Factors Affecting Students to Accept Mobile Banking in North Cyprus: Application of the Unified Theory of Acceptance and Use of Technology Model

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ABSTRACT

Technology continues to progress steadily in every field. Rapid advances in the internet and the smart phones lead banks to improve their field by mobile banking. Researches should be done in order to deepen knowledge about the factors that have influence on adoption to use mobile banking which can guide banks to increase the usage and improve their services. The purpose of this research is to measure the factors affecting university students to adopt mobile banking in the Republic of Northern Cyprus. The study framework based on the Unified Theory of Acceptance and Use of Technology (UTAUT) Model, considering only independent variables which are performance expectancy, effort expectancy, social influence and facilitating conditions. The data were collected from two hundred and fifty students who are studying in TRNC regarding the quantitative research methodology. This research revealed that all of the independent variables of UTAUT Model which are performance expectancy, effort expectancy, social influence and facilitating conditions have positive significant impact on the intention to use mobile banking in this country.

Keywords: Mobile banking, the Unified Theory of Acceptance and Use of Technology (UTAUT) Model, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions

ÖZ

Teknoloji, her alanda istikrarlı bir şekilde ilerlemeye devam ediyor. İnternette ve akıllı telefonlardaki hızlı gelişmeler, bankaları mobil bankacılık alanında geliştirmeye yönlendiriyor. Mobil bankacılığın kullanımına katkıda bulunan ve bankaları kullanımını artırmaya ve hizmetlerini geliştirmeye yönlendirecek faktörler hakkında bilgi derinleştirmek için araştırmalar yapılmalıdır. Bu araştırmanın amacı, Kuzey Kıbrıs Cumhuriyeti'nde öğrencilerin mobil bankacılık sistemini benimsemelerini etkileyen faktörleri ölçmektir. Söz konusu çalışma Birleşmiş Teknoloji Kabul ve Kullanma Teorisi (UTAUT) Modeli çerçevesinde ve sadece performans beklentisi, çaba beklentisi, sosyal etki ve kolaylaştırıcı koşullar olan bağımsız değişkenleri göz önünde bulundurarak yapılmıştır. Veriler, nicel araştırma yöntemi temel alınarak KKTC'de okuyan 250 öğrenciden toplanmıştır. Bu araştırma, UTAUT Modelinin, performans beklentisi, çalışma süresi, sosyal etki ve kolaylaştırıcı koşullar olan tüm bağımsız değişkenlerinin, bu ülkedeki mobil bankacılık kullanma niyeti üzerinde olumlu bir etkisi olduğunu ortaya koymuştur.

Anahtar Kelimeler: Mobil Bankacılık, Birleşmiş Teknoloji Kabul ve Kullanma Teorisi (UTAUT) Modeli, Performans Beklentisi, Çaba Beklentisi, Sosyal Etkiler, Kolaylaştırıcı Koşullar

To My Family

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INTRODUCTION

1.1 Introduction

The purpose of this study is to examine the intention of students to use mobile banking in the Republic of Northern Cyprus according to the Unified Theory of Acceptance and Use of Technology (UTAUT) Model. In order to measure their intention, two hundred and fifty students were surveyed and all the data collected were taken into account. This research is composed of six chapters and each chapter is related with specific themes related to this subject. First of all, chapter one provides a brief summary about this study. Chapter two, which is a literature review, starts with history of the Internet and its role then it continues with its development and links it to the technology. Moreover, the literature review comprises definition of traditional and mobile banking systems, plus pros and cons of both type of banking. It also provides detailed information about mobile banking in Cyprus, specifies the services provided in this country and discusses the future of mobile banking. Furthermore, by using the Diffusion of Innovation Theory, how people adopt new technology is explained. Finally, after providing brief information about Technology Acceptance Model (TAM), which is the previous version of UTAUT Model, this chapter includes detailed information about the Unified Theory of Acceptance and Use of Technology (UTAUT) Model, its independent variables which are performance expectancy, effort expectancy, social influence and facilitating conditions, and the application of this model. Chapter three is the methodology

section of this research. This chapter provides information about the types of research design and defines the suitable one for this study. The questionnaire design is discussed in this section as well, and the steps in order to conduct a useful one are explained in detail. In addition to these, the various methods that the researcher can follow in order to carry out the research discussed and sampling design for this study is mentioned. Lastly, ethics in the data collection is determined. Chapter four of this study is about the research model and the hypothesis. In this section, the relationship between independent variables and intention is discussed and the hypothesis of this research is mentioned. Chapter five is about the analysis of the collected data where various tests are done by using SPSS program such as T-test, ANOVA Test, and Regression Test. The discussions of results, recommendation for future studies and the limitations of this study are presented in the final chapter.

1.2 Theoretical Background

1.2.1 The Unified Theory of Acceptance and Use of Technology (UTAUT) Model

The UTAUT model, which is originated from the Theory of Reasoned Action (TRA), was developed for a better understanding to what drives the behaviour that leads to the use of new technologies. The UTAUT Model includes four independent variables which are facilitating conditions, effort expectancy, social influence and performance expectancy. In addition to these, age, gender, experience and voluntariness of use were determined as having moderator roles to the relationship between these independent variables and intention to use new technologies. In this study, only independent variables will be taken into consideration (Dulle & Minishi, 2011). These independent variables could be explained as follows:

- Performance Expectancy (PE) which refers to the degree by which the individual believes that using this certain technology will assess and increase his job and working performance.
- Effort Expectancy (EE) which measures the degree of ease or difficulty associated with the use of the new technology.
- Social Influence (SI) which refers to the degree by which the behaviour of the individual is affected by others whether to use or not the new technology.
- Facilitating Conditions (FC) which refers to the degree by which the individual believes that the technical infrastructure of the organization supports using the technology. Facilitating conditions was developed to affect the actual usage of the system rather than affecting the behavioural intention (Kijsanayotin, et al., 2009).

1.2.2 Mobile Banking

According to the mobile technological wonders in a series, mobile banking considered to be the latest version of this series besides the Internet banking, telephone banking and the automated teller machine (ATM) in which they all offer an effective delivery channel for the traditional bank. Moreover, mobile banking is an application which also has a significant effect on the mobile market. This is because the development of this new technology causes an increase in the sales of smart phones with the help of mobile banking services provided (Sulaiman, et al., 2006).

At the end of the 1990s mobile banking has been introduced by a partnership between German company called Paybox and Deutsche Bank. Firstly, it was diffused and experienced frequently in European countries such as Sweden, Germany,

Australia, United Kingdom and Spain. In addition, Kenya was the first country among the developing countries to introduce a text-based mobile banking service.

Many people around the world have launched several mobile banking labels such as; m-payment, m-finance, m-transfer, branchless banking or pocket banking. Furthermore, mobile banking is considered as one of the most important components of the electronic banking system which comprised an alternative delivery channel (ADC) for different transactions whether it is financial or non financial transactions.

Most of the researcher defined the mobile banking as a purpose of m-commerce that helps customers to get the access for a bank account to make different transactions through using their mobile such as; transfer money within the same account, checking accounts, pay of different bills, transfer money with different account and selling stocks (Shaikh & Karjaluoto, 2015).

1.3 The Aims and Objectives of the Research

The aim of this study is to evaluate the relationship among factors and intention of respondents to use mobile banking in the Republic of Northern Cyprus. In this study, the Unified Theory of Acceptance and Use of Technology (UTAUT) Model is used in order to investigate the intention to use mobile banking, which is a new technology. The new technology (mobile banking) acceptance and students' intention to use it is researched by using independent variables of UTAUT Model. These independent variables are performance expectancy, effort expectancy, social influence and facilitating conditions.

1.4 Sampling Procedures and Data Collection Method and Methodologies

In this study, a purposive sampling method is used. The aim to use this method is to reach the most accurate results by collecting the data only from the students who are currently studying and living in the Republic of Northern Cyprus. Before collecting data, 10 students were questioned as a pilot study in order to avoid any mistakes and to ensure the questionnaire's efficiency. Then, the data is collected from two hundred and fifty students and all respondents were kept anonymous. The questionnaire was distributed in English language because English is the common language among all the students who are living in this country. The questionnaire is split into 6 parts as follows:

- Questions regarding performance expectancy and its effect on the intention to use mobile banking.
- Questions regarding effort expectancy and its effect on the intention to use mobile banking.
- Questions regarding social influence and its effect on the intention to use mobile banking.
- Questions regarding voluntariness of use and its effect on the intention to use mobile banking.
- Questions regarding behavioural intention to use mobile banking.
- Demographic questions to evaluate their effects on the intention to use mobile banking.

1.5 Research Hypothesis

This research purposes to test the following hypothesis:

H1: Performance expectancy has a positive and significant effect on the intention to use mobile banking.

H2: Effort expectancy has a positive and significant effect on the intention to use mobile banking.

H3: Social influence has a positive and significant effect on the intention to use mobile banking.

H4: Facilitating conditions has a positive and significant effect on the intention to use mobile banking.

1.6 Structure of the Thesis

This study is divided into six chapters as follows:

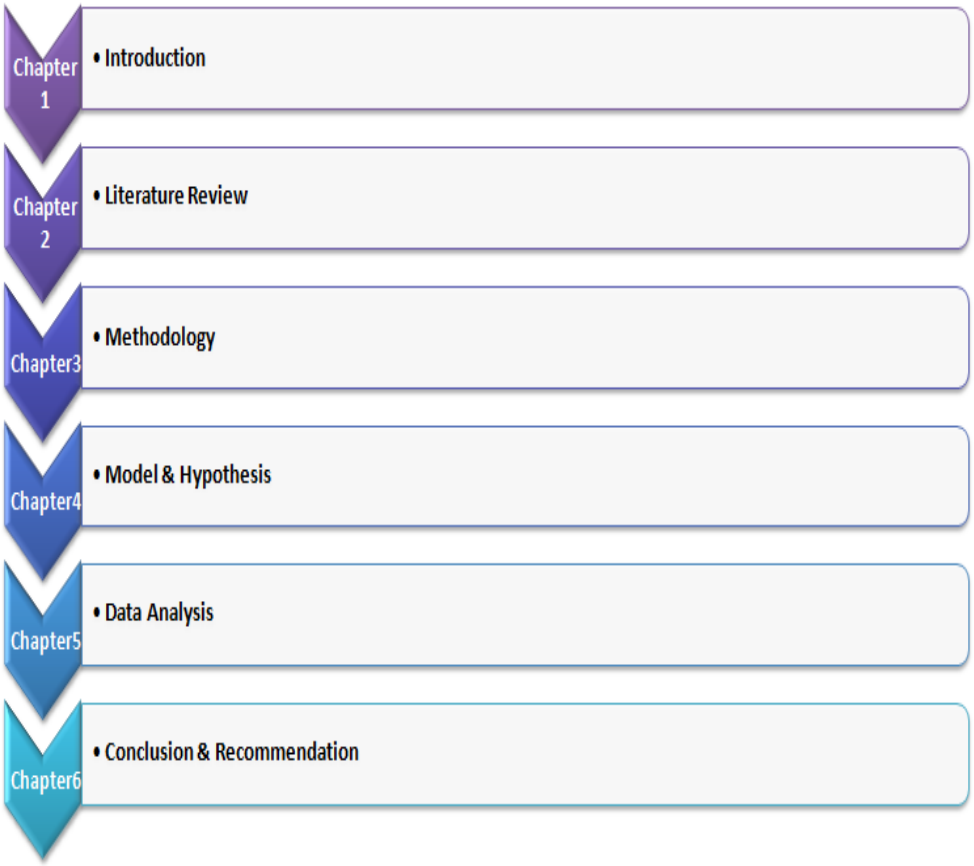

Figure 1.1: Structure of the thesis, source: The Researcher

Chapter 2

LITERATURE REVIEW

2.1 Introduction

Humanity took a crucial step in technological advancement in 1980s when personal computers were first introduced and then followed by the Internet and e-commerce in 1990s. To declare later, the 21st century is the era of mobile commerce and mobile banking (Min, et al., 2008).

Nowadays, technological development is considered to be one of the main essential sources of economic growth. Most developed countries have sustained economic development by keeping up with technological advancement in their productions and services. On the other hand, failing to take the advantage of new technologies will definitely lead those countries to stay retarded compared to developed countries (Andriy, 2001).

Mobile banking emerged as a result of the increase in e-commerce to exceed traditional bank services that is constrained in a specific place and time. Due to the acceleration of technology in different domains such as telecommunication, shopping and banking, the need for mobile banking system emerged to provide different online services accompanied with low cost and flexibility in use.

This chapter will provide an overview about the mobile banking and understanding how performance and effort expectancy, social influence, and facilitating conditions will affect students' intentions toward using mobile banking in The Republic of Northern Cyprus by using the UTAUT Model which was formulated by Venkatesh.

2.2 History of the Internet and Its Role

The Internet is a world-wide, ever-growing network of interconnected computer systems. The Advanced Research Projects Agency Network (ARPANET – the origin of the Internet) seemed to have embraced the concept of the Internet in the world, but at the beginning of the 1970s, it was not a technology product like personal computer, so people who wanted to use it had to learn complex systems. It was first used by universities, then by some government agencies. Then it went to Europe. It is now known as the Internet. The Internet's fastest-growing period can be shown as from 1970s to 1980s. Up until the 1980s, it was used for e-mail and file transfer. However, since 1991 the Internet has become an indispensable part of life (Blum, 2009). Nowadays, the Internet is being used in almost all areas.

The Internet is the only computer technology that can achieve a more important place without losing its importance until today. Internet technology is at its peak with tablets that started with iPad. By 2010, the Internet has reached its focal point with the invention of smart gadgets like mobile phones and tablets.

The Internet changed our life in the way electricity, printing, telephone did in the past. The Internet has not just become a means of communication for a multitude and it has also become a part of everyday life. With the help of this technology, Much-related information can be accessed easily, quickly and safely. As the use of the

Internet became widespread, different opinions about it began to emerge. Some people consider the Internet as the main cause of the communication breakdown, since it decreases face-to-face communication, and is addictive. Some people also think that the Internet usage, which has become a habit in most people, hinders people's productivity, especially in the workplace, and that the use of the Internet should be restricted (Ala-Mutka, 2011).

The Internet is a virtual world where millions of users are involved, where everyone can express themselves as they want. One of the most contributing factors to the widespread of the Internet is e-commerce (Rambure, 2008). With the help of e-commerce, the desired product is ordered from any virtual shopping centre anywhere in the world, and it can be delivered within a few days. The following figure shows mobile and Internet banking usage from 2007 until 2015.

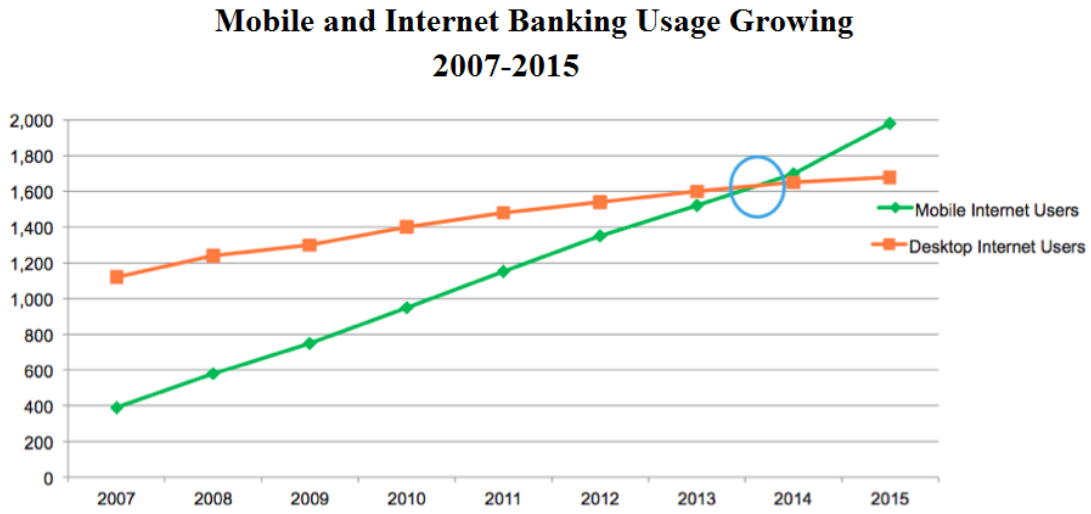

Figure 2.1: Mobile and Internet usage growing, Source: Meeker & Stanley, 2012

2.3 Development of the Internet & Technology

The Internet has unleashed a new revolution of unprecedented kind in the field of computer and technological communication. Moreover this development comes from the inventions made by the inventors of the telephone, telegraph, radio and computer, which worked in addition to opening the doors of integration and continuous development in technology. Furthermore, the Internet is one of the most important examples in the field of technological development through continuous investment and work on the development of the Internet networks in order to build systems and infrastructure to support information systems (Leiner, et al., 2009).

Nowadays people are able to access all the information they need via the Internet. As technology so rapidly evolves, the way information is sought is changing, too. The increase in the needs of people is parallel to the increase in the technology (Davies, 2010). Twenty-five years ago, computers became a tool that only experts can use, and nowadays it becomes a tool that everyone can use (Aswad, 2016).

Technology creates its own culture whether we like it or not. This is the case for the Internet as well. As a balanced Internet user, it is people's choice to take the advantage of the positive aspects and to avoid the negatives. As it is the case with everything else, this important communication tool can be used for the benefit of the people without overdoing the use of the Internet (Wewege, 2017). In addition, the Internet is the best example of the investments that will bring significant benefits and the promises made to improve research and information infrastructure.

Along with the Internet, mobile devices are increasing in popularity. Two-thirds of the students and more than half of the employees stated that "the most important

technology in their lives" is a mobile device (laptop, smart phone, tablet, PC). The steady rise of smart phones and mobility has been on the rise in recent times. Smart phones are at the crossroads of desktop computers as globally most viable devices.

Currently, the Internet represents the information infrastructure in various fields, the first model of what is often known as the national information infrastructure. All companies and institutions are using modern electronic equipment in order to accomplish electronic commerce and obtain information and services provided to the community (Leiner, et al., 2009).

2.4 Traditional Banking System

With the rapid growth of technology, banks have begun to move beyond the images and functions we have become familiar with. Almost every day we meet a new product in banking (Nicoletti, 2014). While banks try to sell their products to their customers, they also communicate with the customers at the same time. It is aimed to reduce the transaction costs both in the services offered by the Internet and to keep the security in shape in accordance with the request of the customer to be kept at a high level and to organize its own transaction and to provide the customers with more time which is valuable for human beings. They have realized a productive marketing by creating a study aiming to reach as many customers as possible without time and space constraints (Davies, 2010). In the services offered by the Internet environment, both the transaction costs are reduced and the security is shaped according to the demand of the customer. With the advancement of the Internet banking, customers are able to do their own transactions by themselves. In this respect, it gives back the most precious time of the customers to the customers

(Moronge, 2017). At this point, they have moved their communication links with customers to electronic affairs.

Traditional banking is based on capital owners depositing money in the bank and making steady income from the banks. In other words, banking is based on interest. Interest; It is an income which is paid in time when no profit can be obtained from the borrowed money or is shared unequally when it is earned. Interest is a transfer of value from one side to the other (Samudrala, 2015). The irreproachable nature of interest is the inequality between the amounts given and the amounts received. Trade is based on equality between recipients, that is, given and received, and the likelihood of this equality is extremely low in interest-rate transactions (Moronge, 2017).

Since the interest-bearing transaction cannot foresee the outcome from the beginning, the mutual consent in trade is not seen in this case either. Interest, therefore, is the act of regret, even if it is consent, in the end, because one of the two sides is at fault and thus regrets. In traditional banking, there is no possibility of balancing between the interest earned on the loan provided by the bank and the profit earned by the customer on the use of the loan, or on the same basis, the interest earned on the deposits deposited on the bank (King, 2016). While the amount of interest is apparent from the start, the expected gain is uncertain and it is not possible to determine in advance. Fixed interest in a floating transaction is based on uncertain and probable gain. This imbalance is the most important problem and the result of the interest system and it is the source of financial instability and crises. In some cases, the banks will only make profits while the borrowers will only have to settle with pre-determined interest incomes (Krishnan, 2014).

Technological developments in the Turkish banking sector will exhibit a structure that will become even more prominent by reducing margins and profitability. On the other hand, it is difficult to improve adaptation processes properly without increasing technology investment. For this reason, the banks will continue their technological investments uninterruptedly. Strengthening analytical models and systems by leveraging technology to penetrate sustainable profitability and more customers and business on one side and improve and change business model on the other side is the hot topic of the bankers (Wewege, 2017).

In Turkish banking system, branchless banking has become more popular and widespread especially in individual transactions and branching still continues its former importance. In this respect, the banks will continue their technological investments such as telephone banking, mobile banking and Internet banking, and they can continue their technological investments in order to make the branch network more widespread (Davies, 2010). It is stated that new entrants in the European Union force traditional banking, but new entrants in the Turkish banking sector are at the forefront with corporate banking and niche market activities.

The concept of traditional banking in the world; Protection of deposits and providing credit service has been extended over time to use on-line payment services, money orders, check payments, insurance, and investment instruments. By bringing technology usage to ever-higher levels, World Banks are able to better control complex banking operations and offer customers better quality and faster service to create competitive advantage.

Due to the rapid development of technology, the banking sector, like other sectors, is in a new phase of the era. For this reason, innovative practices in recent years have created changes in consumer trends (Akinci, et al., 2004).

2.5 Definition of Mobile Banking

The last decade has experienced the development of two important technologies which are the Internet and mobile phones. The Internet users have risen to 1 billion in 2005 by providing a variety of easy, available and efficient services. Mobile phones also had its important role to play in an era where people ask for what's convenient and fast, mobile users reached 1 billion by 2002. Although the Internet and mobile phones were separate, providing the Internet wireless services to mobile phones has made the big move by offering services such as games, email, banking, travel information, news feeds and shopping etc., which enabled the mobile banking to be one of the first commercial applications (Laukkanen, 2007).

Mobile banking is defined as the interaction channel between the customers and banks by mobile devices; the first application of mobile banking was in Finland in 1992 where customers were able the pay bills and checks their accounts by using their mobile phones, and the short message service (SMS) (Barnes & Corbitt, 2003).

Consumers in the developing countries were the first target for these applications. The mobile banking services offer additional convenient services to manage customers' money without having to handle cash. Moreover, the structure of mobile banking varies from one country to another. For instance, the system has different functions such as micro payment third parties, paying bills to companies or between individuals and long distance money transfers. Some of these services are offered

entirely by banks, others by telecommunications and some includes partnership between banks and telecommunication companies. Additionally, regulations and laws vary between countries which determine services delivered by different institutional arrangements (Donner & Tellez, 2008). Several benefits have to be available in order to market mobile baking. First of all, simplicity and usability of the application so that the customer will have no difficulties in learning how to use it and the customer may customize it the way they want. Secondly, universality of mobile banking applications to offer transactions between customers and businesses with domestic, regional and global coverage. Thirdly, joint actions that allow different developed systems to interact with each other. Fourthly, the customer must trust to make online payments by using their mobile phones. Their private information must remain secret and security of their debit and credit information must exist. Fifthly, the cost should be lower than the known and traditional payment techniques so that customers will be encouraged. Finally, speed transactions between the two parties are essential.

There are several advantages and disadvantages that are associated with every feature and services used. Advantages of mobile banking system includes: informing customers about the different purchases made, how much money was used and different transactions made, reminding the customer about their payments whether it was loan or bills that are made through their bank account and the value of each payment. Besides it allows the customer to check how much money they have in their account and make the payment. Customers can also ask to have information concerning their withdrawals and deposits, issued cheques, stop cheques or order a

cheque book via mobile phones. Availability at any time and any place makes mobile banking attractive for customers and mobile users (Goyal, et al., 2012).

Disadvantages and challenges that might face this system are, firstly, complicated authorization because a PIN is needed to be put in order to access the WAP-banking. Secondly, unsatisfying adaptation to the particular device and the reason is that WAP - although it has a common standard - is implemented differently by some manufacturers which make it difficult to interpret the content of the mobile phone. Thirdly, the application cannot be used while the mobile is offline and the applications need continuous connection to the WAP during the usage. Finally, the application cannot be used on more than one device (Pousttchi & Schurig, 2004, January).

2.5.1 Mobile Banking in North Cyprus

Demand for the Internet banking, which saves time and effort, allowing the transactions that were formerly made by branches to be made over the Internet, has recently shifted to mobile banking with the widespread use of the Internet in the TRNC and all around the world. With the new trend in the banking sector, which takes its share from digitalization and accelerates its work in this area, is mobile, growth in mobile transaction volume has at least doubled compared to the last three years.

In the TRNC, there are banks that keep up with the transaction intensity of the customers. These banks provide users with a wide range of transactions such as checking their mobile account balances, transferring money to mobile phones through TL transfers and paying taxes. In the TRNC, mobile and banking transactions become the main platform, and the understanding of time and space is

also changing with the applications that enable mutual contact with everywhere and anywhere.

Banks operating in the TRNC are subject to close supervision by the Central Bank of the Turkish Republic of Northern Cyprus. There are two different structures in the TRNC in which many international banking regulations are applicable, namely Local and Branch Banking, all of which are bound to the Central Bank Audit. There are a total of 22 banks, 6 of them are Foreign Branch Banks, 15 Private Banks and 1 of which are in the status of the Public Bank. The modern banking system needs to be restructured and the use of technology is at a high level in the traditional banking model of the Local Banks operating in the TRNC (Nwobodo, 2011).

Table 2.1: TRNC Bank Information (KKTC Merkez Bankasi, 2017)

	Bank Name	Bank Type
1	Kıbrıs Vakıflar Bankası Ltd.	Public Banks
2	Türkiye İş Bankası A.Ş.	Foreign Branch Banks
3	HSBC Bank A.Ş.	Foreign Branch Banks
4	Türkiye Garanti Bankası A.Ş.	Foreign Branch Banks
5	T.Halk Bankası A.Ş.	Foreign Branch Banks
6	Türk Ekonomi Bankası (TEB)	Foreign Branch Banks
7	T.C. Ziraat Bank A.Ş.	Foreign Branch Banks
8	K.T.Kooperatif Merkez Bankası Ltd.	Private Banks
9	Türk Bankası Ltd.	Private Banks
10	Kıbrıs İktisat Bankası Ltd.	Private Banks
11	Asbank Ltd.	Private Banks
12	Creditwest Bank Ltd.	Private Banks
13	Limasol Türk Kooperatif Bankası Ltd.	Private Banks
14	Yakın Doğu Bank Ltd.	Private Banks
15	Universal Bank Ltd.	Private Banks

16	Şekerbank(Kıbrıs)Ltd.	Private Banks
17	Akfinans Bank Ltd.	Private Banks
18	Viya Bank Ltd.	Private Banks
19	Kıbrıs Faisal İslam Bankası Ltd.	Private Banks
20	Kıbrıs Kapital Bank Ltd.	Private Banks
21	Nova Bank Ltd.	Private Banks
22	Albank Ltd.	Private Banks

Nowadays, in the TRNC, especially branch banks mentioned in the table above are actively using mobile banking platforms. In addition, Private Banks are actively involved in mobile banking development activities.

2.5.2 Northern Cyprus Banks Services

Different services are being provided for different customers in the Northern Cyprus banks according to their needs. However, most people think that this small island cannot provide as much services as bigger countries**.** On the contrary, the types of bank's activities in Northern Cyprus are very flexible and can serve the majority of customers in gaining the full services that they want while doing their transactions inside and outside of the bank (Nwobodo, 2011).

According to the technological development, banks in Northern Cyprus are undergoing a radical change in the banking system in moving towards the use of electronics such as mobile banking and the Internet banking in their banking fields as well as the service of traditional banks. This moving towards the adoption of electronic banking system has increased the business field and makes it easier for the

users to do their transactions without spending too much time and waiting their turn inside the bank (Jenkins, 2007).

Each bank has its own website page and mobile application that can provide the type of services that they offer. Currently, most of the banks in Northern Cyprus promote their products and services through their website and application in order to inform their customer and keep them up to date about their new products and services. Examples of services provided by banks are:

- Opening account
- Transfer money
- Safe deposit boxes
- Cards acceptance
- Checks
- Electronic services
- International trade
- SMEs Banking
- Treasury services
- Foreign Exchange
- Point of sale transaction

2.6 Future of Mobile Banking

The use of mobile banking is witnessing tremendous growth in the future, but the continuous technological development is based on spending a lot of money in order to provide everything that is new to the customers. However, it remains a problem that all societies may face, namely the fraud in the Internet networks. Mobile banking is one of the electronic banking systems that most of fraudsters started to focus on

stealing the information and the money of the clients, which is called the Mobile cyber-attacks. Moreover, and because of the new development of technology, banks have been working to reduce theft by giving each customer their own code and password for personal use only and to combat any attack from hackers (Chapungu, 2014).

In the future, the mobile banking will go into a different direction, beside the other electronic banking services, in order to facilitate the banking services for the customers and to build a strong relationship and create trust among others. Many banks seek to apply the principle of digital wallet as a new technology in their system. This technology already exists in the iPhone 6 throughout Apple Pay. Moreover, the digital wallet technology has security measures. For example, fingerprint scanners and personal passwords that Apple already has partnerships with different banks for using their Smartphone's to handle credit card transactions. This is a unit of technological development on which most banks seek to apply in the future, and certainly, it will not stop at this point, but there will be more and different mobile banking technologies that will be created in the near future (Chapungu, 2014).

2.7 How People Adopt Technology

The necessity of transferring Information Technology (IT) and Information System (IS) applications to the enterprises has become inevitable in achieving organizational performance. However, investments made with such technology-intensive systems are inherently expensive and risky. However, it is not known whether it will contribute to the improvement of organizational performance without using IT and IS applications. Some problems arise at this point. The end users (managers, employees,

professionals) have a very strong resistance against using such technologies (Peoples, 2012).

Users may not be very willing to use technology to do their jobs. It is better to understand why people accept or reject IT and IS applications to better predict, explain and enhance user participation. Information system research has long explored how and why individuals adapt to new information technologies (Blum, 2009). There are various research flows within this broad research area. One of the research flows focuses on the individual acceptance of IT or IS. Other flows are focused on implementation success at the organizational level and task-technology adaptation.

While each of these streams provides significant and unique contributions to the literature on the adoption of IT, the theoretical models involved in present-day investigation, comparison and synthesis use intention and / or use as the main dependent variable. The purpose is to understand the use as a dependent variable. The role of intention to predict behaviour is important and is well structured in reference disciplines related to IS (Lewis, et al., 2013).

2.7.1 Diffusion of Innovation Theory

The technology adoption life is a sociological model that defines the acceptance of a new product or innovation, according to the demographic and psychological characteristics of the groups of persons identified (Lewis, et al., 2013). According to Lewis, et al. (2013), over time, the adoption process is often referred to as a classic normal distribution or "bell curve". According to Diffusion of Innovation Theory, the first group who are more willing to try a new product/innovation represents the innovators, and the early adopters are the second group who are ready to use and

spread the new product to the world. The next group is called early majority and this is the group who use the product when it is well known, and this group is followed by the late majority who are conservative. Finally, the end group to adopt a product is called laggards who do not like to adopt changes. Moreover, very rarely, there is an additional one more group which is called non adopters (Kaminski, 2011). The following figure shows the five groups in a bell shaped curve:

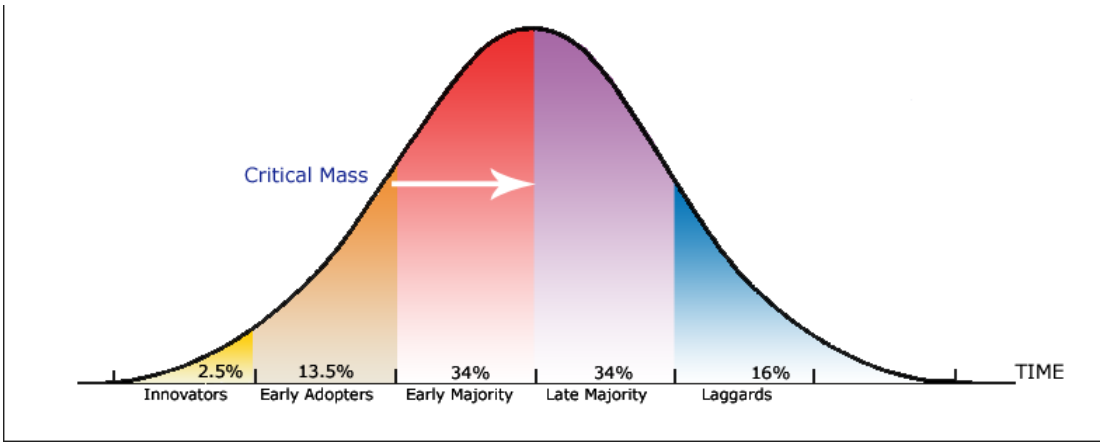

Figure 2.2: Diffusion of innovation theory, Source: Kaminski, 2011.

2.7.2 Technology Acceptance Model (TAM)

Technology Acceptance Model was developed in 1989 by Davis in which is derived from Theory of Reasoned Action (TRA). This theory is used to examine and predict the customer acceptance toward new technological devices such as the mobile banking. The user's attitude in order to accept the new device or not can be influenced by two major factors, which are perceived usefulness (PU) and perceived ease of use (PEOU) (Khrewesh, 2011).

Based on the technology acceptance model, perceived usefulness can be defined as the degree in which a person believes that using such new technology devices will enhance his performance. According to Davis et al. (1992), perceived usefulness

refers to "consumer's perception regarding the outcome of the experience". Furthermore, perceived ease of use can be defined as the perception of the person in which using a new technology device will be easy to use that will not take too much time and be no costly. According to Mathieson (1991), the perceived ease of use is "the consumer's perception that banking on the Internet will involve a minimum of effort" (Jahangir & Begum, 2008).

The technology acceptance model can be seen as an advanced model of the 'diffusion of innovation' approach. In addition, Davis's work in 1989 was improved and new versions of TAM2 and TAM3 created. Moreover, the Unified Theory of Acceptance and Use of Technology model (UTAUT) exemplifies a movement from fragmented view of technology acceptance model to a unified view that integrated both theories into a single one. From this point, UTAUT model can be consider as the extension of technological acceptance model (AbuShanab, et al., 2010).

The following figure can explain the Technology Acceptance Model:

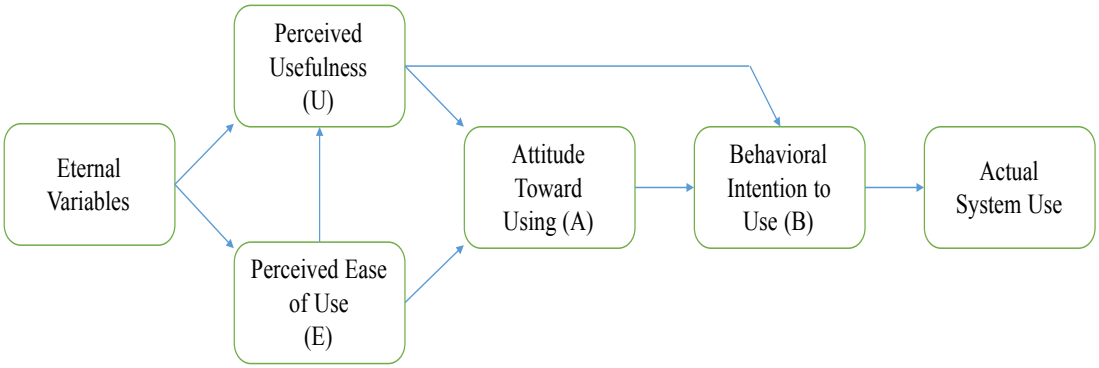

Figure 2.3: TAM, Source (Burton-Jones & Hubona, 2006)

2.7.3 The Unified Theory of Acceptance and Use of Technology Model (UTAUT)

Venkatesh et al. (2003) have summarised eight user acceptance models to declare the UTAUT Model. These eight theories are;

1. Theory of Reasoned Action (TRA)
2. Technology Acceptance Model (TAM)
3. Motivational Model (MM)
4. Theory of Planned Behaviour (TPB)
5. A combined theory of Planned Behaviour/Technology Acceptance Model (C-TPB-TAM)
6. Model of PC Utilization (MPCU)
7. Innovation Diffusion Theory (IDT)
8. Social Cognitive Theory (SCT).

Derived from all these models, UTAUT Model is a highly successful model for describing the adoption and use of technology by individuals although it is still a new and less tried model. It has been a matter of curiosity as to how and why users adopt new technologies and products. The spread of innovations, the rejection of new products and technologies, and the rejection of the use of technologies have been the focus of market researchers. These workshops attracted the attention of company owners and authorities, and they have sought out more effective and successful methods for their products to be accepted and used by consumers. Examining user behaviour has become an important method for market researchers. Factors that influence user behaviour in the context of product acceptance are being sought by researchers to predict whether the product will be used in real life or not (Venkatesh, et al., 2012).

Venkatesh et al. (2003) have stated that, there are four determinative factors that have influence on the intention or the use in the models integrated in the UTAUT framework. These four factors are defined as performance and effort expectancy, social influence and facilitating conditions. These factors play a significant role as direct determinants of user acceptance and users' behaviour.

- Performance Expectancy can be defined as the way that the users think using such a new device will bring gains to them in job performance. Furthermore, most people want to know whether the new device will help them in performing their job well before buying this new technology device. According to the Technological Acceptance Model in which it has two factors, performance expectancy considers the extension of perceived usefulness from the factor of TAM. Example of performance expectancy is the rewards in the job, that is, when your supervisor encourages you to use this device in order to raise your salary which leads to gain a good job performance (Pitchayadejanant, 2011).
- Effort Expectancy is the second variable of UTUAT model which can be defined as the degree in which a person feel that using such a new device will not take so much time and using it will be comfortable without taking lots of effort. Effort expectancy is similar to the one variable of the technological acceptance model which is the perceived ease of use in which both of them can be measured according to behavioural intention of the users in order to use a simple device with less time. Moreover, there is a similar relationship between effort expectancy and behavioural intention, and between performance expectancy and behavioural intention regarding the use of services and mobile devices (Carlsson, 2006).

- Social influence can be defined as the degree to which a person takes into consideration the external influences from other people who are important to him or her in order to use a new technology devices or not (Pitchayadejanant, 2011). Social influence can be divided into three concepts as follows; subjective norms, social factors and image. Each of these concepts reflects the real meaning of word of mouth, cultural agreement and finally the social status in which the social environment has a direct influence on how people act in their life (Li, 2013).
- Facilitating condition is considered as one of the most important direct determinants of the behavioural intention which can be defined as the degree to which a person believe and agree on what the organizations already have as a good technical infrastructure in order to apply a new technological system and give the people the opportunity to use these technological devices. Facilitating condition can be measured by the resources that the perception of the users to access those resources (AlAwadhi & Morris, 2008).

Furthermore, the researchers have barely study the moderator (control) variables which are gender, age, experience and voluntariness of use in order to fill the gaps in their study (Yu, 2012):

- Gender will moderate performance expectancy, effort expectancy and social influence.
- Age is an important mediator factor, which will impact all the main constructs which are performance expectancy, effort expectancy, social influence and facilitating conditions.

- Experience will be a controlling variable for effort expectancy, social influence and facilitating condition.
- Voluntariness of use can only mediate social influence on the behavioural intention to use new products or systems.

According to these variables and the mediators, this figure illustrates how the Unified Theory of Acceptance and Use of Technology are like:

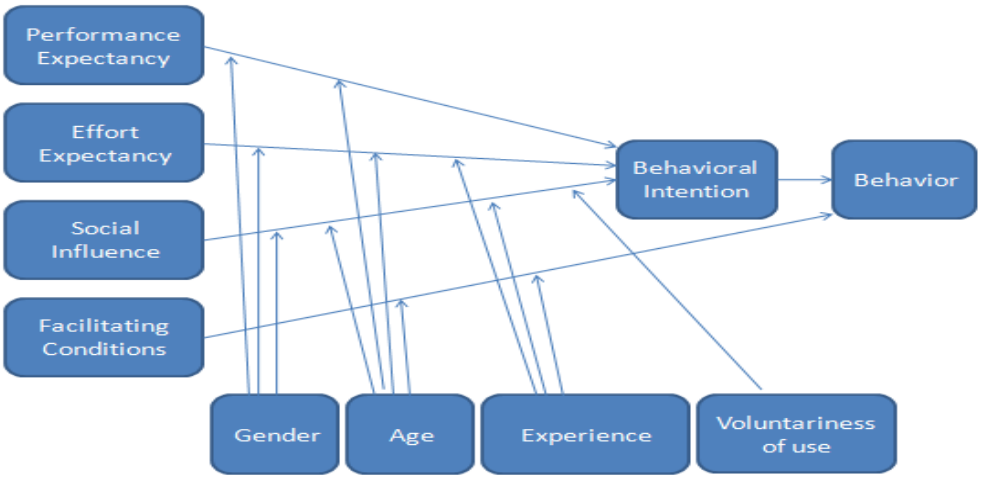

Figure 2.4: UTUAT Model, Source: (Yu, 2012)

There are many previous studies from the perspective of UTAUT Model. Here are some of the examples of earlier studies;

Venkatesh et al., (2003); studies are intended to predict the individual's intention to adapt to a particular system or technology. Abusahanab and Pearson (2007); the main determinants of the Internet banking in Jordan have been reviewed from the perspective of UTAUT. Algahtani et al., (2007); Tested the validity of UTAUT in terms of cultural differences and similarities between Western America and Saudi Arabia. Anderson et al., (2006) implemented UTAUT as a management tool to evaluate the Tablet PC's user acceptance. Chiu and Wang (2008); they extended

UTAUT by applying subjective task value components in the model to examine the continuing intentions of students in web based learning.

In the study of Kijsanayotin et al. (2009), patients in Thailand have used and tested the UTAUT model to understand the factors that affect medical IT compliances. Lin and Anol (2008); by expanding UTAUT, they tested instant messaging used in social networks in Taiwan. Loo et al., (2009); The Malaysian government has examined the degree of user acceptance of national identity cards and driver certification applications embedded in the multipurpose smart card using the UTAUT model.

Wang and Shih (2009); analyzed investigators of information kiosks and mediating effects of age and gender differences on behavioural intent / use behaviour and determinants. Marchewka et al., (2007); they used UTAUT to describe student perceptions using Blackboard, a web-based tool. Wu et al., (2007); they used the UTAUT model to examine the behaviour of 3G mobile communication users in Taiwan.

The purpose of this study is to investigate the intention of the students, who are currently living in the TRNC, to use mobile banking considering the UTAUT Model and its dependent and moderator variables mentioned above.

Chapter 3

REASEARCH METHODOLOGY

3.1 Research Design

A research design is a structure to carrying out the marketing research project. The research design is practical in a way that it illustrates the whole procedures crucial from the beginning to the end of the marketing research. This leads to structure or solve the problems in the most efficient way for the researcher. Moreover, the research design is vital because it identifies in details even though a wide approach to the problem has previously been build up (Malhotra, 2011).

In the research design, there are six steps. First step is to describe the necessary information. In the second step, the researcher decides the type of the research. Then, define the suitable measurement type and scaling procedures and these followed by data collection with specified sample size and method. Final step is to establish a plan in order to analyze the collected data (Malhotra, 2011).

The research design is broadly classified as exploratory research design and conclusive research design as shown in the figure below;

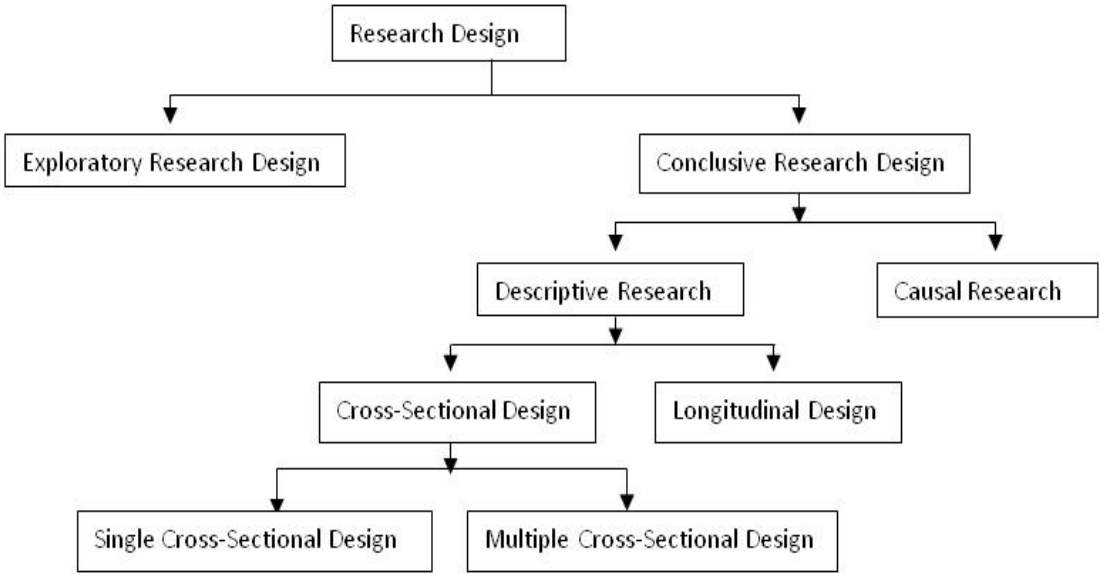

Figure 3.1: A Classification of Marketing Research Designs
Source: (Malhotra, 2011)

Exploratory research design aims to determine the attribute of a problem through collecting information about the study itself. However, this type of research is used in order to define and realize the events and actions of the study. Moreover, most of the researchers use the exploratory study when the problem is unknown and difficult to define (Alagheband, 2006).

Conclusive research is more official and planned compared to exploratory research and this research design is divided into two; descriptive research and causal research. On one hand, descriptive research is a technique in which a researcher can use to identify, analyze and interpret the data of the study in which the problem is known. However, it refers to the design, research question and data analysis of the study (Vaismoradi, et al., 2013). Descriptive research can be either quantitative approach or qualitative approach and it depends mainly on the question of "what is".

Furthermore, descriptive research has a type of interview, survey, observation and portfolio (Knupfer & McLellan, 1996). Moreover, descriptive research is split into cross sectional and longitudinal design and both of them are observational. However, in cross sectional design, researcher collects information from the sample only once and in longitudinal design, researcher collects information several times from the sample on the same variables. Furthermore, cross sectional design is divided into two; single cross-sectional design and multiple cross-sectional design. There is only one sample of respondent in the single cross-sectional design. However, in multiple cross-sectional designs, there are two or more samples of respondents (Malhotra, 2011). On the other hand, causal research, which is the type of conclusive research design, is conducted in order to investigate cause - effect relationship through experiments. In other words, causal research focuses on the effect of one variable on another variable. This method is one of the favourite of the marketing managers and they mainly take into consideration the causal relations while making decisions (Scriven, 2008).

As regards to this research, a cross-sectional design has been used with a descriptive research and quantitative approach as this study aimed to answer the question of 'What are the factors that influence students in North Cyprus for their intention to use mobile banking?'. Since all the results of the research were presented in numbers and statistical analysis had been done, quantitative approach was seen as an appropriate approach to be used in this area. Moreover, a purposive sampling technique was used for this research as each university student in Northern Cyprus had an equal chance of being selected.

3.2 Questionnaire Design

Questionnaire is an important element for the success of primary data collection. Surveys could not be efficient and effective without well designed questionnaire. Everyone can write a set of questions, but if those questions are not targeting the needed information or lead to misunderstanding, the result for this questionnaire will be poor and impractical. On the other hand, building a well designed questionnaire and clear questions can lead the researcher to obtain accurate information that is needed and reveal better results. Moreover, questionnaire is a quick and easy way to collect information from respondents and a medium of communication among the subject and the researcher. There are three main objectives to be considered while constructing a questionnaire. Firstly, in order to obtain the exact information to answer the problem of study, researcher should set up accurate questions which respondents have the willingness to answer. Second objective is how the research should build the questionnaire in a useful way in order to avoid the boredom of the respondents and to put the questions in order as to make it easy for the respondents to complete the questionnaire step by step. The third objective is to reduce response error that could be faced in the data collection by obtaining inaccurate answers from respondents which can happen at any stage.

The process of designing a questionnaire has ten steps as followed;

Table 3.1: Questionnaire Design: Source Malhotra, 2011

Step 1: Specify the information needed.
Step 2: Specify the type of interviewing method.
Step 3: Determine the content of individual questions.
Step 4: Design the questions to overcome the respondent's inability and unwillingness to answer.
Step 5: Decide on the question structure.
Step 6: Determine the question wording.
Step 7: Arrange the questions in a proper order.
Step 8: Identify the form and layout.
Step 9: Reproduce the questionnaire.
Step 10: Eliminate bugs by pretesting.

3.2.1 Specify the Information Needed

This is the first step of questionnaire design. The most crucial step to form a questionnaire is to provide the correct data and to ensure that all necessary questions are included and they serve the purpose of the study. Moreover, we should make sure that the information needed should also contain the hypothesis of our study. Taking into consideration the sample of the questionnaire also is an important part for the data collection. In this study the participants were the university students in Northern Cyprus.

3.2.2 Interviewing Approach

A survey can be divided into two categories which are questionnaire and interview. They are designed to gather the needed information by addressing the respondents various questions in the field of study. Moreover, a survey could be made in a verbal way via face to face or by using a telephone. In addition to these, there are two questionnaire types. Structured questionnaire relies on close-ended questions that are prepared and selected in a formal way by the researcher in advance. On the other hand, unstructured questionnaire relies on open-ended questions that give the respondents the right to mention their ideas freely.

In this study, questionnaire was used with a type of structured questions which aimed to obtain specific information about the intention of the students to use mobile banking in the Turkish Republic of Northern Cyprus.

3.2.3 Determine the Contents

This is the third stage of questionnaire design and in this stage researcher must choose the appropriate content of the questionnaire. The questions should be clear and planned in a way that covers the relevant objective in order to obtain the necessary answers from respondents. Moreover, the respondents should have an idea about the aim of the study before answering the questions to give more useful and specific answers. Additionally, the questions must be structured in a way that respondents can easily answer without facing any difficulties. Furthermore, it is important to avoid acquiring unnecessary information in order to prevent misunderstanding and hesitating while answering questions. Even though the questionnaire is prepared in the right format, the researcher should take into consideration that some of the respondents may make mistakes while answering the

questions. In this study, while preparing the questionnaire, all of the recommendations mentioned have been taken into consideration.

3.2.4 Overcoming Unwillingness to Answer

It is very hard to create a sample that all respondents are willing to answer all the questions in the questionnaire. This is because respondents perceive filling a questionnaire as a significant effort and this may cause either incomplete questionnaires or wrongly answered questions. Therefore, in order to overcome this problem and decrease the unwillingness to answer the questions, the researcher should create a questionnaire with easily understood, straightforward and answerable questions and decrease the effort needed to answer the questions. Moreover, the respondents are less willing to answer sensitive questions such as their wages, family status, religion, and many more questions which may make respondents to feel offended or embarrassed. The best ways to overcome these barriers and build mutual trust between respondent and researcher are either not to ask such questions or to place such questions at the end of the questionnaire and this may increase the respondents' willingness of answering the questions so researcher could obtain more accurate answers. In this study, effort of answering the questions has been minimized as much as possible and sensitive questions have been placed at the end of the questionnaire.

3.2.5 Choosing Questions Structure

Structured and unstructured questions are the two types of questionnaire structure. Structured questions are the ones that the respondents can choose one answer from given multiple options. Multiple choice questions and scales such as Likert Scale could be examples for structured questions. On the other hand, unstructured questions, which are also called open ended questions, allow respondents to answer

the questions in their own. In this study, structured questions were preferred to be used as respondents can only choose one answer among the given options. Additionally, there was Likert Scale questions which allowed respondents to choose from strongly disagree to strongly agree according to their own opinions.

3.2.6 Choosing Question Wording

This is the sixth step of the questionnaire design and this step is crucial because wording of questions should be suitable for the respondents in order to clearly understand what it is exactly asking. In contrast, using complicated and tricky words may lead the respondents to be less willing to answer the questions, or answering them wrongly. Also, avoiding guiding questions is very important in order not to affect respondents' answers. Moreover, the researcher should keep in mind to link the level of questionnaire with the targeted segment of respondents. While preparing the questionnaire, information given above was taken into account for this survey.

3.2.7 Determining the Order of the Questions

The main objective of this step is to make respondents to fill the questionnaire with a positive approach. The questionnaire should be designed in a way that respondents perceive it interesting and, they should not perceive answering questions as they are obliged to do in order to feel comfortable. These are linked to the order of the questions because with well organised ordering like starting with the questions which are asking respondents' own opinions may provide common trust among respondents and researcher. However, besides well designed question ordering, answering the questions step by step is important to prevent confusion which can be occurred by constantly moving from one question to another. Moreover, as mentioned before in the fourth step, sensitive questions such as salary, religion and other questions that

can make respondents feel uncomfortable to answer should be placed at the end of the questionnaire.

Table 3.2: Questionnaire Structure

	Items	References
Performance Expectancy	**PE1** Using mobile banking improves my performance. **PE2** Using mobile banking saves me time. **PE3** I can use mobile banking anywhere. **PE4** I find mobile banking useful.	(Yu, 2012)
Effort Expectancy	**EE1** Learning to use mobile banking is easy. **EE2** It is easy to access the mobile banking page. **EE3** It is easy to use the mobile banking service competently. **EE4** I have no doubt when using the mobile banking services.	(Oliveira, et al., 2014)
Social Influence	**SI1** People who are important to me think that I should use mobile banking. **SI2** People who are familiar with me think that I should use mobile banking. **SI3** People who influence my behaviour think that I should use mobile banking. **SI4** Most people surrounding with me use	(Yu, 2012)

	mobile banking.	
Facilitating Conditions	**FC1** I think the initial costs do not inhibit the usage of mobile device. **FC2** My friends and colleagues guide me in the use of mobile banking. **FC3** I receive help from the operator for the problem related to use of mobile banking. **FC4** I receive help from the service provider for the problem relating to the use of mobile banking.	(Carlsson, et al., 2006)
Behavioural Intention	**BI1** I aim to use mobile banking instead of the traditional one. **BI2** I want to be among the first one to try new mobile banking services. **BI3** I use mobile banking instead of the traditional one when possible.	(Carlsson, et al., 2006)

3.2.8 Form and Layout

The layout of the questionnaire is an instrument of specific data capture that leads it to success by the respondents. Most of the respondents judge the appearance of questionnaire at first sight and make their opinion according the design and the layout of the questionnaire whether it is positive or negative judgment The researcher should be careful in formatting the design of the questionnaire by using a

comfortable and suitable layout that will attract the respondents' attention. The font type and size should also be taken into consideration as the respondent can judge on. Moreover, it is better for the researcher to provide numbers for each question better than putting signs such as stars or anything else. The most important factor for designing the questionnaire is the language that provided from the researcher which means using a high level of education beside the grammatically words and punctuation marks such as dots, commas and etc as can separate one question from another. According to different studies, most of the researcher held that questions on the top of the page is much important than questions on the bottom of the page. In order to have good responses the questionnaire should be done with a professional layout and design according to different factors.

3.2.9 Reproduction of the Questionnaire

The quality of questionnaire paper is as important as the previous steps. This is because respondents will consider worthy to fill the questionnaire when it is printed out with high quality paper, colours selected good enough to read easily and design and the format of the questionnaire is appealing to complete it. Otherwise, respondents may perceive that the questionnaire is not so important and it is a waste of time.

3.2.9.1 Pretesting

In this step, researcher is willing to examine the questionnaire that is prepared for a specific study in advance by distributing to a small group in order to check if there are any missing or misleading questions from the responses in order to minimize the potential bias or error. In this study, the questionnaire was pre-tested with 10 participants in the target sample. Misunderstood questions had been observed and edited before the data is collected.

3.3 Sampling Design

Another crucial part of preparing a questionnaire is to focus on the sampling design and choosing the most suitable design related to the research. Sampling design has various methods that the researcher can follow in order to carry out the research (Kothari, 2004). There are five steps in order to build sample designs which are as follows:

Table 3.3: Sampling Design: Source Malhotra, 2011

Step 1 : Define the target population
Step 2 : Identify the sampling frame
Step 3 : Select sampling technique(s)
Step 4 : Determine the sample size
Step 5 : Execute the sampling process

3.3.1 Define the Target Population

The initial step in sampling design is to determine the target sample which is suitable to the study. Without targeting the right sample according to the research problem, the researcher will not be able to carry out their experimental study. Also, the outcome of the research will not be accurate. Moreover, population can be explained as individuals that are associated to the whole group that researcher is aiming to target in the study and sample refers to the individual who participate to the research among the group of people researcher targets (Bryman & Bell, 2007). In this study, the target population was university students who are currently living in The Turkish Republic of Northern Cyprus.

3.3.2 Determine a Sampling Frame

As mentioned in the first step of sampling design, people who have required interest and features related to the research selected as a sample. It is more favourable for researchers to working with a sample compared to working with the whole population interrelated with the study because it is less expensive and less time consuming. In this research, purposive sampling technique was taken into consideration as every university student who is studying in North Cyprus can engage.

3.3.3 Select Sampling Technique

In order to meet the main goal of the research, the researcher should use the suitable sampling technique as it is part of sampling method. In this research, a purposive sample and stratified sample were used as a sampling technique in order to gather information from students who had the intention to use mobile banking in the Turkish Republic of Northern Cyprus.

3.3.4 Determine the Sample Size

The following step is deciding on the sample size relevant for the research because it has influence on the accuracy of the findings. In other words, too large sample size cause waste of time and it is more expensive to gather information regardless of the quality of the study. On the other hand, too small sample size may lead mistaken results that will affect the analysis of the study. Considering all these, 250 participants are questioned in this research.

3.3.5 Executing the Sampling Process

The final step of sampling design is to collect data from the respondents. In this study, data is collected from students who are living in Northern Cyprus. The questionnaire has structured like; in the first question respondents are questioned

about whether they use mobile banking or not and it politely asked users to continue to answer the questions while asking non-users to stop. Then, in the following five questions respondents are questioned about using mobile banking by using Likert Scale from scale 1 to scale 7. Furthermore, in question seven, demographic information is asked. For example, gender, age, marital status, education level, the frequency of using mobile banking and weekly budget.

3.4 Ethics in Data Collection

Ethical issues must be taken into consideration while gathering information. In order to build a confidential relationship with respondents, researcher needs to progress with concern and sensitivity for their wants and needs, clearly define the purpose of the research and not force them to participate to the research. In addition to these, the researcher should not collect data unrelated to the research problem, so the questions should be more specific. Also, data should be converted into information without manipulation in the database in order to have accurate results. Lastly, the collected data should be only used for the academic purpose (Polkinghorne, 2005). In this research, ethical issues were taken into account while collecting data to avoid any unethical issues.

Chapter 4

MODEL AND HYPOTHESIS

4.1 Introduction

This chapter will demonstrate the independent variables that have influence on the dependent variable of the Unified Theory of Acceptance and Use of Technology (UTAUT) Model and their relationship with the intentions. These independent variables consist of performance expectancy, effort expectancy, social influence and facilitating conditions and their impact on intention to use mobile banking examined by UTAUT Model. Although this research is based on the conceptual framework of UTAUT Model, the four moderator variables of this model, which are age, gender, experience and voluntariness of use, are not taken into account. Moreover, this section will discuss each factor and their explanations due to previous studies separately. Also, this section will examine the influence of the independent variables on the intention based on previous studies. Additionally, the hypothesis will be clearly defined related to earlier studies before running analysis for this research.

4.2 The Relationship between Performance Expectancy and Intention

Venkatesh et al. (2003) defined the performance expectancy as 'the degree to which an individual believes that using the system will help him or her to attain gains in job performance.

A study of the Use of the UTAUT Model in the Adoption of E-government Services in Kuwait was conducted to investigate the variables which verify the adoption of e-government services in Kuwait. The data were collected from students to measure the influence of the performance expectancy on intention to use e-government services. In this study, the independent variable measured via benefits such as effort and money, time saving, developing government services quality, providing better communication with government and offers each resident equal right to run their businesses with government. The result of this study has shown that there was no significant relationship among performance expectancy and intention. However, when the respondents have much knowledge about the Internet, the relationship between the performance expectancy and intension became significant. (AlAwadhi & Morris, 2008).

There was another study with a name of Internet Banking Adoption in Kuala Lumpur which used UTAUT Model. The purpose of this study was to examine the aspects that affect the use of the Internet banking with Malaysian. As a result of this study, performance expectancy was one of the factors which have an impact on the intention to use Internet banking in Malaysia (Foon & Fah, 2011).

The study of an International Comparison of Technology Adoption which was held in Korea and the US aimed to measure the affection of culture on the relationship of performance expectancy and the intention of using MP3 player and Internet banking by using UTAUT Model. In this study, the researcher focused more on the main role of culture in adoption of new technology as it was expected to have significant impact on rapid growing technologies. According to UTAUT Model, the result of

this study showed that the performance expectancy about technology has an influence on intention to use MP3 player and Internet banking (Im, et al., 2011).

Based on the aforementioned evidence, it is hypothesized that;

H1: Performance expectancy has a positive and significant effect on the intention to use mobile banking.

4.3 The Relationship between Effort Expectancy and Intention

Effort expectancy is defined as the user's effort to use the new technology system and the comfort s/he will gain when using that technology (Wang, et al., 2005). Many previous studies have been done about the influence of effort expectancy on intention.

One of the previous studies was measuring the influence of effort expectancy on using mobile devices/services by using UTAUT Model in Finland. During this study, people who are from Finland were questioned that was aiming to examine the effectiveness of effort expectancy on the intention of using mobile services and mobile devices. As a result of this study, the researcher found out that the effort expectancy has direct impact on the intention to use mobile services and devices (Carlsson,et al., 2006).

Moreover, another study was done that applied UTAUT Model to measure the influence of effort expectancy on the health information technology in Thailand. In this study, the researcher explained the effort expectancy as the level of easiness of using a new technological system such as health information technology. In this study, data was collected from the respondents who work in the Community Health

Centre (CHC). The main aim of this research was to find out how workers in the CHC will accept the use of health information technology and how the effort expectancy factor will influence on the acceptance of the health IT. As a conclusion, the researcher discovered from the data collected from those workers in Community Health Centre in Thailand that effort expectancy has a direct impact on the intention to use health information technology (Kijsanayotin,et al., 2009).

Furthermore, there is another study held in Saudi Arabia that focused on the use of information technology. The main purpose of this study was to evaluate the impact of effort expectancy on intention to use an information technology by using UTAUT Model. The researcher was expected that there is a relation between intention to use information technology and level of acceptance of using computers. However, in the light of the collected data, the researcher observed that there is no significant effect of effort expectancy on intention to use information technology (Al-Gahtani, et al,. 2007).

Based on the aforementioned evidence, it is hypothesized that;

H2: Effort expectancy has a positive and significant effect on the intention to use mobile banking.

4.4 The Relationship between Social Influence and Intention

Venkatesh et al. (2003) explained social influence as a kind of Word of Mouth (WOM). In other words, it can be defined as the degree in which an individual could have an impact on others in the intention of using the new system or technologies. There are studies that have been done to measure the effectiveness of social influence

on the intention. Moreover, it is stated that behavioural intention could be affected earlier by the social influence at early stages of new technology adoption.

One of the studies that have been done on this issue was measuring the effectiveness of social influence on the intention of student teachers in order to use interactive whiteboard. This research was done by using the UTAUT Model, and student teachers were surveyed to measure their social influence on their intention to use interactive white board. In this research, they formed the hypothesis on social influence as there would be a positive relationship between social influence and the intention to use interactive white board. In contrast, the result was that the intention of using a new technology is not affected by social influence. This was because, the descriptive analysis was built according to the group of people with young age, between 18 and 21, and people with these ages are less likely to be impacted by others (Wong, et al., 2013).

Another study which was done on this subject was the Acceptance of Automated Road Transport System across Europe. In this study, the researcher was aiming to evaluate the relationship between the intentions of people to use automated transport system regarding social influence from others in two different locations in Europe by using UTAUT Model. The researcher prepared a questionnaire and used iSurvey web site in order to collect data. The result of this study was that there was a significant effect of social influence on people's intention of using the new technology which was automated road transport system (Madigan, et al., 2016).

A further study was conducted which was about consumers' decision on online shopping by using the UTAUT Model. In order to collect data for this research, a questionnaire was distributed to students in one of the universities in Hong Kong because this university was perceived to have the most active group of the Internet users in this country. The researcher was expecting to get positive result regarding the relation between social influence and the intention to use online shopping by students. The results revealed that the research supported the hypothesis, as students in Hong Kong had positive influence on others regarding purchasing online. In addition to this, the results of collected data illustrated that social influence increased the relationship between respondents' attitude and their intention on online shopping significantly (Lee, et al., 2011).

Based on the aforementioned evidence, it is hypothesized that;

H3: Social influence has a positive and significant effect on the intention to use mobile banking.

4.5 The Relationship between Facilitating Conditions and Intention

Venkatesh et al. (2003) defined the facilitating conditions variable as an availability of technical infrastructure to which an individual perceives from using newly purposed system. There are many studies that measure the relation between facilitating conditions and people's intentions.

One of the researches which are done on this issue was about e-banking services. The main aim of the study was to evaluate the impact of facilitating conditions on the intention of using e-banking services which was held in Iran by using UTAUT Model. The questionnaire was distributed to Bank Melli's customers in Iran in order

to reach the result. The result of this study was concluded that facilitating condition which is one of the variables of UTAUT Model has significant and positive influence on the users' behaviour and their intention of using e-banking services. In addition to this relationship, the researcher has recommended that all social classes should have provided by good infrastructure such as affordable and high speed Internet, and computers in order to increase the intention of using different type of technological services such as e-banking (Ghalandari, 2012).

There is another study which was done on this subject and was about examining the factors that affected nurses on the use of clinical care module. In this research, researcher was aiming to evaluate how facilitating conditions influence the intention to apply clinical care module in Zimbabwe by taking into consideration the UTAUT Model. The questionnaire was prepared to collect data from participants who were working as nurses at three different hospitals. The researcher's hypothesis was there is a relation between the facilitating factors and the intention to use clinical care module by nurses. In addition, the researcher stated that the facilitating conditions should be linked directly to the infrastructure of Information Communication Technology (ICT). In conclusion, the researcher found out that there is a relationship between the nurses' intention to use the clinical care module and the facilitating conditions (Zhou, et al., 2016).

Another research was done in Jordan about the web based training system by using UTAUT Model. This research focused on concerning the web based training which enabled the organization to provide a significant workshop for their workers at anywhere and anytime. The data was collected from the employees who work in Jordan to describe the intention of employees to use web based training system. In

the light of the collected data, the researcher stated that there is a significant influence and strong effect of facilitating conditions on the intention to use web-based training system for employees. Moreover, knowledge and resources that are crucial part of infrastructure of using technology should be taken into consideration by the managers of any organizations who are using this system in order to encourage their employees to use such a system in their work (Alrawashdeh, et al., 2012).

Based on the aforementioned evidence, it is hypothesized that;

H4: Facilitating conditions have a positive and significant effect on the intention to use mobile banking.

4.6 Conceptual Framework for Mobile Banking

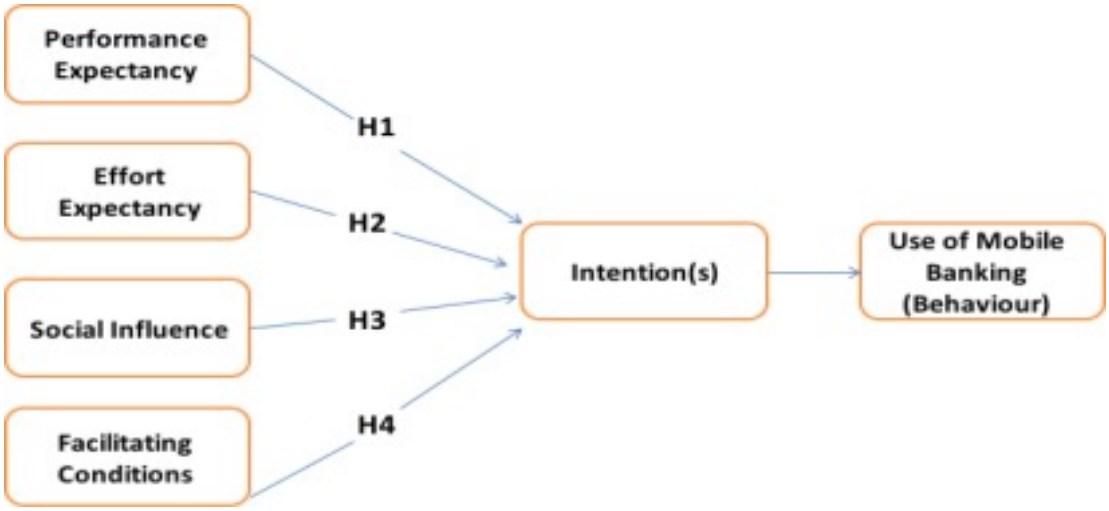

Figure 4.1: Conceptual framework model

H1: Performance expectancy has a positive and significant effect on the intention to use mobile banking.

H2: Effort expectancy has a positive and significant effect on the intention to use mobile banking.

H3: Social influence has a positive and significant effect on the intention to use mobile banking.

H4: Facilitating conditions have a positive and significant effect on the intention to use mobile banking.

Chapter 5

DATA ANALYSIS

5.1 Introduction

This chapter will evaluate the results of the data that has been gathered via questionnaires in order to determine the intention to use mobile banking and the factors that have an impact on the adoption of this new technology. The obtained data will be analyzed by using SPSS Software version 18 and the results will illustrate whether we should accept or reject hypotheses that we have revealed.

Statistical Package for the Social Sciences (SPSS) is a popular software package which was first introduced in 1968. Afterwards, the use of this software has started in the university and industry research applications. Statistical Package for Social Science offers several capabilities for descriptive analysis and other related tools such as regression, correlation, etc. Moreover, SPSS can find out the relationship between different variables in order to determine if there is any significant effect or relationship between them and the type of this relationship whether it is positive or negative (DiMaggio, 2013).

We will do various types of analysis and tests in order to reach the most reliable results. First of all, descriptive analysis will be done by demographic test to demonstrate demographic features of the participants such as gender, age, marital status, education level, frequency of using mobile banking and weekly budget.

Secondly, in order to measure reliability and validity of the questionnaire, reliability analysis will be done. Thirdly, Independent Sample T-Test will be done to evaluate two means of two various groups. Moreover, to compare more than two types of groups, One Way ANOVA Test will be done. Furthermore, Correlation Analysis will be part of this chapter to calculate strength and direction among intention to use mobile banking and independent variables (PE, EE, SI, FC). In addition to these, Principal Component Analysis will be done to assess the component (factor) loading concerning the variables. Finally, Regression Analysis will be done in this chapter in order to measure the influence of performance expectancy, effort expectancy, social influence and facilitating conditions regarding the intention to use mobile banking.

Furthermore, after analyzing and interpreting the data collected, those findings for the Independent Sample T-Test, ANOVA Test and Regression Analysis will be discussed in this section.

5.2 Descriptive Analysis and Reliability Analysis

250 students who are studying in the Republic of Northern Cyprus are surveyed in this research. The following tables show their intention to use mobile banking and demographic characteristics.

5.2.1 Usage of Mobile Banking

Firstly, the data was collected from 250 respondents to check if they were using mobile banking or not. The results have shown that majority of students who are studying in the TRNC are using this new technology. There were 217 participants who were using mobile banking with the percentage of 86.8%. However, 33 students were non users with the percentage of 13.2%. The distribution of users and non users respondents is shown in the pie chart below.

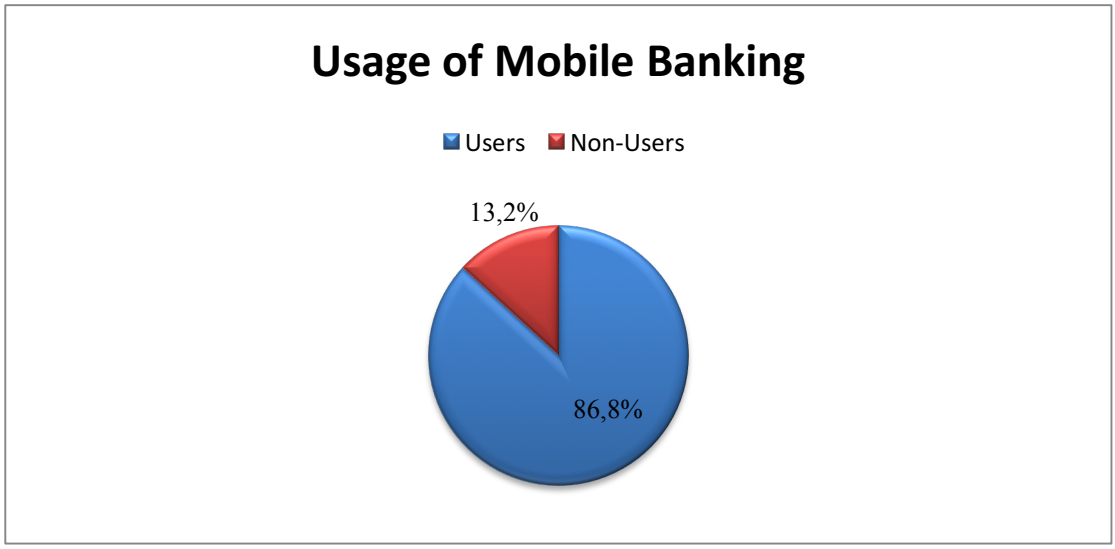

Figure 5.1: Users and non users' distribution of respondents

In the following tests, only the mobile banking users' surveys (217 surveys) were taken into consideration.

5.2.2 Gender

According to the data collected, it is found out that 119 respondents were males and 98 of respondents were females with the percentage of 54,8 and 45,2, respectively. The following pie chart illustrates the distribution of gender.

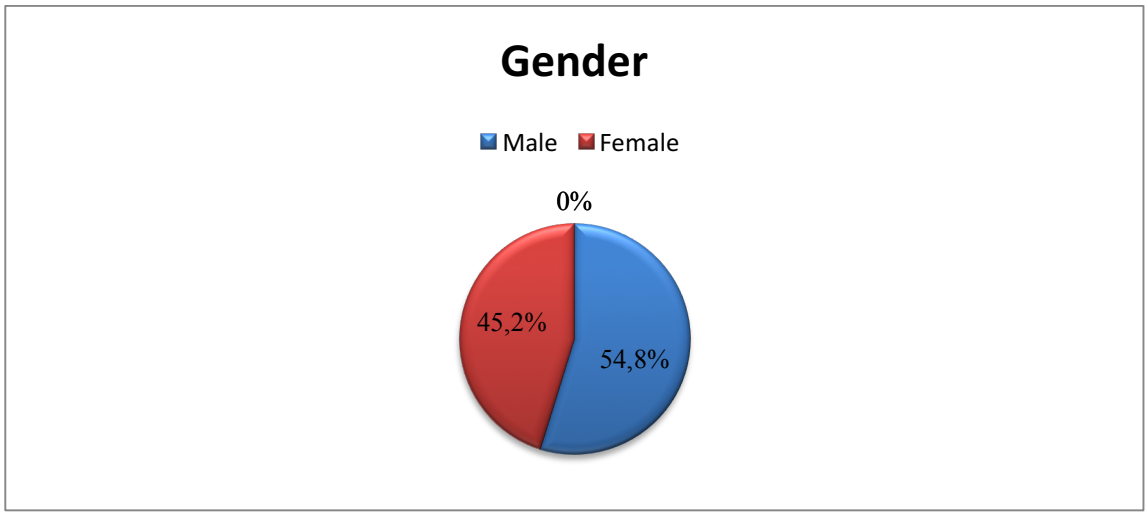

Figure 5.2: Gender distribution of mobile banking users

5.2.3 Age

The age analysis of mobile banking users has indicated that 113 respondents were in age group 1 (18-23) with the percentage of 52,1%, 87 respondents were in age group 2 (24-29) with the percentage of 40,1% and the remaining 17 respondents were in the age group 3 (30-39) with the percentage of 7,8%. The following pie chart shows the age distribution of mobile banking users.

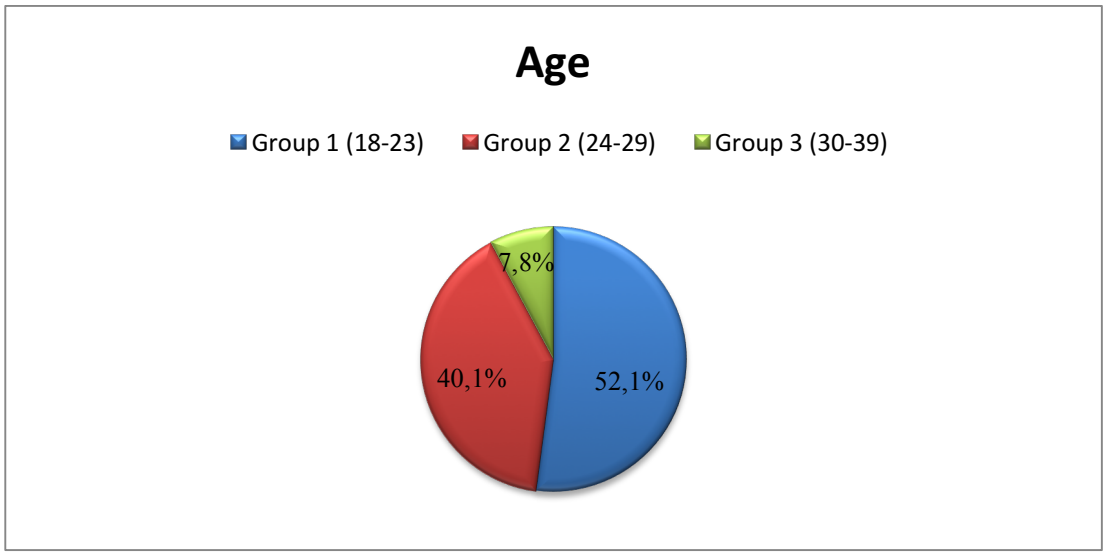

Figure 5.3: Age distribution of mobile banking users

5.2.4 Marital Status

Regarding 217 students who use mobile banking, it has been found that the number of respondents who are single is 182 with the percentage of 83,9 and the number of respondents who are married is 32 with 14,7%. Moreover, the number of divorced respondents is 3 with 1,4% . The pie chart below shows marital status distribution of mobile banking users.

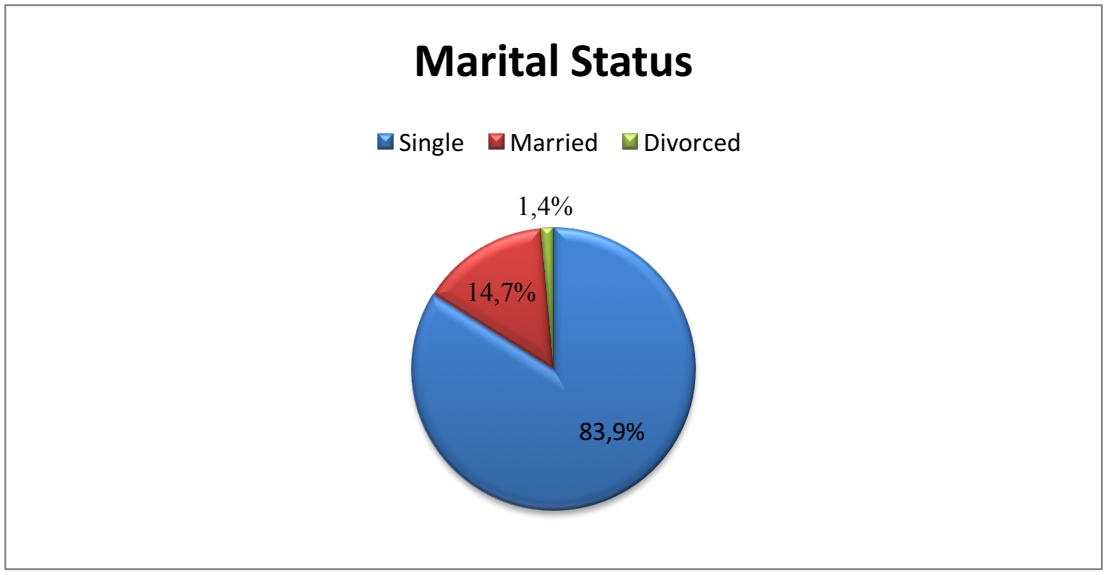

Figure 5.4: Marital status distribution of mobile banking users.

5.2.5 Education Level

The analysis of collected data has shown that the number of respondents who are currently studying in an undergraduate program is 155 with 71,4%. The number of respondents who were studying in the master program was 44 which was 20,3% and also, there were 18 respondents who were doing their PhD with the percentage of 8,3. The following pie chart demonstrates education level distribution of mobile banking users.

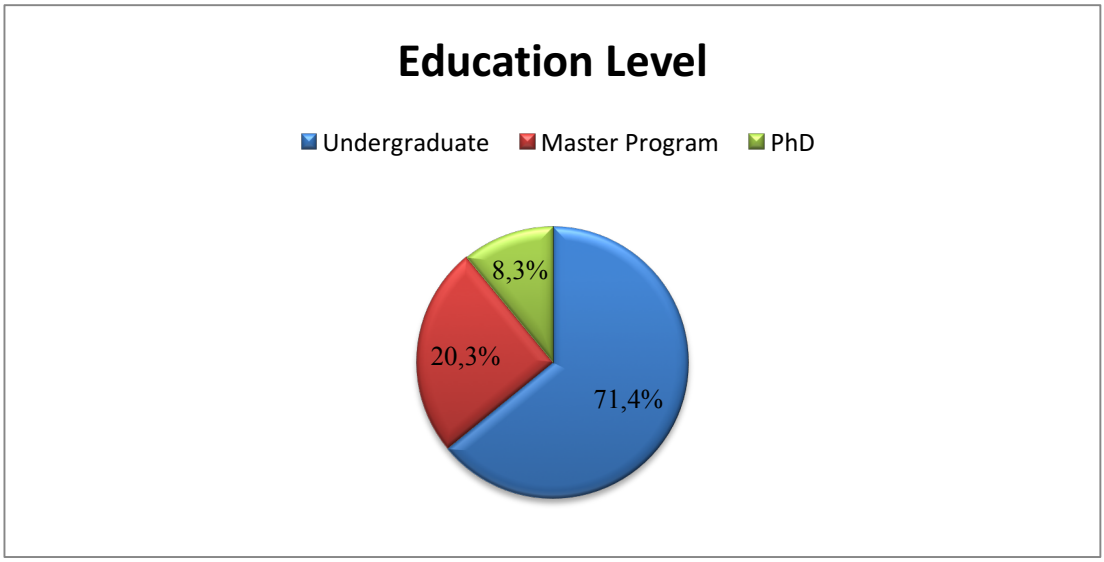

Figure 5.5: Education level distribution of mobile banking users.

5.2.6 Usage Frequency

The respondents' answers have shown that 90 (41,5%) of them are using mobile banking 1-3 times a week, 97 (44,7%) of them were using 4-6 times a week, 17 (7,8%) of them were using 7-9 times a week and 13 (6%) of mobile banking users were using this new technology 10 or more times a week. The following pie chart shows the distribution of usage frequency of mobile banking users weekly.

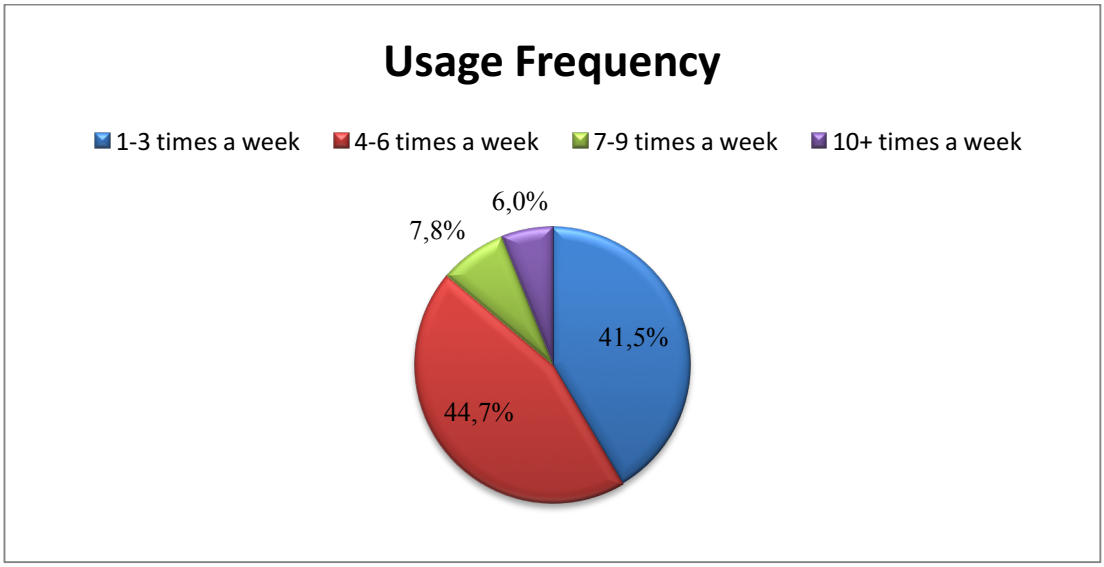

Figure 5.6: Usage frequency distribution of mobile banking users.

5.2.7 Weekly Budget

Regarding weekly budget of the respondents, 93 respondents (42,9%) out of 217 mobile banking users have stated that they had up to 500 Turkish Lira (tl) weekly budget. Other 72 respondents, with the percentage of 33,2, have mentioned that their budget was between 501tl and 1000tl. In addition to these, the number of 37 respondents (17,1%) had weekly budget in between 1001tl and 1500tl. Furthermore, for 15 of the respondents', with the percentage of 6,9, weekly budget was more than 1500tl according to the collected data. The pie chart below illustrates the weekly budget distribution of mobile banking users.

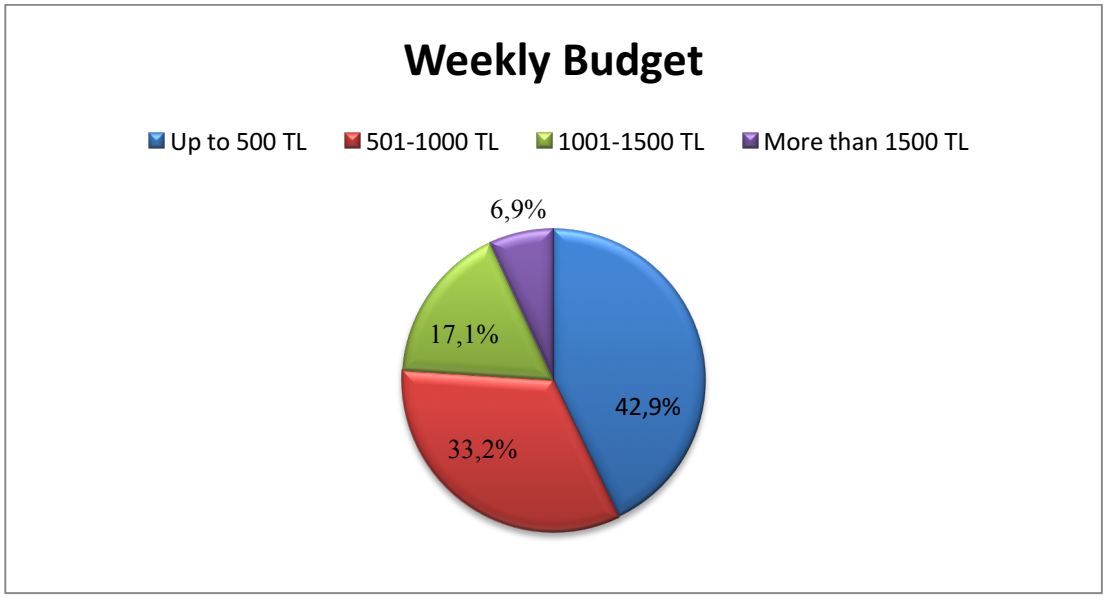

Figure 5.7: Weekly budget distribution of mobile banking users.

The following table summarises all the demographic characteristics of the respondents.

Table 5.1: Demographic Characteristics of respondents

		Frequency	Percent
Gender	Male	119	54,8
	Female	98	45,2
Age	18-23	113	52,1
	24-29	87	40,1
	30-39	17	7,8
Marital Status	Single	182	83,9
	Married	32	14,7
	Divorced	3	1,4
	Other	0	0
Educational Level	Undergraduate	155	71,4
	Master Program	44	20,3
	PhD	18	8,3
Usage Frequency	1-3 times a week	90	41,5
	4-6 times a week	97	44,7
	7-9 times a week	17	7,8
	10+ times a week	13	6,0
Weekly budget	Up to 500 TL	93	42,9
	501 - 1000 TL	72	33,2
	1001- 1500 TL	37	17,1
	More than 1500 TL	15	6,9
Total		217	100

5.2.8 Descriptive Analysis of the Scale

Table 5.2: Descriptive analysis of the scale

Item	$\bar{x}$	S	C
Performance Expectancy	**6,05**	**1,057**	**0.820**
a) Using mobile banking improves my performance.	5,71	1,161	
b) Using mobile banking saves me time.	6,18	1,030	
c) I can use mobile banking anywhere.	6,09	1,080	
d) I find mobile banking useful.	6,23	0,957	
Effort Expectancy	**5,81**	**1,092**	**0.834**
a) Learning to use mobile banking is easy.	6,00	1,030	
b) It is easy to access the mobile banking page.	5,91	1,050	
c) It is easy to use the mobile banking service competently.	5,80	0,993	
d) I have no doubt when using the mobile banking services.	5,53	1,295	
Social Influence	**5,24**	**1,389**	**0.873**
a) People who are important to me think that I should use mobile banking.	5,19	1,462	
b) People who are familiar with me think that I should use mobile banking.	5,13	1,436	
c) People who influence my behaviour think that I should use mobile banking.	5,24	1,414	
d) Most people surrounding with me use mobile banking.	5,41	1,244	
Facilitating Conditions	**5,16**	**1,491**	**0.752**
a) In my opinion, the initial costs do not inhibit the use of mobile device.	5,53	1,269	
b) My friends and colleagues guide me in the use of the mobile banking.	5,00	1,617	
c) I get help from the operator for the problem relating to the use of mobile banking.	5,09	1,567	
d) I get help from the service provider for the problem relating to the use of mobile banking.	5,03	1,512	
Behavioural Intention	**5,71**	**1,254**	**0.764**

a) I aim to use mobile services instead of the traditional one.	5,81	1,238	
b) I want to be among the first one to try out new mobile banking services.	5,39	1,417	
c) I use, when possible, mobile banking instead of the traditional one.	5,94	1,106	

The table above illustrates the descriptive analysis of the respondents according to the scales.

According to the descriptive analysis, the respondents have positive performance expectancy for using mobile banking because the mean of the scale is 6.05. This demonstrates that the majority of the respondents who are using mobile banking 'agree' that using mobile banking will enhance their performance.

In addition to this, regarding descriptive analysis, the respondents have positive effort expectancy for using mobile banking due to the mean of scale which is 5,81. In other words, most of the respondents 'agree' that using mobile banking is easy.

Moreover, the descriptive analysis of social influence for using mobile banking shows that the respondents are generally 'slightly agree' that other people have the impact on their use of mobile banking. This is because the mean of the scale is 5,24. Furthermore, the descriptive analysis has shown that the respondents also have positive perception towards facilitating conditions. Considering the mean of the scale which is 5,16, most respondents are 'slightly agree' that all the conditions exist to support the use of mobile banking.

Finally, the descriptive analysis of behavioural intention for using mobile banking illustrates that most of the respondents 'agree' that they will keep using mobile banking when they have the opportunity to use it considering the mean of the scale which is 5,71.

5.2.9 Reliability Analysis of the Employed Scales

Cronbach's alpha is used in order to measure the reliability and validity of the questionnaires. This method reinforces the accuracy of the applied scales to obtain the needed result whereas 0.7 and above is considered reliable (Tavakol & Dennick, 2011).

Table 5.3: Cronbach's Alpha test for reliability of the scales.

Scale	Cronbach's Alpha
Performance Expectancy	0.820
Effort Expectancy	0.834
Social Influence	0.873
Facilitating Conditions	0.752
Behavioural Intention	0.764

The table above demonstrates that all of the scales are reliable. This is because each scale's Cronbach's Alpha value is greater than the set point which is 0.7.

5.3 Independent Sample T-Test

Independent Sample T-Test is defined as a test which is used to discover whether there is a statistically significant distinction among the means between two separate groups on the same dependent variable (Norušis, 2006).

In this survey, gender is tested with performance expectancy, effort expectancy, social influence, facilitating conditions and intention respectively.

5.3.1 T-Test for Gender Comparison

In this research, Independent Sample T-Test is used in order to compare if there is a statistically significant difference between gender groups; male and female, as both of them joined to the survey, and independent variables which are performance expectancy, effort expectancy, social influence, facilitating conditions and behavioural intention.

The table below demonstrates the Independent Samples T-Test group statistics specifically for gender comparison.

Table 5.4: Group Statistics for Gender Comparison

Group Statistics					
Variables	Gender	N	Mean	Std. Deviation	Std Error Mean
Performance Expectancy	Male	119	6.0882	0.65870	0.06038
	Female	98	6.0026	1.04567	0.10563
Effort Expectancy	Male	119	5.7899	0.82787	0.07589
	Female	98	5.8291	0.97890	0.09888
Social Influence	Male	119	5.3109	1.09601	0.10047
	Female	98	5.1658	1.28480	0.12978
Facilitating Conditions	Male	119	5.2374	1.10077	0.10091
	Female	98	5.0714	1.17095	0.11828
Behavioural Intention	Male	119	5.7367	0.92758	0.08503
	Female	98	5.6871	1.16440	0.11762

This table shows that there is a difference between males and females due to the different mean scores. For instance, males have more performance expectancy (M($\bar{x}$)=6.0882>F($\bar{x}$)= 6.0026), social influence (M($\bar{x}$)= 5.3109>F($\bar{x}$)= 5.1658), facilitating conditions (M($\bar{x}$)= 5.2374 >F($\bar{x}$)= 5.0714), and behavioural intention (M($\bar{x}$)= 5.7367>F($\bar{x}$)=5.6871) compared to females. On the other hand, females have more effort expectancy in contrast to males (M($\bar{x}$)= 5.7899<F($\bar{x}$)=5.8291.

However, the data above does not prove that there is a statistically significant difference among gender and independent variables. Another test should be done in order to decide on this issue which is called; Levene's Test for Equality of Variances. The table below shows if there is statistically significant difference or not.

Table 5.5: Independent Samples Test for Gender

Independent Samples Test						
		Levene's Test for Equality of Variance		t-test for Equality of Means		
		F	Sig.	T	Df	Sig (2-tailed)
Performance Expectancy	Equal variances assumed	5.413	0.021	0.734	215	0.463
	Equal variances not assumed			0.704	156.976	0.482
Effort Expectancy	Equal variances assumed	0.015	0.901	-0.319	215	0.750
	Equal variances			-0.314	190.572	0.754

	not assumed					
Social Influence	Equal variances assumed	0.647	0.422	0.898	215	0.370
	Equal variances not assumed			0.884	191.549	0.378
Facilitating Conditions	Equal variances assumed	0.140	0.709	1.074	215	0.284
	Equal variances not assumed			1.067	201.732	0.287
Behavioural Intention	Equal variances assumed	0.568	0.452	0.349	215	0.727
	Equal variances not assumed			0.342	183.648	0.733

To reach the final outcome in the Independent Samples T-Test, first of all, Levene's Test should be checked whether it is significant or not. If the Levene's Test p-value is more than 0.05, this means, it is insignificant and equal variances exist. Therefore, 'Equal variances assumed' line should be taken into consideration for the further steps of the t-test. On the other hand, if the Levene's Test p-value is less than 0.05, this means, it is significant and not equal variances exist. In this case, 'Equal

variances not assumed.' line should be taken into account. Afterwards, significance (2-tailed) of t-test for Equality of Means must be checked. If the p-value is more than 0.05, this means, it is insignificant and there is statistically no significant difference between male and female due to independent variables. In contrast, if the p-value is less than 0.05, it means, it is significant and there is a statistically significant difference between male and female due to independent variables.

In this research, the independent samples t-test results illustrate that;

Performance Expectancy: In the Levene's Test, p-value is 0.021, which is less than 0.05, then, variances are not assumed. However, in t-test, p-value is 0.482, which means, it is insignificant. In this case, there is statistically no significant difference among males and females regarding performance expectancy according their intention to use mobile banking.

Effort Expectancy: The Levene's Test shows that p-value is more than 0.05 (p=0.901), then the variances assumed. Also, in the t-test, the p-value is above 0.05 (p=0.750), which is 'insignificant'. Therefore, the data demonstrates that there is statistically no significant difference between males and females regarding effort expectancy towards their intention to use mobile banking.

Social Influence: The Levene's Test illustrates that p-value is 0.422 so the variances assumed. The t-test's p-value is also above 0.05 (p=0.370), which means it is insignificant. In this case, the analysis shows that there is statistically no significant difference among males and females regarding social influence due to their intention to use mobile banking.

Facilitating Conditions: In the Levene's Test, p-value is more than 0.05. Therefore, variances assumed. Afterwards, in t-test, p-value is 0.284, which means it is insignificant. In this case, there is statistically no significant difference among males and females regarding facilitating conditions concerning their intention to use mobile banking.

Behavioural Intention: The Levene's Test illustrates that p-value is more than 0.05 (p=0.452), then the variances assumed. Also, in the t-test, the p-value is above 0.05 (p=0.727), in other words it is 'insignificant'. Therefore, the data shows that there is statistically no significant difference between males and females regarding behavioural intention.

5.4 One -Way ANOVA Test

One-way ANOVA Test can be defined as Independent Sample T-Test, however, ANOVA is used to test more than two groups (Kozub, 2010).

In order to run the ANOVA Test, firstly, Levene Test should be checked whether the result is significant or not.

- If the result of the Levene Test is insignificant, it means the assumption of the homogeneity of variances is not violated. Then, ANOVA Test must be checked. If the result is insignificant, this indicates there is statistically no significant difference between the groups. However, if the result is significant, this represents that there is statistically significant difference among the groups. In this case, Post Hoc Tests will be used to evaluate the difference between the groups.

- On the other hand, if the result of the Levene Test is significant, this shows the assumption of the homogeneity of variances is violated. In this situation, Robust Test will be taken into account. If the result of the test is insignificant, there is statistically no significant difference between the groups. Conversely, when the result is significant, although the assumption is violated, there is statistically significant difference between the groups. In this case, Post Hoc Tests results will be checked to evaluate the difference between the groups (Kozub, 2010).

In this research the ANOVA Test is used in order to summarize statistical diversity among respondents regarding their age, education level, weekly budget and frequency of using mobile banking according to their intention to use mobile banking. Moreover, the Test of Homogeneity of Variances is done just before analyzing the statistical differences to check if we are violating the assumption of the homogeneity of variance or not.

5.4.1 Age

Firstly, ANOVA Test was done in order to outline the statistical differences among respondents according to their age as regards their intention to use mobile banking. Therefore, the Test of Homogeneity of Variances is done just before analyzing the statistical differences. The results of the Homogeneity of Variances Tests are shown as below:

Table 5.6: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Behavioural Intention	0.436	2	214	0.647

As the result is insignificant (p>0.05), we are not violating the assumption of homogeneity of variances, therefore, we checked ANOVA Test results.

Table 5.7: ANOVA Test

		Sum of Squares	df	Mean Square	F	Sig.
Behavioural Intention	Between Groups	3.908	2	1.954	1.824	0.164
	Within Groups	229.267	214	1.071		
	Total	233.175	216			

Considering the result of ANOVA Test, which is insignificant (p>0.05), there is no statistically significant difference between age groups regarding the intention to use mobile banking.

5.4.2 Education Level

Secondly, ANOVA Test is used to check the statistical diversities among respondents concerning their education level in terms of their intention to use mobile banking. Hence, before doing this test, the Test of Homogeneity of Variances is done again. The result is shown as follows:

Table 5.8: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Behavioural Intention	0.957	2	214	0.386

As the result of the Homogeneity of Variances Test is insignificant (p>0.05), this means we are not violating the assumption of homogeneity of variances. Therefore, ANOVA Test is done as the next step in order to achieve the most productive results.

Table 5.9: ANOVA Test

		Sum of Squares	df	Mean Square	F	Sig.
Behavioural Intention	Between Groups	0.307	2	0.154	0.141	0.868
	Within Groups	232.867	214	1.088		
	Total	233.175	216			

As a result of ANOVA Test, which is insignificant (p>0.05), there is no statistically significant difference among education level groups concerning intention to use mobile banking in The Republic of Northern Cyprus.

5.4.3 Weekly Budget

Thirdly, ANOVA Test is done in order to outline the statistical differences among participants regarding their weekly budget according to their intention to use mobile banking. For this reason, the Test of Homogeneity of Variances is done again before ANOVA Test. The result of this test is shown in the table below:

Table 5.10: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Behavioural Intention	2.519	3	213	0.059

The result of the Homogeneity of Variances Test reveals that it is insignificant ($p>0.05$). In other words, we are not violating the assumption of homogeneity of variances. Therefore, ANOVA Test should be checked to observe if there is a statistical difference or not.

Table 5.11: ANOVA Test

		Sum of Squares	df	Mean Square	F	Sig.
Behavioural Intention	Between Groups	3.331	3	1.110	1.029	0.381
	Within Groups	229.843	213	1.079		
	Total	233.175	216			

The result of the test demonstrated that there is no statistically significant difference among weekly budget groups with reference to intention to use mobile banking. This is because the result is insignificant ($p>0.05$).

5.4.4 Frequency of Usage

Finally, the ANOVA Test is taken into account to indicate the statistical differences among participants about their frequency of usage regarding their intention to use mobile banking. Therefore, the Test of Homogeneity of Variances is checked in order to find out if we are violating the homogeneity of variance or not. The following table illustrates the result of this test:

Table 5.12: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Behavioural Intention	3.754	3	213	0.012

As shown in the table above, the result of the Homogeneity of Variances Test is significant ($p<0.05$). This means, we are violating the assumption of homogeneity of variances. Hence, the next step is to check Robust Tests results.

Table 5.13: Robust Tests of Equality of Means

	Statistic [a]	df1	df2	Sig.
Welch	18,866	3	44,110	0.000
Brown – Forsythe	11,269	3	61,864	0.000

a. Asymptotically F distributed.

The result of the Robust Tests is significant ($p<0.05$), so that there is statistically significant difference among different frequency of usage groups regarding their intention to use mobile banking. Therefore, Post Hoc Tests should be considered.

Table 5.14: Post Hoc Tests (Games-Howell)

Dependent Variable	(I) How often do you use mobile banking?	(J) How often do you use mobile banking?	Mean Difference (I-J)	Std. Error	Sig.
Behavioural Intention	1-3 times a week	4-6 times a week	-0.58473*	0.14347	0.000
		7-9 times a week	-0.65447	0.25924	0.059
		10+ times a week	-1.26382*	0.29086	0.000
	4-6 times a week	1-3 times a week	0.58473*	0.14347	0.000
		7-9 times a week	-0.06974	0.25775	0.993
		10+ times a week	-0.67909	0.28953	0.091
	7-9 times a week	1-3 times a week	0.65447	0.25924	0.059
		4-6 times a week	0.06974	0.25775	0.993
		10+ times a week	-0.60935	0.36118	0.333
	10+ times a week	1-3 times a week	1.26382*	0.29086	0.000
		4-6 times a week	0.67909	0.28953	0.091
		7-9 times a week	0.60935	0.36118	0.333

*. The mean difference is significant at the 0.05 level.

As a result of the Games-Howell, it is observed that there is statistically significant difference among Group 2 (4-6 times a week) and Group 1 (1-3 times a week) regarding the intention to use mobile banking since $p<0.05$. The difference between these groups is positive, which means that Group 2 has higher average compared to Group 1 by 0.58473.

Moreover, Games-Howell's results have shown that there is also statistically significant difference between Group 4 (10+ times a week) and Group 1 (1-3 times a week) concerning the intention to use mobile banking since $p<0.05$. As well as

Group 1 and Group 2, the difference between Group 4 and Group 1 is also positive. This means, Group 4 has higher average compared to Group 1 by 1.26382.

5.5 Correlation Analysis

Correlation Analysis is defined as a bivariate analysis which is done in order to calculate strength and direction of the linear relationship among two variables. The value range is +1 to -1. When the correlation coefficient value is exactly +1 or -1, it is called perfect degree. Moreover, if the value of correlation coefficient is closer to 1, the relationship between the variables is stronger. Also, if the value is closer to 0, then the relationship between the variables is weaker. Furthermore, + and – sign demonstrates whether there is positive or negative relationship between the two variables (Hardoon, et al., 2004).

In this research, correlation analysis is done in order to measure the strength and direction of linear relationship among the intention to use mobile banking and independent variables one by one. Moreover, the correlation coefficient strengths are interpreted as follows;

- Weak= 0.100 to 0.299
- Moderate= 0.300 to 0.499
- Strong= 0.500 to 0.999

The results of the Correlation Analysis are shown in the table below:

Table 5.15: Correlations

		PEAVG	EEAVG	SIAVG	FCAVG	BIAVG
PEAVG	Pearson Correlation	1	0.648**	0.336**	0.181**	0.494**
	Sig. (2-tailed)		0.000	0.000	0.007	0.000
	N	217	217	217	217	217
EEAVG	Pearson Correlation	0.648**	1	0.470**	0.341**	0.601**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
	N	217	217	217	217	217
SIAVG	Pearson Correlation	0.336**	0.470**	1	0.473**	0.558**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000
	N	217	217	217	217	217
FCAVG	Pearson Correlation	0.181**	0.341**	0.473**	1	0.567**
	Sig. (2-tailed)	0.007	0.000	0.000		0.000
	N	217	217	217	217	217
BIAVG	Pearson Correlation	0.494**	0.601**	0.558**	0.567**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	217	217	217	217	217

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

5.5.1 The Correlation between the Intention to Use Mobile Banking and Variables.

According to the table above, the correlation among the variables and intention to use mobile banking is summarized as below:

- Performance Expectancy and Intention: There is statistically significant ($p<0.01$), moderate ($r=0.494$) and positive correlation between performance expectancy and intention to use mobile banking. Therefore, when one of them goes up, the other goes up, too and if one goes down, other goes down even though they do not affect each other.
- Effort Expectancy and Intention: There is statistically significant ($p<0.01$), strong ($r=0.601$) and positive correlation between the effort expectancy and the intention to use mobile banking. In this case, they are moving up or down together.
- Social Influence and Intention: There is statistically significant ($p<0.01$), strong ($r=0.558$) and positive correlation between the social influence and the intention to use mobile banking. This means, they are moving together. For example, if social influence goes up, behavioural intention goes up, too and vice versa.
- Facilitating Conditions and Intention: There is statistically significant ($p<0.01$), strong ($r=0.567$) and positive correlation between the facilitating conditions and the intention to use mobile banking. Thus, although they have no impact on each other, they move to the same direction.

5.6 Principal Component Analysis

Principal Components Analysis (PCA) uses algorithms to "reduce" data into correlated "factors" that provide a conceptual and mathematical understanding of the construct of interest (Holland, 2008).

Table 5.16: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.884
Bartlett's Test of Sphericity	Approx. Chi-Square	2351.928
	df	171
	Sig.	0.000

Kaiser-Meyer-Olkin measures sampling sufficiency and as a result of the test, KMO is 0.884, which indicates the samples are adequate. Moreover, Barlett's Test measures the strength of the relationship between variables. This test's result is significant ($p<0.05$). Therefore, the data is appropriate for the Factor Analysis.

Table 5.17: Rotated Component Matrix[a]

	Components				
	1	2	3	4	5
Using mobile banking improves my performance.	0.716				
Using mobile banking saves me time.	0.818				
I can use mobile banking anywhere.	0.752				
I find mobile banking useful.	0.704				
Learning to use mobile banking is easy.				0.855	
It is easy to access the mobile				0.791	

banking page.					
It is easy to use the mobile banking service competently.				0.663	
I have no doubt when using the mobile banking services.	0.363	0.308	0.061	0.458	0.398
People who are important to me think that I should use mobile banking.		0.886			
People who are familiar with me think that I should use mobile banking.		0.913			
People who influence my behaviour think that I should use mobile banking.		0.821			
Most people surrounding with me use mobile banking.		0.617			
I think the initial costs do not inhibit the use of mobile device.	0.199	0.026	0.220	0.055	0.792
My friends and colleagues advise me in the usage of the mobile banking.			0.666		
I receive help from the operator for the problem about using mobile banking.			0.909		
I receive help from the service provider for the problem related to the use of mobile banking.			0.860		
I aim to use mobile services rather than the traditional one.					0.700
I want to be among the first one to try new mobile banking services.					0.775
I use mobile banking instead of					

the traditional one when possible.					0.840

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

The table above illustrates that;

- Items 1,2,3 and 4 are substantially loaded on Component 1.
- Items 5,6 and 7 are loaded on Component 4.
- Item 8 is removed because of low factor loading.
- Items 9,10,11 and 12 are loaded on Component 2.
- As the item 13 is only above 0.5 at Component 5, it is loaded on Component 5.
- Item 14,15 and 16 are loaded on Component 3.
- Item 17, 18 and 19 are loaded on Component 5. (Plus, we added item 13 as mentioned at point 5.)

5.7 Regression Analysis

Regression analysis is defined as an analysis which is done in order to measure the impact of independent variables on dependent variable (Montgomery, 2012). In this study, regression analysis is done to examine the influence of performance expectancy, effort expectancy, social influence and facilitating conditions on the intention to use mobile banking.

Table 5.18: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.736[a]	0.542	0.533	0.65726

a. Predictors: (Constant), FCAVG2, PEAVG, SIAVG, EEAVG2
b. Dependent Variable: BIAVG2

R^2 is 0.542 which indicates that 54.2% of the variance in behavioural intention is explained by performance expectancy, effort expectancy, social influence and facilitating conditions. In other words, independent variables are good predictors of dependent variable.

Table 5.19: ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	108.299	4	27.075	62.674	0.000[a]
	Residual	91.583	212	0.432		
	Total	199.882	216			

a. Predictors: (Constant), FCAVG2, PEAVG, SIAVG, EEAVG2
b. Dependent Variable: BIAVG2

The table above shows that, F(216) = 62.674 and p-value <0.05, which means all of independent variables (PE, EE, SI, FC) statistically significantly predict dependent variable (BI).

The established conceptual model is statistically significant since the p-value <0.05.

Table 5.20: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.438	0.362		1.212	0.227
	PEAVG	0.289	0.068	0.257	4.263	0.000
	EEAVG2	0.195	0.067	0.181	2.919	0.004
	SIAVG	0.210	0.045	0.259	4.683	0.000
	FCAVG2	0.243	0.038	0.333	6.379	0.000

a. Dependent Variable: BIAVG2

The Coefficient Table is used in order to predict the power of individual variable. Therefore, regarding the table above;

- β (PEAVG) = 0.257, t = 4.263, and $p<0.05$. In this case, performance expectancy positively predicts behavioural intention. Therefore, if performance expectancy increases by 1 unit, the intention to use mobile banking will increase by 25.7%.
- β (EEAVG2) = 0.181, t = 2.919, and $p<0.05$. This results shows that effort expectancy positively predicts behavioural intention. Then, if effort expectancy increases by 1 unit, the intention to use mobile banking will increase by 18.1%.
- β (SIAVG) = 0.259, t = 4.683, and $p<0.05$. Regarding these results, social influence positively predicts behavioural intention. Hence, if social influence increases by 1 unit, intention to use mobile banking will increase by 25.9%.
- β (FCAVG2) = 0.333, t = 6.379, and $p<0.05$. Considering these results, facilitating conditions positively predicts behavioural intention. Therefore, if facilitating conditions increases by 1 unit, intention to use mobile banking will increase by 33.3%.

Table 5.21: Result of Hypothesis Test

HYPOTHESIS	FINDINGS
H1: Performance expectancy has a positive and significant effect on the intention to use mobile banking.	Accepted
H2: Effort expectancy has a positive and significant effect on the intention to use mobile banking.	Accepted
H3: Social influence has a positive and significant effect on the intention to use mobile banking.	Accepted
H4: Facilitating conditions have a positive and significant effect on the intention to use mobile banking.	Accepted

5.8 Discussion of Findings

The analysis of the survey is done and interpreted above and now we will discuss the result of the analysis made. Firstly, the gender differences will be discussed regarding performance expectancy, effort expectancy, social influence, facilitating conditions and behavioural intention which is tested by using the Independent Sample T-Test. Afterwards, the outcome of the ANOVA Test, age, educational level and weekly budget differences will be argued considering the intention to use mobile banking. Finally, the Regression Analysis results, which demonstrate if independent variables (PE, EE, SI, FC) have an impact on dependent variable (BI), will be discussed.

5.8.1 Gender Differences

Regarding the results of the Independent Sample T-Test, this study revealed that, there is statistically no significant difference among males and females considering their performance expectancy (mean scores; m(m)=6.09 and m(f)=06.00, $p>0.05$) ,

effort expectancy (mean scores; m(m)=5.79 and m(f)=5.83, p>0.05), social influence (mean scores; m(m)=5.31 and m(f)=5.17, p>0.05), facilitating conditions (mean scores; m(m)=5.24 and m(f)=5.07, p>0.05) and behavioural intention (mean scores; m(m)=5.74 and m(f)=5.67, p>0.05) concerning the university students' intention to use mobile banking in the Republic of Northern Cyprus.

There are many previous studies which were done to measure the differences among these independent variables regarding gender. For instance, a research is done aiming to find out factors affecting individuals in order to adopt mobile banking. In this study, the researcher revealed that there is statistically significant difference among males and females regarding performance expectancy, in contrast to our findings. On the other hand, this research supported our results that there is statistically no significant difference between females and males as regards effort expectancy and social influence (Yu, 2012). Moreover, another study was done in Tanzania to reveal the factors influences open access adoption of university researchers of six universities in this country. This study supported our finding that there is a statistically no significant gender difference regarding performance expectancy regarding researcher's intention to use open access. However, in contrast to our findings, this study revealed that there is a statistically significant difference between males and females considering effort expectancy, social influence and facilitating conditions (Dulle, & Minishi-Majanja, 2011). In addition to these, there was another study done in order to find out factors affecting acceptance of the mobile Internet and if there are any gender differences or not in Taiwan. Although the results illustrated that there are statistically no significant differences between genders related to effort expectancy and behavioural intention which is not supporting our findings, the

results also showed that there is statistically significant difference between genders regarding social influence which supports our results (Wang & Wang, 2010).

Furthermore, another study was done in Kuala Lumpur aiming to measure the factors affecting the intention to use Internet banking among Malaysian. In this study, it is found out that there is no significant difference among genders considering the intention to use mobile banking, like our findings (Foon & Fah, 2011).

Briefly, the result of our study shows that gender differences among university students in the TRNC do not play a major role in any of the independent variables concerning their intention to use mobile banking. Therefore, we can perceive male and female university students as a homogeneous group in this country regarding mobile banking usage.

5.8.2 Age Differences

ANOVA Test is done in order to measure if age variations have an influence on the behavioural intention. Nevertheless, the result of the ANOVA Test showed that there is statistically no significant difference between the age groups on the students' intention to use mobile banking in the Turkish Republic of Northern Cyprus because the test result is insignificant, $p>0.05$.

The research which was done about adoption of open access in Tanzania revealed that age variations have an influence on the adoption of open access by researches (Dulle, & Minishi-Majanja, 2011). Also, another study discovered that age has an impact on the acceptance of information technology (Venkatesh, et al., 2012). Although these two studies did not support our research findings, the study which is done in Kuala Lumpur aiming to find out factors affecting usage of Internet banking

revealed that there is statistically no difference among different age groups on the adoption of Internet banking (Foon & Fah, 2011).

This result may be linked to the targeted group age range. All the data is collected from the university students; undergraduates, masters and PhD students. Therefore, the age groups could be perceived as having similar background because the age range was between 18 and 39. People vary between these age groups adopt using the Internet and mobile services more easily and are more willing to use them compared to people who are 40 years old and above.

5.8.3 Education Level Differences

ANOVA Test is also done in order to measure if education level distinctions have an effect on the behavioural intention. However, as in the age differences, the result of the ANOVA Test demonstrated that there is statistically no significant difference among different educational levels on the students' intention to use mobile banking in the Republic of Northern Cyprus as the test result is insignificant due to $p>0.05$.

A previous study which done in Kuala Lumpur purposing to measure the determinants influencing adoption of Internet banking between Malaysian supports our findings. Researchers also founded out that there is no significant difference between education level groups regarding intention to use mobile banking (Foon & Fah, 2011).

This result founded from our survey showed that; no matter whether the respondent is an undergraduate student, a master student or PhD student, respondent in any education level have similar intention to use mobile banking in this country. This

may also because of the students are from the same generation and this generation adopts technological advantages more compared to elder peoples.

5.8.4 Weekly Budget Differences

Except age and educational level, ANOVA Test is also done in order to measure if weekly budget dissimilarities have an effect on the behavioural intention. However, as in the age and educational level differences, the result of the ANOVA Test revealed that there is statistically no significant difference among different weekly budgets on the students' intention to use mobile banking in the Republic of Northern Cyprus since the test result is insignificant due to $p>0.05$.

The previous study which was aiming to measure the factors affecting intention to use Internet banking in Malaysia supported our findings. This study also founded out that monthly income differences have no effect on the intention to use Internet banking (Foon & Fah, 2011).

The result of our test illustrated that the students' weekly budget does not play a major role on their intention to use mobile banking which is logical. Everyone somehow spend money to survive no matter less or much and use banks to make some of their transactions. Mobile banking is a services provided by banks to make our lives easier and the amount of the money for the transactions have no sense on the intention to use mobile banking services.

5.8.5 Regression Analysis

In this survey, Regression Analysis is done to measure the impact of performance expectancy, effort expectancy, social influence and facilitating conditions on intention to use mobile banking. The result of this analysis revealed that all independent variables statistically significantly and positively influence the students'

intention to use mobile banking in the Republic of Northern Cyprus since the test results are significant due to $p<0.05$.

Therefore, it is expected to observe higher intention to use mobile banking with students who have higher level of performance expectancy, effort expectancy, social influence and facilitating conditions in this country.

There are many previous studies that are supporting our findings.

For example, the research was done in Iran to determine the effect of four independent variables of UTAUT Model on the intention to use electronic banking services. There results of this analysis are exactly the same as our results. The researcher of the study revealed that all the four variables; which are performance expectancy, effort expectancy, social influence and facilitating conditions are statistically significantly and positively affect the intention to use e-banking services (Ghalandari, 2012). Moreover, there is a research which was done purposing to measure factors that have an influence on the adoption of mobile banking. The researcher revealed that performance expectancy, social influence and facilitating conditions are statistically significantly and positively influence intention to use mobile banking but effort expectancy does not (Yu, 2012). Furthermore, another study also reveals that performance expectancy, effort expectancy and social influence are statistically significantly and positively affects the intention. This study was aiming to demonstrate the factors that have influence on the adoption of mobile Internet in Taiwan (Wang & Wang, 2010).

Chapter 6

CONCLUSION

6.1 Introduction

In the previous sections, the subject was clearly defined, data collection method was explained, data analysis was done and the findings were discussed. In this chapter, managerial implication, limitations of the study and suggestions for future studies will be discussed by blending all the information gained in the previous parts of this research. Finally, the result of our research will be clearly described at the end of this chapter.

6.2 Managerial Implications

Acceptance and factors affecting intention to use new technologies differs amongst countries with different cultures. Therefore, manager(s) of any businesses need to know how their actual and potential customers adopt new technologies and the factors influence the intention to use them in order to be a successful manager. This research revealed the factors that influence university students on using mobile banking in the Turkish Republic of Northern Cyprus. As a result of the research, it is found out that age, gender, and educational level has no effect on the behavioural intention. This means, banks should target all the people regardless their age, gender and educational level. However, performance expectancy, effort expectancy, social influence and facilitating conditions have an impact on the intention to use mobile banking in this country concerning students. These findings will assist manager(s) of

banks in learning about the factors influence their customers' intention to use their mobile banking services and how to improve this service provided.

Considering the findings of this research, in order to increase the usage of mobile banking, banks should convince their customers that using mobile banking will facilitate them to improve their performances as performance expectancy has influence on the intention to use mobile banking.

Moreover, as the effort expectancy has an effect on the intention to use mobile banking, banks need to provide a service which is not complicated to encourage customers to use the system. Also, training classes might be provided to the customers who are needed to learn how to use mobile banking efficiently.

Additionally, considering that social influence has an impact on the intention of using mobile banking, banks need to do extremely effective marketing promotions to spread the usage of mobile banking and also need to satisfy their customers by using this service in order not to negatively affected by the dissatisfied customers.

Furthermore, as facilitating conditions have an effect on the intention to use mobile banking, banks require providing their customers the entire technical and organizational infrastructure needed in order to support the use of the system and convince them that the system works properly.

6.3 Limitations of the Study and Suggestions for Future Studies

There are couples of limitations for this research. However, these limitations could be overcome in the further studies.

6.3.1 Method of Collecting Data

For this research, 250 students, who were available, willing to participate to the survey, and knew English were questioned about their intention to use mobile banking. Not all of the requested students in the TRNC took part in this survey because of their unwillingness to answer the questions and language barrier. For this reason, questionnaire could be translated into local language, which is Turkish, in the further studies.

Moreover, the data was collected from foreign and local students who were studying in this country. In this case, this research does not only reflect factors affecting intention to use mobile banking of Turkish Cypriot students but foreign students as well. Therefore, in order to be more beneficial to the banks in this country, in the future studies, the data could be collected only from people who live in this country permanently or willing to live in this country in the future.

In addition to these, questionnaire was the only method used to obtain data for this study. However, as well as questionnaire, unstructured interviews could be used to observe respondents' intention to use mobile banking. By blending both qualitative and quantitative methods of collecting data, the researchers would triangulate the data and could come up with more valuable results. Therefore, unstructured interviews are suggested to be used as a method of collecting data in the future studies beside questionnaire.

Furthermore, in this research, the data was collected from a particular group at a time. In other words, this study was a cross sectional study. However, behaviour of users is continuously changing over time. Therefore, longitudinal research is advised to be used in the future studies in order to be more aware of the current factors affecting the behavioural intention.

6.3.2 Age of Participants

This study was aiming to measure the students' intention to use mobile banking in the Turkish Republic of Northern Cyprus. In this respect, the data was collected only from the students who were studying in this country. Regarding demographic findings, the age range of the participants was between 18 and 39 but mainly between 18 and 25. However, in order to be more beneficial to the banks in this country, in the future studies, the data should be collected not only from the students, but also elder people should be taken into consideration as they are the significant portion of the population in this country.

6.3.3 The Limited Factors That Have Been Used in This Study

In this research, factors affecting the adoption of mobile banking of the students are measured regarding the Unified Theory of Acceptance and Use of Technology (UTAUT) Model. However, only four of the independent variables of this model were taken into considerations which were performance expectancy, effort expectancy, social influence and facilitating conditions. The four moderators of this model were ignored. In the further studies, other factors that might have an effect on the behavioural intention could be measured, too. Especially the effect of experience and trust on the intention to use mobile banking should be considered.

Moreover, compared to Internet banking, mobile banking provides less and simpler services which could also have an influence on the adoption. In this case, the dissimilarities of mobile and Internet banking could be studied in detail in the future research.

6.4 Conclusion

To sum up, we aimed to measure the students' adoption of mobile banking in the Turkish Republic of Northern Cyprus based on UTUAT Model's independent variables which were performance expectancy, effort expectancy, social influence and facilitating conditions. The following consequences have been attained regarding the hypotheses tested;

i. Performance expectancy has a positive and significant effect on the intention to use mobile banking.
ii. Effort expectancy has a positive and significant effect on the intention to use mobile banking.
iii. Social influence has a positive and significant effect on the intention to use mobile banking.
iv. Facilitating conditions have a positive and significant effect on the intention to use mobile banking.

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APPENDIX

QUESTIONNAIRE

This academic project is concerned with the factors affecting intention to use Mobile Banking. Taking the time to complete the questionnaire is vitally important and your contribution is highly appreciated. Your responses will remain anonymous and be treated in the strictest of confidence. There are no right or wrong answers; what really matters is your honest opinion. Thank you very much for your help.

Q1: Do you use the mobile banking services provided by your bank?

YES NO

(If 'No', you can stop now but If 'Yes', please continue.)

Q2: Please indicate the extent to which you agree or disagree with each of the following statements.

(Please tick /circle only one box per line)

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
a) Using mobile banking improves my performance.	1	2	3	4	5	6	7
b) Using mobile banking saves me time.	1	2	3	4	5	6	7
c) I can use mobile banking anywhere.	1	2	3	4	5	6	7
d) I find mobile banking useful.	1	2	3	4	5	6	7

Q3: Please indicate the extent to which you agree or disagree with each of the following statements.

(Please tick /circle only one box per line)

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
a) Learning to use mobile banking is easy.	1	2	3	4	5	6	7
b) It is easy to access the mobile banking page.	1	2	3	4	5	6	7
c) It is easy to use the mobile banking service competently.	1	2	3	4	5	6	7
d) I have no doubt when using the mobile banking services.	1	2	3	4	5	6	7

Q4: Please indicate the extent to which you agree or disagree with each of the following statements.
(Please tick /circle only one box per line)

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
a) People who are important to me think that I should use mobile banking.	1	2	3	4	5	6	7
b) People who are familiar with me think that I should use mobile banking.	1	2	3	4	5	6	7
c) People who influence my behaviour think that I should use mobile banking.	1	2	3	4	5	6	7
d) Most people surrounding with me use mobile banking.	1	2	3	4	5	6	7

Q5: Please indicate the extent to which you agree or disagree with each of the following statements.
(Please tick /circle only one box per line)

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
a) In my opinion, the initial costs do not inhibit the use of mobile device.	1	2	3	4	5	6	7
b) My friends and colleagues guide me in the use of the mobile banking.	1	2	3	4	5	6	7
c) I get help from the operator for the problem relating to the use of mobile banking.	1	2	3	4	5	6	7
d) I get help from the service provider for the problem relating to the use of mobile banking.	1	2	3	4	5	6	7

Q6: Please indicate the extent to which you agree or disagree with each of the following statements (Please tick /circle only one box per line)

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
a) I aim to use mobile banking instead of the traditional one.	1	2	3	4	5	6	7
b) I want to be among the first one to try out new mobile banking services.	1	2	3	4	5	6	7
c) I use, when possible, mobile banking instead of the traditional one.	1	2	3	4	5	6	7

Q7. Please specify below your:

(Tick only one box per question)

Q7 a) Gender: Male 1

Female 2

Q7 b) Age _____

Q7 c) Marital Status:

Single 1

Married 2

Divorced 3

Other (Please specify): _____

Q7 e) Education Level:

Undergraduate 1

Masters Degree 2

PhD 3

Other (Please specify): _____

Q7 d) How often do you use mobile banking?

1-3 times a week 1

4-6 times a week 2

7-9 times a week 3

10+ times a week 4

Q7 f) Weekly Budget:

Up to 500 TL 1

501 - 1000 TL 2

1001 - 1500 TL 3

More than 1500 TL 4

Thank you very much for your participation