b>	Ethiopian	1	1.0%
	<b>12</b>	Filipino	1	1.0%
	<b>13</b>	French	3	3.1%
	<b>14</b>	German	2	2.1%
	<b>15</b>	German/ Cypriot	1	1.0%
	<b>16</b>	Greek	30	30.9%
	<b>17</b>	Indian	6	6.2%
	<b>18</b>	Indonesia	1	1.0%
	<b>19</b>	Iranian	1	1.0%
	<b>20</b>	Israel	1	1.0%
	<b>21</b>	Italian	4	4.1%
	<b>22</b>	Lebanese	2	2.1%
	<b>23</b>	Maltese	1	1.0%
	<b>24</b>	Nigerian	2	2.1%
	<b>25</b>	Norwegian	1	1.0%
	<b>26</b>	Peruvian	1	1.0%
	<b>27</b>	Polish	2	2.1%
	<b>28</b>	Serbian	2	2.1%
	<b>29</b>	Singaporean	2	2.1%
	<b>30</b>	Swedish	1	1.0%
	<b>31</b>	Syrian	1	1.0%
	<b>32</b>	Turkish	1	1.0%
	<b>33</b>	Venezuelan	1	1.0%
	<b>34</b>	Zimbabwean	1	1.0%
		Verification	97	100.0%

In which country are you located now?				
69	1	Australia	2	2.1%
	2	Canada	2	2.1%
	3	China	1	1.0%
	4	Congo-Brazzaville	1	1.0%
	5	Cyprus	22	22.7%
	6	Denmark	1	1.0%
	7	Ethiopia	1	1.0%
	8	France	3	3.1%
	9	Germany	4	4.1%
	10	Greece	20	20.6%
	11	India	1	1.0%
	12	Indonesia	1	1.0%
	13	Iran	1	1.0%
	14	Italy	2	2.1%
	15	Lebanon	3	3.1%
	16	Malta	3	3.1%
	17	Mogadishu	1	1.0%
	18	Netherlands	1	1.0%
	19	Nigeria	1	1.0%
	20	Norway	1	1.0%
	21	Perú	1	1.0%
	22	Philippines	1	1.0%
	23	Republic Of Congo	1	1.0%
	24	Saudi Arabia	1	1.0%
	25	Singapore	3	3.1%
	26	South Africa	1	1.0%
	27	Spain	1	1.0%
	28	Switzerland	1	1.0%
	29	Turkey	1	1.0%
	30	United Arab Emirates	3	3.1%
	31	United Kingdom	4	4.1%
	32	United States	6	6.2%
	33	Wales	1	1.0%
Verification			97	100.0%

What is the highest degree or level of school you have completed?								
70	1 - Elementary (6th Grade)	2 - Intermediate (9th Grade)	3 - Higher (12th Grade)	4 - College degree	5 - Bachelor's degree	6 - Master's degree	7 - Doctorate degree	Verification
	0	0	4	11	26	47	9	97
	0.0%	0.0%	4.1%	11.3%	26.8%	48.5%	9.3%	100.0%

Employment / Professional situation								Verification
71	1 - Government employee	2 - Private employee	3 - Businessman / woman	4 - Self employed	5 - College student	6 - Unemployed	7 - Retired - ex Managing Dir	
	4	57	19	10	5	1	1	97
	4.1%	58.8%	19.6%	10.3%	5.2%	1.0%	1.0%	100.0%

Number (i.e., 1, no,3, etc.) of people living in the house (including you)														Verification
72	1	2	3	4	5	6	7	8	9	10	11	12		
	14	26	13	22	12	5	3	1	0	0	0	1	97	
	14.4%	26.8%	13.4%	22.7%	12.4%	5.2%	3.1%	1.0%	0.0%	0.0%	0.0%	1.0%	100.0%	

What is the monthly income range of your family (total gross monthly income of all family members that contributes to the budget and stay in the same house)?					
73	1	Less than €999		5	5.2%
	2	€1,000 to €1,499		4	4.1%
	3	€1,500 to €1,999		10	10.3%
	4	€2,000 to €2,499		9	9.3%
	5	€2,500 to €2,999		12	12.4%
	6	€3,000 to €3,499		9	9.3%
	7	€3,500 to €3,999		2	2.1%
	8	€4,000 to €4,999		6	6.2%
	9	€5,000 and above		40	41.2%
<b>Verification</b>			<b>97</b>	<b>100.0%</b>	

How much do you spend on shopping every month (as an individual or as a family)?					
74	1	Less than €100		5	5.2%
	2	€100 to €499		24	24.7%
	3	€500 to €999		25	25.8%
	4	€1,000 to €1,499		16	16.5%
	5	€1,500 to €1,999		7	7.2%
	6	€2,000 to €2,499		9	9.3%
	7	€2,500 to €2,999		4	4.1%
	8	More than €3,000		7	7.2%
<b>Verification</b>			<b>97</b>	<b>100.0%</b>	

# *Appendix F*

**Calculations of the mean score (m) and standard deviation (Sd)  
for 97 respondents (Other Nationalities)**

<b>1</b>					
<b>x</b>	<b>Frequency (f)</b>	<b>fx</b>	<b>(x-mean)</b>	<b>(x-mean)<sup>2</sup></b>	<b>f(x-mean)<sup>2</sup></b>
1	22	22	-1.49	2.23	49.16
2	32	64	-0.49	0.24	7.84
3	23	69	0.51	0.26	5.87
4	13	52	1.51	2.27	29.45
5	7	35	2.51	6.28	43.93
	<b>97</b>	<b>242</b>		<b>11.28</b>	<b>136.25</b>
	<b>Mean</b>	<b>2.49</b>		<b>Variance</b>	<b>1.40</b>

<b>2</b>					
<b>x</b>	<b>Frequency (f)</b>	<b>fx</b>	<b>(x-mean)</b>	<b>(x-mean)<sup>2</sup></b>	<b>f(x-mean)<sup>2</sup></b>
1	79	79	-0.19	0.03	2.72
2	18	36	0.81	0.66	11.94
	<b>97</b>	<b>115</b>		<b>0.70</b>	<b>14.66</b>
	<b>Mean</b>	<b>1.19</b>		<b>Variance</b>	<b>0.15</b>

<b>3</b>					
<b>x</b>	<b>Frequency (f)</b>	<b>fx</b>	<b>(x-mean)</b>	<b>(x-mean)<sup>2</sup></b>	<b>f(x-mean)<sup>2</sup></b>
1	59	59	-0.39	0.15	9.05
2	38	76	0.61	0.37	14.06
	<b>97</b>	<b>135</b>		<b>0.52</b>	<b>23.11</b>
	<b>Mean</b>	<b>1.39</b>		<b>Variance</b>	<b>0.24</b>

<b>4</b>					
<b>x</b>	<b>Frequency (f)</b>	<b>fx</b>	<b>(x-mean)</b>	<b>(x-mean)<sup>2</sup></b>	<b>f(x-mean)<sup>2</sup></b>
1	63	63	-0.35	0.12	7.74
2	34	68	0.65	0.42	14.34
	<b>97</b>	<b>131</b>		<b>0.54</b>	<b>22.08</b>
	<b>Mean</b>	<b>1.35</b>		<b>Variance</b>	<b>0.23</b>

<b>5</b>					
<b>x</b>	<b>Frequency (f)</b>	<b>fx</b>	<b>(x-mean)</b>	<b>(x-mean)<sup>2</sup></b>	<b>f(x-mean)<sup>2</sup></b>
1	44	44	-0.55	0.30	13.14
2	53	106	0.45	0.21	10.91
	<b>97</b>	<b>150</b>		<b>0.50</b>	<b>24.04</b>
	<b>Mean</b>	<b>1.55</b>		<b>Variance</b>	<b>0.25</b>

6					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	38	38	-0.61	0.37	14.06
2	59	118	0.39	0.15	9.05
	<b>97</b>	<b>156</b>		<b>0.52</b>	<b>23.11</b>
	<b>Mean</b>	<b>1.61</b>		<b>Variance</b>	<b>0.24</b>

7					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	38	38	-0.61	0.37	14.06
2	59	118	0.39	0.15	9.05
	<b>97</b>	<b>156</b>		<b>0.52</b>	<b>23.11</b>
	<b>Mean</b>	<b>1.61</b>		<b>Variance</b>	<b>0.24</b>

8					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	21	21	-0.78	0.61	12.89
2	76	152	0.22	0.05	3.56
	<b>97</b>	<b>173</b>		<b>0.66</b>	<b>16.45</b>
	<b>Mean</b>	<b>1.78</b>		<b>Variance</b>	<b>0.17</b>

9					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	22	22	-0.77	0.60	13.15
2	75	150	0.23	0.05	3.86
	<b>97</b>	<b>172</b>		<b>0.65</b>	<b>17.01</b>
	<b>Mean</b>	<b>1.77</b>		<b>Variance</b>	<b>0.18</b>

10					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	27	27	-0.72	0.52	14.06
2	70	140	0.28	0.08	5.42
	<b>97</b>	<b>167</b>		<b>0.60</b>	<b>19.48</b>
	<b>Mean</b>	<b>1.72</b>		<b>Variance</b>	<b>0.20</b>

11					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	14	14	-0.86	0.73	10.25
2	83	166	0.14	0.02	1.73
	<b>97</b>	<b>180</b>		<b>0.75</b>	<b>11.98</b>
	<b>Mean</b>	<b>1.86</b>		<b>Variance</b>	<b>0.12</b>

12					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	20	20	-0.79	0.63	12.60
2	77	154	0.21	0.04	3.27
	<b>97</b>	<b>174</b>		<b>0.67</b>	<b>15.88</b>
	<b>Mean</b>	<b>1.79</b>		<b>Variance</b>	<b>0.16</b>

13					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	28	28	-0.71	0.51	14.17
2	69	138	0.29	0.08	5.75
	<b>97</b>	<b>166</b>		<b>0.59</b>	<b>19.92</b>
	<b>Mean</b>	<b>1.71</b>		<b>Variance</b>	<b>0.21</b>

14					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	34	34	-0.65	0.42	14.34
2	63	126	0.35	0.12	7.74
	<b>97</b>	<b>160</b>		<b>0.54</b>	<b>22.08</b>
	<b>Mean</b>	<b>1.65</b>		<b>Variance</b>	<b>0.23</b>

15					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	25	25	-0.74	0.55	13.77
2	72	144	0.26	0.07	4.78
	<b>97</b>	<b>169</b>		<b>0.62</b>	<b>18.56</b>
	<b>Mean</b>	<b>1.74</b>		<b>Variance</b>	<b>0.19</b>

16					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	26	26	-0.73	0.54	13.93
2	71	142	0.27	0.07	5.10
	<b>97</b>	<b>168</b>		<b>0.61</b>	<b>19.03</b>
	<b>Mean</b>	<b>1.73</b>		<b>Variance</b>	<b>0.20</b>

17					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	21	21	-0.78	0.61	12.89
2	76	152	0.22	0.05	3.56
	<b>97</b>	<b>173</b>		<b>0.66</b>	<b>16.45</b>
	<b>Mean</b>	<b>1.78</b>		<b>Variance</b>	<b>0.17</b>

18					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	28	28	-0.71	0.51	14.17
2	69	138	0.29	0.08	5.75
	<b>97</b>	<b>166</b>		<b>0.59</b>	<b>19.92</b>
	<b>Mean</b>	<b>1.71</b>		<b>Variance</b>	<b>0.21</b>

19					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	29	29	-0.70	0.49	14.25
2	68	136	0.30	0.09	6.08
	<b>97</b>	<b>165</b>		<b>0.58</b>	<b>20.33</b>
	<b>Mean</b>	<b>1.70</b>		<b>Variance</b>	<b>0.21</b>

20					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	21	21	-0.78	0.61	12.89
2	76	152	0.22	0.05	3.56
	<b>97</b>	<b>173</b>		<b>0.66</b>	<b>16.45</b>
	<b>Mean</b>	<b>1.78</b>		<b>Variance</b>	<b>0.17</b>

21					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	44	44	-0.55	0.30	13.14
2	53	106	0.45	0.21	10.91
	<b>97</b>	<b>150</b>		<b>0.50</b>	<b>24.04</b>
	<b>Mean</b>	<b>1.55</b>		<b>Variance</b>	<b>0.25</b>

22					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	32	32	-0.67	0.45	14.37
2	65	130	0.33	0.11	7.07
	<b>97</b>	<b>162</b>		<b>0.56</b>	<b>21.44</b>
	<b>Mean</b>	<b>1.67</b>		<b>Variance</b>	<b>0.22</b>

23					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	45	45	-0.54	0.29	12.93
2	52	104	0.46	0.22	11.19
	<b>97</b>	<b>149</b>		<b>0.50</b>	<b>24.12</b>
	<b>Mean</b>	<b>1.54</b>		<b>Variance</b>	<b>0.25</b>

24					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	35	35	-0.64	0.41	14.30
2	62	124	0.36	0.13	8.07
	<b>97</b>	<b>159</b>		<b>0.54</b>	<b>22.37</b>
	<b>Mean</b>	<b>1.64</b>		<b>Variance</b>	<b>0.23</b>

25					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	34	34	-0.65	0.42	14.34
2	63	126	0.35	0.12	7.74
	<b>97</b>	<b>160</b>		<b>0.54</b>	<b>22.08</b>
	<b>Mean</b>	<b>1.65</b>		<b>Variance</b>	<b>0.23</b>

26					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	30	30	-0.69	0.48	14.31
2	67	134	0.31	0.10	6.41
	<b>97</b>	<b>164</b>		<b>0.57</b>	<b>20.72</b>
	<b>Mean</b>	<b>1.69</b>		<b>Variance</b>	<b>0.21</b>

27					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	8	8	-2.39	5.72	45.76
2	17	34	-1.39	1.94	32.93
3	18	54	-0.39	0.15	2.76
4	37	148	0.61	0.37	13.69
5	17	85	1.61	2.59	43.97
	<b>97</b>	<b>329</b>		<b>10.77</b>	<b>139.11</b>
	<b>Mean</b>	<b>3.39</b>		<b>Variance</b>	<b>1.43</b>

28					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	47	47	-0.52	0.27	12.49
2	50	100	0.48	0.23	11.74
	<b>97</b>	<b>147</b>		<b>0.50</b>	<b>24.23</b>
	<b>Mean</b>	<b>1.52</b>		<b>Variance</b>	<b>0.25</b>

29					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	9	9	-2.47	6.12	55.10
2	9	18	-1.47	2.17	19.56
3	25	75	-0.47	0.22	5.62
4	35	140	0.53	0.28	9.68
5	19	95	1.53	2.33	44.23
	<b>97</b>	<b>337</b>		<b>11.12</b>	<b>134.19</b>
	<b>Mean</b>	<b>3.47</b>		<b>Variance</b>	<b>1.38</b>

30					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	8	8	-2.41	5.82	46.56
2	12	24	-1.41	1.99	23.94
3	26	78	-0.41	0.17	4.42
4	34	136	0.59	0.35	11.74
5	17	85	1.59	2.52	42.85
	<b>97</b>	<b>331</b>		<b>10.85</b>	<b>129.51</b>
	<b>Mean</b>	<b>3.41</b>		<b>Variance</b>	<b>1.34</b>

31					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	10	10	-2.43	5.92	59.19
2	10	20	-1.43	2.05	20.53
3	23	69	-0.43	0.19	4.31
4	36	144	0.57	0.32	11.57
5	18	90	1.57	2.46	44.20
	<b>97</b>	<b>333</b>		<b>10.94</b>	<b>139.81</b>
	<b>Mean</b>	<b>3.43</b>		<b>Variance</b>	<b>1.44</b>

32					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	8	8	-2.58	6.64	53.14
2	9	18	-1.58	2.49	22.39
3	20	60	-0.58	0.33	6.67
4	39	156	0.42	0.18	6.97
5	21	105	1.42	2.02	42.50
	<b>97</b>	<b>347</b>		<b>11.67</b>	<b>131.67</b>
	<b>Mean</b>	<b>3.58</b>		<b>Variance</b>	<b>1.36</b>

33					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	5	5	-2.61	6.80	34.01
2	10	20	-1.61	2.59	25.86
3	21	63	-0.61	0.37	7.77
4	43	172	0.39	0.15	6.60
5	18	90	1.39	1.94	34.87
	<b>97</b>	<b>350</b>		<b>11.85</b>	<b>109.11</b>
	<b>Mean</b>	<b>3.61</b>		<b>Variance</b>	<b>1.12</b>

34					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	10	10	-2.41	5.82	58.20
2	11	22	-1.41	1.99	21.94
3	21	63	-0.41	0.17	3.57
4	39	156	0.59	0.35	13.47
5	16	80	1.59	2.52	40.33
	<b>97</b>	<b>331</b>		<b>10.85</b>	<b>137.51</b>
	<b>Mean</b>	<b>3.41</b>		<b>Variance</b>	<b>1.42</b>

35					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	30	30	-1.85	3.41	102.16
2	5	10	-0.85	0.71	3.57
3	14	42	0.15	0.02	0.33
4	46	184	1.15	1.33	61.33
5	2	10	2.15	4.64	9.28
	<b>97</b>	<b>276</b>		<b>10.12</b>	<b>176.68</b>
	<b>Mean</b>	<b>2.85</b>		<b>Variance</b>	<b>1.82</b>

36					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	62	62	-0.67	0.45	27.84
2	5	10	0.33	0.11	0.54
3	30	90	1.33	1.77	53.06
	<b>97</b>	<b>162</b>		<b>2.33</b>	<b>81.44</b>
	<b>Mean</b>	<b>1.67</b>		<b>Variance</b>	<b>0.84</b>

37					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	66	66	-0.59	0.35	22.79
2	5	10	0.41	0.17	0.85
3	26	78	1.41	1.99	51.86
	<b>97</b>	<b>154</b>		<b>2.51</b>	<b>75.51</b>
	<b>Mean</b>	<b>1.59</b>		<b>Variance</b>	<b>0.78</b>

38					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	8	8	-2.69	7.24	57.92
2	3	6	-1.69	2.86	8.58
3	18	54	-0.69	0.48	8.59
4	50	200	0.31	0.10	4.78
5	18	90	1.31	1.71	30.86
	<b>97</b>	<b>358</b>		<b>12.39</b>	<b>110.72</b>
	<b>Mean</b>	<b>3.69</b>		<b>Variance</b>	<b>1.14</b>

39					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	6	6	-2.55	6.48	38.90
2	10	20	-1.55	2.39	23.91
3	21	63	-0.55	0.30	6.27
4	45	180	0.45	0.21	9.26
5	15	75	1.45	2.11	31.69
	<b>97</b>	<b>344</b>		<b>11.49</b>	<b>110.04</b>
	<b>Mean</b>	<b>3.55</b>		<b>Variance</b>	<b>1.13</b>

40					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	8	8	-2.56	6.54	52.29
2	8	16	-1.56	2.42	19.39
3	19	57	-0.56	0.31	5.89
4	46	184	0.44	0.20	9.04
5	16	80	1.44	2.08	33.33
	<b>97</b>	<b>345</b>		<b>11.55</b>	<b>119.94</b>
	<b>Mean</b>	<b>3.56</b>		<b>Variance</b>	<b>1.24</b>

41					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	11	11	-2.65	7.02	77.22
2	5	10	-1.65	2.72	13.60
3	14	42	-0.65	0.42	5.91
4	44	176	0.35	0.12	5.41
5	23	115	1.35	1.82	41.95
	<b>97</b>	<b>354</b>		<b>12.11</b>	<b>144.08</b>
	<b>Mean</b>	<b>3.65</b>		<b>Variance</b>	<b>1.49</b>

42					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	7	7	-2.65	7.02	49.14
2	7	14	-1.65	2.72	19.05
3	17	51	-0.65	0.42	7.17
4	48	192	0.35	0.12	5.90
5	18	90	1.35	1.82	32.83
	<b>97</b>	<b>354</b>		<b>12.11</b>	<b>114.08</b>
	<b>Mean</b>	<b>3.65</b>		<b>Variance</b>	<b>1.18</b>

43					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	8	8	-2.62	6.86	54.85
2	2	4	-1.62	2.62	5.24
3	25	75	-0.62	0.38	9.57
4	46	184	0.38	0.15	6.69
5	16	80	1.38	1.91	30.53
	<b>97</b>	<b>351</b>		<b>11.91</b>	<b>106.89</b>
	<b>Mean</b>	<b>3.62</b>		<b>Variance</b>	<b>1.10</b>

44					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	10	10	-2.72	7.41	74.07
2	0	0	-1.72	2.96	0.00
3	20	60	-0.72	0.52	10.42
4	44	176	0.28	0.08	3.41
5	23	115	1.28	1.63	37.59
	<b>97</b>	<b>361</b>		<b>12.60</b>	<b>125.48</b>
	<b>Mean</b>	<b>3.72</b>		<b>Variance</b>	<b>1.29</b>

45					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	8	8	-2.39	5.72	45.76
2	12	24	-1.39	1.94	23.24
3	24	72	-0.39	0.15	3.68
4	40	160	0.61	0.37	14.80
5	13	65	1.61	2.59	33.62
	<b>97</b>	<b>329</b>		<b>10.77</b>	<b>121.11</b>
	<b>Mean</b>	<b>3.39</b>		<b>Variance</b>	<b>1.25</b>

46					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	5	5	-2.84	8.04	40.19
2	7	14	-1.84	3.37	23.57
3	13	39	-0.84	0.70	9.07
4	46	184	0.16	0.03	1.25
5	26	130	1.16	1.36	35.28
	<b>97</b>	<b>372</b>		<b>13.49</b>	<b>109.36</b>
	<b>Mean</b>	<b>3.84</b>		<b>Variance</b>	<b>1.13</b>

47					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	5	5	-2.87	8.21	41.07
2	4	8	-1.87	3.48	13.93
3	14	42	-0.87	0.75	10.50
4	50	200	0.13	0.02	0.90
5	24	120	1.13	1.29	30.86
	<b>97</b>	<b>375</b>		<b>13.75</b>	<b>97.26</b>
	<b>Mean</b>	<b>3.87</b>		<b>Variance</b>	<b>1.00</b>

48					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	6	6	-2.78	7.75	46.49
2	6	12	-1.78	3.18	19.09
3	16	48	-0.78	0.61	9.82
4	44	176	0.22	0.05	2.06
5	25	125	1.22	1.48	37.00
	<b>97</b>	<b>367</b>		<b>13.07</b>	<b>114.45</b>
	<b>Mean</b>	<b>3.78</b>		<b>Variance</b>	<b>1.18</b>

49					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	44	44	-1.04	1.08	47.70
2	5	10	-0.04	0.00	0.01
3	48	144	0.96	0.92	44.12
	<b>97</b>	<b>198</b>		<b>2.01</b>	<b>91.84</b>
	<b>Mean</b>	<b>2.04</b>		<b>Variance</b>	<b>0.95</b>

50					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	16	16	-3.10	9.63	154.07
2	27	54	-2.10	4.42	119.42
3	4	12	-1.10	1.22	4.87
4	6	24	-0.10	0.01	0.06
5	1	5	0.90	0.80	0.80
6	15	90	1.90	3.60	53.97
7	27	189	2.90	8.39	226.59
8	1	8	3.90	15.19	15.19
	<b>97</b>	<b>398</b>		<b>43.26</b>	<b>574.97</b>
	<b>Mean</b>	<b>4.10</b>		<b>Variance</b>	<b>5.93</b>

51					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	69	69	-0.49	0.24	16.90
2	11	22	0.51	0.26	2.81
3	15	45	1.51	2.27	33.98
4	1	4	2.51	6.28	6.28
5	1	5	3.51	12.29	12.29
	<b>97</b>	<b>145</b>		<b>21.33</b>	<b>72.25</b>
	<b>Mean</b>	<b>1.49</b>		<b>Variance</b>	<b>0.74</b>

52					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	22	22	-1.72	2.96	65.21
2	27	54	-0.72	0.52	14.06
3	23	69	0.28	0.08	1.78
4	8	32	1.28	1.63	13.07
5	15	75	2.28	5.19	77.86
6	2	12	3.28	10.75	21.50
	<b>97</b>	<b>264</b>		<b>21.13</b>	<b>193.48</b>
	<b>Mean</b>	<b>2.72</b>		<b>Variance</b>	<b>1.99</b>

53					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	33	33	-1.27	1.61	53.06
2	5	10	-0.27	0.07	0.36
3	54	162	0.73	0.54	28.93
3	5	15	0.73	0.54	2.68
	<b>97</b>	<b>220</b>		<b>2.75</b>	<b>85.03</b>
	<b>Mean</b>	<b>2.27</b>		<b>Variance</b>	<b>0.88</b>

54					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	26	26	-1.99	3.96	102.93
2	15	30	-0.99	0.98	14.69
3	9	27	0.01	0.00	0.00
4	31	124	1.01	1.02	31.64
5	14	70	2.01	4.04	56.58
6	1	6	3.01	9.06	9.06
7	1	7	4.01	16.08	16.08
	<b>97</b>	<b>290</b>		<b>35.15</b>	<b>230.99</b>
	<b>Mean</b>	<b>2.99</b>		<b>Variance</b>	<b>2.38</b>

55					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	36	36	-1.36	1.85	66.67
2	18	36	-0.36	0.13	2.34
3	30	90	0.64	0.41	12.26
4	8	32	1.64	2.69	21.50
5	1	5	2.64	6.97	6.97
6	1	6	3.64	13.24	13.24
7	1	7	4.64	21.52	21.52
8	1	8	5.64	31.80	31.80
9	1	9	6.64	44.08	44.08
	<b>97</b>	<b>229</b>		<b>122.69</b>	<b>220.37</b>
	<b>Mean</b>	<b>2.36</b>		<b>Variance</b>	<b>2.27</b>

56					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	58	58	-1.46	2.14	124.30
2	5	10	-0.46	0.22	1.08
3	9	27	0.54	0.29	2.59
4	9	36	1.54	2.36	21.24
5	9	45	2.54	6.43	57.89
6	1	6	3.54	12.50	12.50
7	1	7	4.54	20.58	20.58
8	1	8	5.54	30.65	30.65
9	1	9	6.54	42.72	42.72
10	1	10	7.54	56.79	56.79
11	1	11	8.54	72.86	72.86
12	1	12	9.54	90.94	90.94
	<b>97</b>	<b>239</b>		<b>338.48</b>	<b>534.12</b>
	<b>Mean</b>	<b>2.46</b>		<b>Variance</b>	<b>5.51</b>

57					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	21	21	-1.30	1.69	35.43
2	31	62	-0.30	0.09	2.77
3	40	120	0.70	0.49	19.66
4	5	20	1.70	2.89	14.47
	<b>97</b>	<b>223</b>		<b>5.16</b>	<b>72.33</b>
	<b>Mean</b>	<b>2.30</b>		<b>Variance</b>	<b>0.75</b>

58					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	31	31	-1.21	1.45	45.10
2	22	44	-0.21	0.04	0.94
3	37	111	0.79	0.63	23.32
4	7	28	1.79	3.22	22.52
	<b>97</b>	<b>214</b>		<b>5.35</b>	<b>91.88</b>
	<b>Mean</b>	<b>2.21</b>		<b>Variance</b>	<b>0.95</b>

59					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	55	55	-0.86	0.73	40.27
2	10	20	0.14	0.02	0.21
3	23	69	1.14	1.31	30.12
4	9	36	2.14	4.60	41.38
	<b>97</b>	<b>180</b>		<b>6.66</b>	<b>111.98</b>
	<b>Mean</b>	<b>1.86</b>		<b>Variance</b>	<b>1.15</b>

60					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	9	9	-2.23	4.96	44.63
2	11	22	-1.23	1.51	16.56
3	31	93	-0.23	0.05	1.59
4	41	164	0.77	0.60	24.51
5	5	25	1.77	3.14	15.72
	<b>97</b>	<b>313</b>		<b>10.26</b>	<b>103.01</b>
	<b>Mean</b>	<b>3.23</b>		<b>Variance</b>	<b>1.06</b>

61					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	10	10	-2.60	6.75	67.49
2	2	4	-1.60	2.55	5.11
3	20	60	-0.60	0.36	7.15
4	50	200	0.40	0.16	8.08
5	15	75	1.40	1.97	29.49
	<b>97</b>	<b>349</b>		<b>11.79</b>	<b>117.32</b>
	<b>Mean</b>	<b>3.60</b>		<b>Variance</b>	<b>1.21</b>

62					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	45	45	-0.94	0.88	39.61
2	13	26	0.06	0.00	0.05
3	39	117	1.06	1.13	43.97
	<b>97</b>	<b>188</b>		<b>2.01</b>	<b>83.63</b>
	<b>Mean</b>	<b>1.94</b>		<b>Variance</b>	<b>0.86</b>

63					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	54	54	-0.71	0.51	27.32
2	17	34	0.29	0.08	1.42
3	26	78	1.29	1.66	43.18
	<b>97</b>	<b>166</b>		<b>2.25</b>	<b>71.92</b>
	<b>Mean</b>	<b>1.71</b>		<b>Variance</b>	<b>0.74</b>

64					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	49	49	-0.86	0.73	35.88
2	13	26	0.14	0.02	0.27
3	35	105	1.14	1.31	45.83
	<b>97</b>	<b>180</b>		<b>2.06</b>	<b>81.98</b>
	<b>Mean</b>	<b>1.86</b>		<b>Variance</b>	<b>0.85</b>

65					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	73	73	-0.25	0.06	4.47
2	24	48	0.75	0.57	13.59
	<b>97</b>	<b>121</b>		<b>0.63</b>	<b>18.06</b>
	<b>Mean</b>	<b>1.25</b>		<b>Variance</b>	<b>0.19</b>

66					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	0	0	-3.44	11.86	0.00
2	4	8	-2.44	5.97	23.88
3	19	57	-1.44	2.08	39.58
4	33	132	-0.44	0.20	6.48
5	18	90	0.56	0.31	5.58
6	17	102	1.56	2.42	41.20
7	6	42	2.56	6.54	39.22
	<b>97</b>	<b>431</b>		<b>29.38</b>	<b>155.94</b>
	<b>Mean</b>	<b>4.44</b>		<b>Variance</b>	<b>1.61</b>

67					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	23	23	-2.28	5.19	119.39
2	6	12	-1.28	1.63	9.81
3	1	3	-0.28	0.08	0.08
4	59	236	0.72	0.52	30.73
5	5	25	1.72	2.96	14.82
6	2	12	2.72	7.41	14.81
7	1	7	3.72	13.85	13.85
	<b>97</b>	<b>318</b>		<b>31.65</b>	<b>203.48</b>
	<b>Mean</b>	<b>3.28</b>		<b>Variance</b>	<b>2.10</b>

Question 68 and 69 are nationality and location

70					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	0	0	-4.47	20.02	0.00
2	0	0	-3.47	12.07	0.00
3	4	12	-2.47	6.12	24.49
4	11	44	-1.47	2.17	23.91
5	26	130	-0.47	0.22	5.85
6	47	282	0.53	0.28	12.99
7	9	63	1.53	2.33	20.95
	<b>97</b>	<b>531</b>		<b>43.21</b>	<b>88.19</b>
	<b>Mean</b>	<b>5.47</b>		<b>Variance</b>	<b>0.91</b>

71					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	4	4	-1.61	2.59	10.35
2	57	114	-0.61	0.37	21.09
3	19	57	0.39	0.15	2.92
4	10	40	1.39	1.94	19.37
5	5	25	2.39	5.72	28.60
6	1	6	3.39	11.50	11.50
7	1	7	4.39	19.29	19.29
	<b>97</b>	<b>253</b>		<b>41.56</b>	<b>113.11</b>
	<b>Mean</b>	<b>2.61</b>		<b>Variance</b>	<b>1.17</b>

72					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	14	14	-2.34	5.48	76.67
2	26	52	-1.34	1.80	46.70
3	13	39	-0.34	0.12	1.50
4	22	88	0.66	0.44	9.58
5	12	60	1.66	2.75	33.06
6	5	30	2.66	7.07	35.37
7	3	21	3.66	13.39	40.18
8	1	8	4.66	21.71	21.71
9	0	0	5.66	32.03	0.00
10	0	0	6.66	44.35	0.00
11	0	0	7.66	58.67	0.00
12	1	12	8.66	74.99	74.99
	<b>97</b>	<b>324</b>		<b>262.81</b>	<b>339.77</b>
	<b>Mean</b>	<b>3.34</b>		<b>Variance</b>	<b>3.50</b>

73					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	5	5	-5.34	28.52	142.59
2	4	8	-4.34	18.84	75.35
3	10	30	-3.34	11.16	111.57
4	9	36	-2.34	5.48	49.29
5	12	60	-1.34	1.80	21.55
6	9	54	-0.34	0.12	1.04
7	2	14	0.66	0.44	0.87
8	6	48	1.66	2.75	16.53
9	40	360	2.66	7.07	282.98
	<b>97</b>	<b>615</b>		<b>76.17</b>	<b>701.77</b>
	<b>Mean</b>	<b>6.34</b>		<b>Variance</b>	<b>7.23</b>

74					
x	Frequency (f)	fx	(x-mean)	(x-mean) <sup>2</sup>	f(x-mean) <sup>2</sup>
1	5	5	-2.76	7.63	38.17
2	24	48	-1.76	3.11	74.59
3	25	75	-0.76	0.58	14.55
4	16	64	0.24	0.06	0.90
5	7	35	1.24	1.53	10.71
6	9	54	2.24	5.00	45.04
7	4	28	3.24	10.48	41.92
8	7	56	4.24	17.95	125.67
	<b>97</b>	<b>365</b>		<b>46.35</b>	<b>351.55</b>
	<b>Mean</b>	<b>3.76</b>		<b>Variance</b>	<b>3.62</b>

# Appendix G

## t-Test: Two-Sample Assuming Unequal Variances

Q1	Cypriots	33	28	31	13	1	<b>106</b>
	Other Nationalities	22	32	23	13	7	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	189.20	93.30
Observations	5	5
Hypothesized Mean Difference	0	
df	7	
t Stat	0.24	
P(T<=t) one-tail	0.41	
t Critical one-tail	1.89	
P(T<=t) two-tail	0.82	
t Critical two-tail	2.36	

**Conclusion:** The t-value is 0.24. The p-value is 0.82  
 If  $p > \alpha$  ( $0.82 > 0.05$ ), then we fail to reject the null hypothesis

Q2	Cypriots	83	23	<b>106</b>
	Other Nationalities	79	18	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	1800.00	1860.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.11	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.93	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.11. The p-value is 0.93  
 $p > \alpha$  ( $0.93 > 0.05$ ), then we fail to reject the null hypothesis

Q3	Cypriots	58	48	<b>106</b>
	Other Nationalities	59	38	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	50.00	220.50
Observations	2	2
Hypothesized Mean Difference	0	
df	1	
t Stat	0.39	
P(T<=t) one-tail	0.38	
t Critical one-tail	6.31	
P(T<=t) two-tail	0.76	
t Critical two-tail	12.71	

**Conclusion:** The t-value is 0.39. The p-value is 0.76  
 $p > \alpha$  ( $0.76 > 0.05$ ), then we fail to reject the null hypothesis

Q4	Cypriots	70	36	<b>106</b>
	Other Nationalities	63	34	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	578.00	420.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.20	
P(T<=t) one-tail	0.43	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.86	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.20. The p-value is 0.86  
 $p > \alpha$  ( $0.86 > 0.05$ ), then we fail to reject the null hypothesis

Q5	Cypriots	55	51	106
	Other Nationalities	44	53	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	8.00	40.50
Observations	2	2
Hypothesized Mean Difference	0	
df	1	
t Stat	0.91	
P(T<=t) one-tail	0.26	
t Critical one-tail	6.31	
P(T<=t) two-tail	0.53	
t Critical two-tail	12.71	

**Conclusion:** The t-value is 0.91. The p-value is 0.53  
 $p > \alpha$  ( $0.53 > 0.05$ ), then we fail to reject the null hypothesis

Q6	Cypriots	41	65	106
	Other Nationalities	38	59	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	288.00	220.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.28	
P(T<=t) one-tail	0.40	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.80	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.28. The p-value is 0.80  
 $p > \alpha$  ( $0.80 > 0.05$ ), then we fail to reject the null hypothesis

Q7	Cypriots	36	70	<b>106</b>
	Other Nationalities	38	59	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	578.00	220.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.23	
P(T<=t) one-tail	0.42	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.84	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.23. The p-value is 0.84  
 $p > \alpha$  (0.84 > 0.05), then we fail to reject the null hypothesis

Q8	Cypriots	18	88	<b>106</b>
	Other Nationalities	21	76	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	2450.00	1512.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.10	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.93	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.10. The p-value is 0.93  
 $p > \alpha$  (0.93 > 0.05), then we fail to reject the null hypothesis

Q9	Cypriots	21	85	<b>106</b>
	Other Nationalities	22	75	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	2048.00	1404.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.11	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.92	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.11. The p-value is 0.92  
 $p > \alpha$  (0.92 > 0.05), then we fail to reject the null hypothesis

Q10	Cypriots	35	71	<b>106</b>
	Other Nationalities	27	70	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	648.00	924.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.16	
P(T<=t) one-tail	0.44	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.89	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.16. The p-value is 0.89  
 $p > \alpha$  (0.89 > 0.05), then we fail to reject the null hypothesis

Q11	Cypriots	9	97	<b>106</b>
	Other Nationalities	14	83	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	3872.00	2380.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.08	
P(T<=t) one-tail	0.47	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.94	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.08. The p-value is 0.94  
 $p > \alpha$  (0.94 > 0.05), then we fail to reject the null hypothesis

Q12	Cypriots	17	89	<b>106</b>
	Other Nationalities	20	77	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	2592.00	1624.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.10	
P(T<=t) one-tail	0.47	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.93	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.10. The p-value is 0.93  
 $p > \alpha$  (0.93 > 0.05), then we fail to reject the null hypothesis

Q13	Cypriots	20	86	<b>106</b>
	Other Nationalities	28	69	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	2178.00	840.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.12	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.92	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.12. The p-value is 0.92  
 $p > \alpha$  (0.86 > 0.05), then we fail to reject the null hypothesis

Q14	Cypriots	24	82	<b>106</b>
	Other Nationalities	34	63	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	1682.00	420.50
Observations	2	2
Hypothesized Mean Difference	0	
df	1	
t Stat	0.14	
P(T<=t) one-tail	0.46	
t Critical one-tail	6.31	
P(T<=t) two-tail	0.91	
t Critical two-tail	12.71	

**Conclusion:** The t-value is 0.14. The p-value is 0.91  
 $p > \alpha$  (0.91 > 0.05), then we fail to reject the null hypothesis

Q15	Cypriots	18	88	<b>106</b>
	Other Nationalities	25	72	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	2450.00	1104.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.11	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.92	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.11. The p-value is 0.92  
 $p > \alpha$  (0.92 > 0.05), then we fail to reject the null hypothesis

Q16	Cypriots	28	78	<b>106</b>
	Other Nationalities	26	71	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	1250.00	1012.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.13	
P(T<=t) one-tail	0.45	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.91	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.213. The p-value is 0.91  
 $p > \alpha$  (0.91 > 0.05), then we fail to reject the null hypothesis

Q17	Cypriots	19	87	<b>106</b>
	Other Nationalities	21	76	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	2312.00	1512.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.10	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.93	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.10. The p-value is 0.93  
 $p > \alpha$  (0.93 > 0.05), then we fail to reject the null hypothesis

Q18	Cypriots	22	84	<b>106</b>
	Other Nationalities	28	69	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	1922.00	840.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.12	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.91	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.12. The p-value is 0.91  
 $p > \alpha$  (0.91 > 0.05), then we fail to reject the null hypothesis

Q19	Cypriots	23	83	<b>106</b>
	Other Nationalities	29	68	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	1800.00	760.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.13	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.91	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.13. The p-value is 0.91  
 $p > \alpha$  (0.91 > 0.05), then we fail to reject the null hypothesis

Q20	Cypriots	25	81	<b>106</b>
	Other Nationalities	21	76	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	1568.00	1512.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.11	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.92	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.11. The p-value is 0.92  
 $p > \alpha$  (0.92 > 0.05), then we fail to reject the null hypothesis

Q21	Cypriots	50	56	<b>106</b>
	Other Nationalities	44	53	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	18.00	40.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.83	
P(T<=t) one-tail	0.25	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.49	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.83. The p-value is 0.49  
 $p > \alpha$  ( $0.49 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q22	Cypriots	42	64	<b>106</b>
	Other Nationalities	32	65	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	242.00	544.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.23	
P(T<=t) one-tail	0.42	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.84	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.23. The p-value is 0.84  
 $p > \alpha$  ( $0.84 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q23	Cypriots	52	54	106
	Other Nationalities	45	52	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	2.00	24.50
Observations	2	2
Hypothesized Mean Difference	0	
df	1	
t Stat	1.24	
P(T<=t) one-tail	0.22	
t Critical one-tail	6.31	
P(T<=t) two-tail	0.43	
t Critical two-tail	12.71	

**Conclusion:** The t-value is 1.24. The p-value is 0.43  
 $p > \alpha$  ( $0.43 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q24	Cypriots	34	72	106
	Other Nationalities	35	62	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	722.00	364.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.19	
P(T<=t) one-tail	0.43	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.86	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.19. The p-value is 0.86  
 $p > \alpha$  ( $0.86 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q25	Cypriots	25	81	106
	Other Nationalities	34	63	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	1568.00	420.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.14	
P(T<=t) one-tail	0.45	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.90	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.14. The p-value is 0.90  
 $p > \alpha$  ( $0.90 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q26	Cypriots	31	75	106
	Other Nationalities	30	67	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	968.00	684.50
Observations	2	2
Hypothesized Mean Difference	0	
df	2	
t Stat	0.16	
P(T<=t) one-tail	0.44	
t Critical one-tail	2.92	
P(T<=t) two-tail	0.89	
t Critical two-tail	4.30	

**Conclusion:** The t-value is 0.16. The p-value is 0.89  
 $p > \alpha$  ( $0.89 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q27	Cypriots	6	8	25	34	33	<b>106</b>
	Other Nationalities	8	17	18	37	17	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	25.00	22.25
Variance	144.67	96.92
Observations	4	4
Hypothesized Mean Difference	0	
df	6	
t Stat	0.35	
P(T<=t) one-tail	0.37	
t Critical one-tail	1.94	
P(T<=t) two-tail	0.74	
t Critical two-tail	2.45	

**Conclusion:** The t-value is 0.35. The p-value is 0.74  
 $p > \alpha$  (0.74 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q28	Cypriots	44	62	<b>106</b>
	Other Nationalities	47	50	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	53.00	48.50
Variance	162.00	4.50
Observations	2	2
Hypothesized Mean Difference	0	
df	1	
t Stat	0.49	
P(T<=t) one-tail	0.35	
t Critical one-tail	6.31	
P(T<=t) two-tail	0.71	
t Critical two-tail	12.71	

**Conclusion:** The t-value is 0.49. The p-value is 0.71  
 $p > \alpha$  (0.71 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q29	Cypriots	9	1	22	59	15	<b>106</b>
	Other Nationalities	9	9	25	35	19	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	506.20	122.80
Observations	5	5
Hypothesized Mean Difference	0	
df	6	
t Stat	0.16	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.94	
P(T<=t) two-tail	0.88	
t Critical two-tail	2.45	

**Conclusion:** The t-value is 0.16. The p-value is 0.88  
 $p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q30	Cypriots	9	2	19	61	15	<b>106</b>
	Other Nationalities	8	12	26	34	17	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	536.20	111.80
Observations	5	5
Hypothesized Mean Difference	0	
df	6	
t Stat	0.16	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.94	
P(T<=t) two-tail	0.88	
t Critical two-tail	2.45	

**Conclusion:** The t-value is 0.16. The p-value is 0.88  
 $p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q31	Cypriots	9	3	19	56	19	<b>106</b>
	Other Nationalities	10	10	23	36	18	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	425.20	116.80
Observations	5	5
Hypothesized Mean Difference	0	
df	6	
t Stat	0.17	
P(T<=t) one-tail	0.43	
t Critical one-tail	1.94	
P(T<=t) two-tail	0.87	
t Critical two-tail	2.45	

**Conclusion:** The t-value is 0.17. The p-value is 0.87  
 $p > \alpha$  ( $0.87 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q32	Cypriots	6	2	17	57	24	<b>106</b>
	Other Nationalities	8	9	20	39	21	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	476.70	156.30
Observations	5	5
Hypothesized Mean Difference	0	
df	6	
t Stat	0.16	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.94	
P(T<=t) two-tail	0.88	
t Critical two-tail	2.45	

**Conclusion:** The t-value is 0.16. The p-value is 0.88  
 $p > \alpha$  ( $0.88 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q33	Cypriots	6	0	23	57	20	<b>106</b>
	Other Nationalities	5	10	21	43	18	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	491.70	214.30
Observations	5	5
Hypothesized Mean Difference	0	
df	7	
t Stat	0.15	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.89	
P(T<=t) two-tail	0.88	
t Critical two-tail	2.36	

**Conclusion:** The t-value is 0.15. The p-value is 0.88  
 $p > \alpha$  (0.88 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q34	Cypriots	7	2	26	51	20	<b>106</b>
	Other Nationalities	10	11	21	39	16	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	370.70	139.30
Observations	5	5
Hypothesized Mean Difference	0	
df	7	
t Stat	0.18	
P(T<=t) one-tail	0.43	
t Critical one-tail	1.89	
P(T<=t) two-tail	0.86	
t Critical two-tail	2.36	

**Conclusion:** The t-value is 0.18. The p-value is 0.86  
 $p > \alpha$  (0.86 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q35	Cypriots	3	2	17	67	17	106
	Other Nationalities	30	5	14	46	2	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	708.20	339.80
Observations	5	5
Hypothesized Mean Difference	0	
df	7	
t Stat	0.12	
P(T<=t) one-tail	0.45	
t Critical one-tail	1.89	
P(T<=t) two-tail	0.90	
t Critical two-tail	2.36	

**Conclusion:** The t-value is 0.12. The p-value is 0.90  
 $p > \alpha$  (0.90 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q36	Cypriots	73	3	30	106
	Other Nationalities	62	5	30	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	35.33	32.33
Variance	1246.33	816.33
Observations	3	3
Hypothesized Mean Difference	0	
df	4	
t Stat	0.11	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.13	
P(T<=t) two-tail	0.91	
t Critical two-tail	2.78	

**Conclusion:** The t-value is 0.11. The p-value is 0.91  
 $p > \alpha$  (0.91 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q37	Cypriots	76	5	25	<b>106</b>
	Other Nationalities	66	5	26	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	35.33	32.33
Variance	1340.33	960.33
Observations	3	3
Hypothesized Mean Difference	0	
df	4	
t Stat	0.11	
P(T<=t) one-tail	0.46	
t Critical one-tail	2.13	
P(T<=t) two-tail	0.92	
t Critical two-tail	2.78	

**Conclusion:** The t-value is 0.11. The p-value is 0.92  
 $p > \alpha$  (0.92 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q38	Cypriots	3	5	19	54	25	<b>106</b>
	Other Nationalities	8	3	18	50	18	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	422.20	334.80
Observations	5	5
Hypothesized Mean Difference	0	
df	8	
t Stat	0.15	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.86	
P(T<=t) two-tail	0.89	
t Critical two-tail	2.31	

**Conclusion:** The t-value is 0.15. The p-value is 0.89  
 $p > \alpha$  (0.89 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q39	Cypriots	4	5	21	56	20	<b>106</b>
	Other Nationalities	6	10	21	45	15	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	442.70	236.30
Observations	5	5
Hypothesized Mean Difference	0	
df	7	
t Stat	0.15	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.89	
P(T<=t) two-tail	0.88	
t Critical two-tail	2.36	

**Conclusion:** The t-value is 0.15. The p-value is 0.88  
 $p > \alpha$  (0.88 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q40	Cypriots	9	7	20	54	16	<b>106</b>
	Other Nationalities	8	8	19	46	16	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	363.70	244.80
Observations	5	5
Hypothesized Mean Difference	0	
df	8	
t Stat	0.16	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.86	
P(T<=t) two-tail	0.87	
t Critical two-tail	2.31	

**Conclusion:** The t-value is 0.16. The p-value is 0.87  
 $p > \alpha$  (0.87 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q41	Cypriots	4	2	25	50	25	<b>106</b>
	Other Nationalities	11	5	14	44	23	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	380.70	231.30
Observations	5	5
Hypothesized Mean Difference	0	
df	8	
t Stat	0.16	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.86	
P(T<=t) two-tail	0.87	
t Critical two-tail	2.31	

**Conclusion:** The t-value is 0.16. The p-value is 0.87  
 $p > \alpha$  (0.87 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q42	Cypriots	4	1	26	55	20	<b>106</b>
	Other Nationalities	7	7	17	48	18	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	467.70	283.30
Observations	5	5
Hypothesized Mean Difference	0	
df	8	
t Stat	0.15	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.86	
P(T<=t) two-tail	0.89	
t Critical two-tail	2.31	

**Conclusion:** The t-value is 0.15. The p-value is 0.89  
 $p > \alpha$  (0.88 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q43	Cypriots	5	3	33	52	13	<b>106</b>
	Other Nationalities	8	2	25	46	16	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	437.20	295.80
Observations	5	5
Hypothesized Mean Difference	0	
df	8	
t Stat	0.15	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.86	
P(T<=t) two-tail	0.89	
t Critical two-tail	2.31	

**Conclusion:** The t-value is 0.15. The p-value is 0.89  
 $p > \alpha$  (0.89 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q44	Cypriots	5	2	17	57	25	<b>106</b>
	Other Nationalities	10	0	20	44	23	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	486.20	270.80
Observations	5	5
Hypothesized Mean Difference	0	
df	7	
t Stat	0.15	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.89	
P(T<=t) two-tail	0.89	
t Critical two-tail	2.36	

**Conclusion:** The t-value is 0.15. The p-value is 0.89  
 $p > \alpha$  (0.89 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q45	Cypriots	2	12	27	44	21	<b>106</b>
	Other Nationalities	8	12	24	40	13	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	251.70	167.80
Observations	5	5
Hypothesized Mean Difference	0	
df	8	
t Stat	0.20	
P(T<=t) one-tail	0.42	
t Critical one-tail	1.86	
P(T<=t) two-tail	0.85	
t Critical two-tail	2.31	

**Conclusion:** The t-value is 0.20. The p-value is 0.85  
 $p > \alpha$  (0.85 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q46	Cypriots	1	6	14	62	23	<b>106</b>
	Other Nationalities	5	7	13	46	26	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	589.70	288.30
Observations	5	5
Hypothesized Mean Difference	0	
df	7	
t Stat	0.14	
P(T<=t) one-tail	0.45	
t Critical one-tail	1.89	
P(T<=t) two-tail	0.90	
t Critical two-tail	2.36	

**Conclusion:** The t-value is 0.14. The p-value is 0.90  
 $p > \alpha$  (0.88 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q47	<b>Cypriots</b>	1	4	20	56	25	106
	<b>Other Nationalities</b>	5	4	14	50	24	97

<b>t-Test: Two-Sample Assuming Unequal Variances</b>		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	482.70	357.80
Observations	5	5
Hypothesized Mean Difference	0	
df	8	
t Stat	0.14	
P(T<=t) one-tail	0.45	
t Critical one-tail	1.86	
P(T<=t) two-tail	0.89	
t Critical two-tail	2.31	

**Conclusion:** The t-value is 0.14. The p-value is 0.89  
 $p > \alpha$  (0.89 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q48	<b>Cypriots</b>	3	3	16	63	21	106
	<b>Other Nationalities</b>	6	6	16	44	25	97

<b>t-Test: Two-Sample Assuming Unequal Variances</b>		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	609.20	251.80
Observations	5	5
Hypothesized Mean Difference	0	
df	7	
t Stat	0.14	
P(T<=t) one-tail	0.45	
t Critical one-tail	1.89	
P(T<=t) two-tail	0.89	
t Critical two-tail	2.36	

**Conclusion:** The t-value is 0.14. The p-value is 0.89  
 $p > \alpha$  (0.88 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q49	Cypriots	36	5	65	106
	Other Nationalities	44	5	48	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	35.33	32.33
Variance	900.33	564.33
Observations	3	3
Hypothesized Mean Difference	0	
df	4	
t Stat	0.14	
P(T<=t) one-tail	0.45	
t Critical one-tail	2.13	
P(T<=t) two-tail	0.90	
t Critical two-tail	2.78	

**Conclusion:** The t-value is 0.14. The p-value is 0.90  
 $p > \alpha$  (0.90 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q50	Cypriots	17	29	11	5	0	13	29	1	1	106
	Other Nationalities	16	27	4	6	1	15	27	1	97	

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	11.78	12.13
Variance	129.94	116.70
Observations	9	8
Hypothesized Mean Difference	0	
df	15	
t Stat	-0.06	
P(T<=t) one-tail	0.47	
t Critical one-tail	1.75	
P(T<=t) two-tail	0.95	
t Critical two-tail	2.13	

**Conclusion:** The t-value is -0.06. The p-value is 0.95  
 $p > \alpha$  (0.95 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q51	Cypriots	88	5	12	1	106	
	Other Nationalities	69	11	15	1	1	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	26.50	19.40
Variance	1701.67	806.80
Observations	4	5
Hypothesized Mean Difference	0	
df	5	
t Stat	0.29	
P(T<=t) one-tail	0.39	
t Critical one-tail	2.02	
P(T<=t) two-tail	0.78	
t Critical two-tail	2.57	

**Conclusion:** The t-value is 0.29. The p-value is 0.78  
 $p > \alpha$  (0.78 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q52	Cypriots	0	40	30	15	20	1	106
	Other Nationalities	22	27	23	8	15	2	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	17.67	16.17
Variance	250.67	93.37
Observations	6	6
Hypothesized Mean Difference	0	
df	8	
t Stat	0.20	
P(T<=t) one-tail	0.42	
t Critical one-tail	1.86	
P(T<=t) two-tail	0.85	
t Critical two-tail	2.31	

**Conclusion:** The t-value is 0.20. The p-value is 0.85  
 $p > \alpha$  (0.85 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q53	Cypriots	38	8	59	1	<b>106</b>
	Other Nationalities	33	5	54	5	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	26.50	24.25
Variance	727.00	567.58
Observations	4	4
Hypothesized Mean Difference	0	
df	6	
t Stat	0.13	
P(T<=t) one-tail	0.45	
t Critical one-tail	1.94	
P(T<=t) two-tail	0.90	
t Critical two-tail	2.45	

**Conclusion:** The t-value is 0.13. The p-value is 0.90  
 $p > \alpha$  ( $0.90 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q54	Cypriots	23	12	11	36	22	1	1	<b>106</b>
	Other Nationalities	26	15	9	31	14	1	1	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	15.14	13.86
Variance	161.81	132.81
Observations	7	7
Hypothesized Mean Difference	0	
df	12	
t Stat	0.20	
P(T<=t) one-tail	0.42	
t Critical one-tail	1.78	
P(T<=t) two-tail	0.85	
t Critical two-tail	2.18	

**Conclusion:** The t-value is 0.20. The p-value is 0.85  
 $p > \alpha$  ( $0.85 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q55	Cypriots	40	20	35	9	1	1	106				
	Other Nationalities	36	18	30	8	1	1	1	1	1	97	

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	17.67	10.78
Variance	287.07	192.94
Observations	6	9
Hypothesized Mean Difference	0	
df	9	
t Stat	0.83	
P(T<=t) one-tail	0.21	
t Critical one-tail	1.83	
P(T<=t) two-tail	0.43	
t Critical two-tail	2.26	

**Conclusion:** The t-value is 0.83. The p-value is 0.43  
 $p > \alpha$  (0.43 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q56	Cypriots	69	7	11	7	9	1	1	1	106			
	Other Nationalities	58	5	9	9	9	1	1	1	1	1	1	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	13.25	8.08
Variance	522.79	259.54
Observations	8	12
Hypothesized Mean Difference	0	
df	12	
t Stat	0.55	
P(T<=t) one-tail	0.29	
t Critical one-tail	1.78	
P(T<=t) two-tail	0.59	
t Critical two-tail	2.18	

**Conclusion:** The t-value is 0.55. The p-value is 0.59  
 $p > \alpha$  (0.55 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q57	Cypriots	20	31	52	3	106
	Other Nationalities	21	31	5	40	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	26.50	24.25
Variance	421.67	224.92
Observations	4	4
Hypothesized Mean Difference	0	
df	5	
t Stat	0.18	
P(T<=t) one-tail	0.43	
t Critical one-tail	2.02	
P(T<=t) two-tail	0.87	
t Critical two-tail	2.57	

**Conclusion:** The t-value is 0.18. The p-value is 0.87  
 $p > \alpha$  (0.87 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q58	Cypriots	33	14	53	6	106
	Other Nationalities	31	22	7	37	97

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	26.5	24.25
Variance	440.33	170.25
Observations	4	4
Hypothesized Mean Difference	0	
df	5	
t Stat	0.18	
P(T<=t) one-tail	0.43	
t Critical one-tail	2.02	
P(T<=t) two-tail	0.86	
t Critical two-tail	2.57	

**Conclusion:** The t-value is 0.18. The p-value is 0.86  
 $p > \alpha$  (0.86 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q59	Cypriots	62	7	33	4	<b>106</b>
	Other Nationalities	55	10	9	23	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	26.50	24.25
Variance	729.67	460.92
Observations	4	4
Hypothesized Mean Difference	0	
df	6	
t Stat	0.13	
P(T<=t) one-tail	0.45	
t Critical one-tail	1.94	
P(T<=t) two-tail	0.90	
t Critical two-tail	2.45	

**Conclusion:** The t-value is 0.13. The p-value is 0.90  
 $p > \alpha$  (0.90 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q60	Cypriots	7	7	37	50	5	<b>106</b>
	Other Nationalities	9	11	31	41	5	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	436.20	246.80
Observations	5	5
Hypothesized Mean Difference	0	
df	7	
t Stat	0.15	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.89	
P(T<=t) two-tail	0.88	
t Critical two-tail	2.36	

**Conclusion:** The t-value is 0.16. The p-value is 0.88  
 $p > \alpha$  (0.88 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q61	Cypriots	7	4	32	48	15	<b>106</b>
	Other Nationalities	10	2	20	50	15	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	21.20	19.40
Variance	342.70	336.80
Observations	5	5
Hypothesized Mean Difference	0	
df	8	
t Stat	0.15	
P(T<=t) one-tail	0.44	
t Critical one-tail	1.86	
P(T<=t) two-tail	0.88	
t Critical two-tail	2.31	

**Conclusion:** The t-value is 0.15. The p-value is 0.88  
 $p > \alpha$  (0.88 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q62	Cypriots	51	8	47	<b>106</b>
	Other Nationalities	45	13	39	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	35.33	32.33
Variance	564.33	289.33
Observations	3	3
Hypothesized Mean Difference	0	
df	4	
t Stat	0.18	
P(T<=t) one-tail	0.43	
t Critical one-tail	2.13	
P(T<=t) two-tail	0.87	
t Critical two-tail	2.78	

**Conclusion:** The t-value is 0.18. The p-value is 0.87  
 $p > \alpha$  (0.87 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q63	Cypriots	69	9	28	<b>106</b>
	Other Nationalities	54	17	26	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	35.33	32.33
Variance	940.33	372.33
Observations	3	3
Hypothesized Mean Difference	0	
df	3	
t Stat	0.14	
P(T<=t) one-tail	0.45	
t Critical one-tail	2.35	
P(T<=t) two-tail	0.90	
t Critical two-tail	3.18	

**Conclusion:** The t-value is 0.14. The p-value is 0.90  
 $p > \alpha$  (0.89 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q64	Cypriots	46	11	49	<b>106</b>
	Other Nationalities	49	13	35	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	35.33	32.33
Variance	446.33	329.33
Observations	3	3
Hypothesized Mean Difference	0	
df	4	
t Stat	0.19	
P(T<=t) one-tail	0.43	
t Critical one-tail	2.13	
P(T<=t) two-tail	0.86	
t Critical two-tail	2.78	

**Conclusion:** The t-value is 0.19. The p-value is 0.86  
 $p > \alpha$  (0.86 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q65	Cypriots	61	44	1	<b>106</b>
	Other Nationalities	73	24	97	

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	35.33	64.67
Variance	956.33	1384.33
Observations	3	3
Hypothesized Mean Difference	0	
df	4	
t Stat	-1.05	
P(T<=t) one-tail	0.18	
t Critical one-tail	2.13	
P(T<=t) two-tail	0.35	
t Critical two-tail	2.78	

**Conclusion:** The t-value is -1.05. The p-value is 0.35  
 $p > \alpha$  ( $0.35 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q66	Cypriots	0	2	40	29	26	9	0	<b>106</b>
	Other Nationalities	0	4	19	33	18	17	6	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	15.14	13.86
Variance	266.14	128.48
Observations	7	7
Hypothesized Mean Difference	0	
df	11	
t Stat	0.17	
P(T<=t) one-tail	0.43	
t Critical one-tail	1.80	
P(T<=t) two-tail	0.87	
t Critical two-tail	2.20	

**Conclusion:** The t-value is 0.17. The p-value is 0.87  
 $p > \alpha$  ( $0.87 > 0.05$ ), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.



Q70	<b>Cypriots</b>	0	0	1	4	33	58	10	<b>106</b>
	<b>Other Nationalities</b>	0	0	4	11	26	47	9	<b>97</b>

<b>t-Test: Two-Sample Assuming Unequal Variances</b>		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	15.14	13.86
Variance	494.14	293.14
Observations	7	7
Hypothesized Mean Difference	0	
df	11	
t Stat	0.12	
P(T<=t) one-tail	0.45	
t Critical one-tail	1.80	
P(T<=t) two-tail	0.91	
t Critical two-tail	2.20	

**Conclusion:** The t-value is 0.12. The p-value is 0.91  
 $p > \alpha$  (0.91 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q71	<b>Cypriots</b>	15	64	18	5	1	2	1	<b>106</b>
	<b>Other Nationalities</b>	4	57	19	10	5	1	1	<b>97</b>

<b>t-Test: Two-Sample Assuming Unequal Variances</b>		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	15.14	13.86
Variance	511.81	401.48
Observations	7	7
Hypothesized Mean Difference	0	
df	12	
t Stat	0.11	
P(T<=t) one-tail	0.46	
t Critical one-tail	1.78	
P(T<=t) two-tail	0.91	
t Critical two-tail	2.18	

**Conclusion:** The t-value is 0.11. The p-value is 0.91  
 $p > \alpha$  (0.91 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q72	Cypriots	16	33	28	21	6	2	<b>106</b>							
	Other Nationalities	14	26	13	22	12	5	3	1	0	0	0	1	<b>97</b>	

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	17.67	8.08
Variance	147.47	83.72
Observations	6	12
Hypothesized Mean Difference	0	
df	8	
t Stat	1.71	
P(T<=t) one-tail	0.06	
t Critical one-tail	1.86	
P(T<=t) two-tail	0.13	
t Critical two-tail	2.31	

**Conclusion:** The t-value is 1.71. The p-value is 0.13  
 $p > \alpha$  (0.13 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q73	Cypriots	3	7	10	7	9	2	10	14	44	<b>106</b>
	Other Nationalities	5	4	10	9	12	9	2	6	40	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	11.78	10.78
Variance	159.44	130.19
Observations	9	9
Hypothesized Mean Difference	0	
df	16	
t Stat	0.18	
P(T<=t) one-tail	0.43	
t Critical one-tail	1.75	
P(T<=t) two-tail	0.86	
t Critical two-tail	2.12	

**Conclusion:** The t-value is 0.18. The p-value is 0.86  
 $p > \alpha$  (0.86 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

Q74	Cypriots	3	37	30	14	13	5	3	1	<b>106</b>
	Other Nationalities	5	24	25	16	7	9	4	7	<b>97</b>

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Cypriots</i>	<i>Other Nationalities</i>
Mean	13.25	12.125
Variance	181.93	71.55
Observations	8	8
Hypothesized Mean Difference	0	
df	12	
t Stat	0.20	
P(T<=t) one-tail	0.42	
t Critical one-tail	1.78	
P(T<=t) two-tail	0.84	
t Critical two-tail	2.18	

**Conclusion:** The t-value is 0.20. The p-value is 0.84  
 $p > \alpha$  (0.84 > 0.05), then we fail to reject the null hypothesis  
 Is not statistically significant and suggests that the null hypothesis is strongly supported.

No	N (Cypriots / Other Nationalities)	Mean	Variance	StDev	Pooled Standard Deviation	SE Mean	t - Test (unequal variance)	t - Test (equal variance)	Statistically significant (95%)	
Q 1	106	2.25	1.11	1.06	1.25	0.10	2.34	2.00	7.20%	No
	97	2.49	1.40	1.19		0.12				
Q 2	106	1.22	0.17	0.41	0.16	0.04	0.78	0.80	#NUM!	No
	97	1.19	0.15	0.39		0.04				
Q 3	106	1.45	0.25	0.50	0.24	0.05	1.26	1.23	#NUM!	No
	97	1.39	0.24	0.49		0.05				
Q 4	106	1.34	0.22	0.47	0.23	0.05	0.24	0.22	#NUM!	No
	97	1.35	0.23	0.48		0.05				
Q 5	106	1.48	0.25	0.50	0.25	0.05	1.34	1.29	20.35%	No
	97	1.55	0.25	0.50		0.05				
Q 6	106	1.61	0.24	0.49	0.24	0.05	0.10	0.10	46.67%	No
	97	1.61	0.24	0.49		0.05				
Q 7	106	1.66	0.22	0.47	0.23	0.05	1.13	1.05	23.01%	No
	97	1.61	0.24	0.49		0.05				
Q 8	106	1.83	0.14	0.38	0.15	0.04	1.28	1.12	21.11%	No
	97	1.78	0.17	0.41		0.04				
Q 9	106	1.80	0.16	0.40	0.17	0.04	0.74	0.67	29.70%	No
	97	1.77	0.18	0.42		0.04				
Q 10	106	1.67	0.22	0.47	0.21	0.05	1.13	1.14	22.99%	No
	97	1.72	0.20	0.45		0.05				
Q 11	106	1.92	0.08	0.28	0.10	0.03	2.19	1.67	13.61%	No
	97	1.86	0.12	0.35		0.04				
Q 12	106	1.84	0.13	0.37	0.15	0.04	1.29	1.12	21.05%	No
	97	1.79	0.16	0.40		0.04				
Q 13	106	1.81	0.15	0.39	0.18	0.04	2.63	2.17	11.56%	No
	97	1.71	0.21	0.45		0.05				
Q 14	106	1.77	0.18	0.42	0.20	0.04	3.05	2.56	10.08%	No
	97	1.65	0.23	0.48		0.05				
Q 15	106	1.83	0.14	0.38	0.17	0.04	2.41	1.98	12.52%	No
	97	1.74	0.19	0.44		0.04				
Q 16	106	1.74	0.19	0.44	0.20	0.04	0.09	0.09	47.12%	No
	97	1.73	0.20	0.44		0.04				
Q 17	106	1.82	0.15	0.38	0.16	0.04	1.00	0.89	25.00%	No
	97	1.78	0.17	0.41		0.04				
Q 18	106	1.79	0.16	0.41	0.18	0.04	2.06	1.76	14.39%	No
	97	1.71	0.21	0.45		0.05				
Q 19	106	1.78	0.17	0.41	0.19	0.04	2.05	1.76	14.46%	No
	97	1.70	0.21	0.46		0.05				
Q 20	106	1.76	0.18	0.42	0.18	0.04	0.47	0.46	36.03%	No
	97	1.78	0.17	0.41		0.04				
Q 21	106	1.53	0.25	0.50	0.25	0.05	0.37	0.36	38.63%	No
	97	1.55	0.25	0.50		0.05				

Q 22	106	1.60	0.24	0.49	0.23	0.05	1.40	1.39	19.78%	No
	97	1.67	0.22	0.47		0.05				
Q 23	106	1.51	0.25	0.50	0.25	0.05	0.55	0.53	34.02%	No
	97	1.54	0.25	0.50		0.05				
Q 24	106	1.68	0.22	0.47	0.22	0.05	0.88	0.82	26.96%	No
	97	1.64	0.23	0.48		0.05				
Q 25	106	1.76	0.18	0.42	0.20	0.04	2.78	2.37	10.99%	No
	97	1.65	0.23	0.48		0.05				
Q 26	106	1.71	0.21	0.45	0.21	0.04	0.38	0.36	38.42%	No
	97	1.69	0.21	0.46		0.05				
Q 27	106	3.75	1.30	1.14	1.36	0.11	3.28	2.99	1.10%	No
	97	3.39	1.43	1.20		0.12				
Q 28	106	1.58	0.24	0.49	0.25	0.05	1.45	1.37	19.21%	No
	97	1.52	0.25	0.50		0.05				
Q 29	106	3.66	1.04	1.02	1.20	0.10	1.88	1.56	5.92%	No
	97	3.47	1.38	1.18		0.12				
Q 30	106	3.67	1.05	1.03	1.19	0.10	2.58	2.19	2.46%	No
	97	3.41	1.34	1.16		0.12				
Q 31	106	3.69	1.14	1.07	1.28	0.10	2.47	2.10	2.84%	No
	97	3.43	1.44	1.20		0.12				
Q 32	106	3.86	0.95	0.98	1.15	0.09	2.97	2.38	1.56%	No
	97	3.58	1.36	1.17		0.12				
Q 33	106	3.80	0.88	0.94	0.99	0.09	2.13	1.80	4.32%	No
	97	3.61	1.12	1.06		0.11				
Q 34	106	3.71	1.02	1.01	1.21	0.10	3.01	2.44	1.48%	No
	97	3.41	1.42	1.19		0.12				
Q 35	106	3.88	0.64	0.80	1.20	0.08	13.32	7.53	0.01%	No
	97	2.85	1.82	1.35		0.14				
Q 36	106	1.59	0.81	0.90	0.82	0.09	0.87	0.81	27.24%	No
	97	1.67	0.84	0.92		0.09				
Q 37	106	1.52	0.72	0.85	0.75	0.08	0.83	0.77	27.88%	No
	97	1.59	0.78	0.88		0.09				
Q 38	106	3.88	0.84	0.92	0.99	0.09	2.09	1.72	4.53%	No
	97	3.69	1.14	1.07		0.11				
Q 39	106	3.78	0.87	0.93	1.00	0.09	2.61	2.19	2.37%	No
	97	3.55	1.13	1.07		0.11				
Q 40	106	3.58	1.19	1.09	1.21	0.11	0.18	0.17	43.31%	No
	97	3.56	1.24	1.11		0.11				
Q 41	106	3.85	0.86	0.93	1.16	0.09	2.21	1.61	3.90%	No
	97	3.65	1.49	1.22		0.12				
Q 42	106	3.81	0.78	0.88	0.97	0.09	1.89	1.47	5.85%	No
	97	3.65	1.18	1.08		0.11				
Q 43	106	3.61	0.82	0.91	0.96	0.09	0.06	0.05	47.70%	No
	97	3.62	1.10	1.05		0.11				
Q 44	106	3.90	0.89	0.94	1.08	0.09	1.91	1.51	5.72%	No

	97	3.72	1.29	1.14		0.12				
Q 45	106	3.66	0.96	0.98	1.10	0.10	2.82	2.37	1.85%	No
	97	3.39	1.25	1.12		0.11				
Q 46	106	3.94	0.66	0.81	0.88	0.08	1.38	1.00	11.36%	No
	97	3.84	1.13	1.06		0.11				
Q 47	106	3.94	0.66	0.81	0.82	0.08	0.98	0.76	18.53%	No
	97	3.87	1.00	1.00		0.10				
Q 48	106	3.91	0.71	0.84	0.93	0.08	1.49	1.11	9.76%	No
	97	3.78	1.18	1.09		0.11				
Q 49	106	2.27	0.88	0.94	0.91	0.09	2.51	2.32	6.44%	No
	97	2.04	0.95	0.97		0.10				
Q 50	106	4.02	5.98	2.45	5.96	0.24	0.35	0.34	36.75%	No
	97	4.10	5.93	2.43		0.25				
Q 51	106	1.30	0.49	0.70	0.61	0.07	2.79	2.18	#NUM!	No
	97	1.49	0.74	0.86		0.09				
Q 52	106	3.17	1.33	1.15	1.65	0.11	4.00	3.13	1.40%	No
	97	2.72	1.99	1.41		0.14				
Q 53	106	2.22	0.91	0.95	0.90	0.09	0.54	0.52	32.17%	No
	97	2.27	0.88	0.94		0.10				
Q 54	106	3.27	2.31	1.52	2.34	0.15	1.90	1.79	6.52%	No
	97	2.99	2.38	1.54		0.16				
Q 55	106	2.19	1.25	1.12	1.74	0.11	1.59	1.12	12.67%	No
	97	2.36	2.27	1.51		0.15				
Q 56	106	1.98	2.51	1.58	3.94	0.15	3.11	2.01	4.48%	No
	97	2.46	5.51	2.35		0.24				
Q 57	106	2.36	0.66	0.81	0.71	0.08	0.74	0.67	26.84%	No
	97	2.30	0.75	0.87		0.09				
Q 58	106	2.30	0.95	0.97	0.95	0.09	0.95	0.91	22.11%	No
	97	2.21	0.95	0.97		0.10				
Q 59	106	1.80	1.01	1.00	1.08	0.10	0.60	0.53	32.89%	No
	97	1.86	1.15	1.07		0.11				
Q 60	106	3.37	0.86	0.92	0.97	0.09	1.92	1.61	6.40%	No
	97	3.20	1.11	1.05		0.11				
Q 61	106	3.57	1.00	1.00	1.10	0.10	0.22	0.19	41.65%	No
	97	3.59	1.21	1.10		0.11				
Q 62	106	1.96	0.92	0.96	0.89	0.09	0.26	0.26	41.95%	No
	97	1.94	0.86	0.93		0.09				
Q 63	106	1.61	0.77	0.87	0.75	0.08	1.28	1.24	21.16%	No
	97	1.72	0.74	0.86		0.09				
Q 64	106	2.03	0.90	0.95	0.87	0.09	1.77	1.75	16.40%	No
	97	1.87	0.84	0.92		0.09				
Q 65	106	1.43	0.26	0.51	0.23	0.05	3.73	4.26	#NUM!	No
	97	1.25	0.19	0.43		0.04				
Q 66	106	4.00	1.04	1.02	1.31	0.10	4.45	3.42	0.22%	No
	97	4.44	1.61	1.27		0.13				

<b>Q 67</b>	106	3.10	2.24	1.50	2.18	0.15	1.21	1.20	14.62%	No
	97	3.28	2.10	1.45		0.15				
<b>68</b>										
<b>69</b>										
<b>Q 70</b>	106	5.68	0.54	0.73	0.72	0.07	2.94	2.16	0.83%	No
	97	5.47	0.91	0.95		0.10				
<b>Q 71</b>	106	2.27	1.05	1.02	1.11	0.10	3.38	3.06	3.87%	No
	97	2.61	1.17	1.08		0.11				
<b>Q 72</b>	106	2.75	1.45	1.20	2.43	0.12	5.01	3.08	0.37%	No
	97	3.34	3.50	1.87		0.19				
<b>Q 73</b>	106	2.96	20.79	4.56	14.32	0.44	7.63	12.37	0.01%	No
	97	6.34	7.23	2.69		0.27				
<b>Q 74</b>	106	3.27	2.12	1.46	2.84	0.14	3.46	2.53	0.90%	No
	97	3.76	3.62	1.90		0.19				