

**Virtual Socialization, Sharing and Loneliness Level  
of Primary School Teachers: A Case Study of  
Famagusta, North Cyprus**

**Lamiya Valiyeva**

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Approval of the Institute of Graduate Studies and Research

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Prof. Dr. Cem Tanova  
Acting Director

I certify that this thesis satisfies the requirements as a thesis for the degree of Master of Science in Information and Communication Technologies in Education.

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Assoc. Prof. Dr. Ersun İşçiođlu  
Chair, Department of Computer and Instructional  
Technology Teacher Education

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Science in Information and Communication Technologies in Education.

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Assoc. Prof. Dr. Ersun İşçiođlu  
Supervisor

---

Examining Committee

1. Assoc. Prof. Dr. Mustafa İlkan

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2. Assoc. Prof. Dr. Ersun İşçiođlu

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3. Dr. Fatma Tansu Hocanın

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## ABSTRACT

In social sciences environment is becoming very essential in any given field. Virtual learning environment is one of the on-going trends in our primary education today. In fact, it has been increasingly luring the social scientists who dedicate most of their studies in field researches.

The main purpose of this study is to find out teachers perspective about a virtual learning environment, with regards to virtual socialization, virtual sharing and to investigate the loneliness level of primary school teachers in virtual environment.

This thesis make use of a mixed approach in data collection, as data will be retrieved from the participant with the use of a questionnaire aiming to evaluate teachers' loneliness level in virtual learning environments that will be administered among 153 instructors in 32 Primary schools within the Famagusta District of North Cyprus. In the same vein, a semi-structured interview will be carried out.

This study indicates that there is a firm correlation between teachers' attitudes and virtual learning environments. The main findings of this study show that the level of teachers' virtual socialization is higher than their loneliness level, and the teachers' level of virtual sharing was at a lowest level.

**Keywords:** Environment, Virtual Learning, Virtual Learning Environment, Famagusta, North Cyprus

## ÖZ

Sosyal ortamlarda yapılan saha çalışmaları, birçok sosyal disiplin açısından özel bir öneme sahiptir. Günümüzde özellikle temel eğitim alanında artan bir ivme sergileyen ve öğrenme süreçlerinin önemli bir parçasına dönüşen sanal öğrenme ortamları, saha çalışmasına önem veren araştırmacıların büyük ilgisini çekmektedir.

Bu çalışmanın temel amacı öğretmenlerin sanal öğrenme ortamlarına yönelik düşüncelerini, öğrencilerinin sanal ortamlarda sosyalleşmelerine ve sanal paylaşımlarda bulunmalarına nasıl baktıklarını araştırmak, ayrıca ilkökul öğretmenlerinin sanal ortamlardaki yalnızlık düzeylerini ortaya koymaktır.

Bu tez araştırması, Kuzey Kıbrıs'ın Gazimağusa şehrinde bulunan 32 ilkökulda eğitim veren toplam 153 öğretmeni kapsamaktadır. Araştırmada, veri toplama aşamasında karma bir yaklaşım benimsenerek başlıca iki temel araçtan yararlanılmıştır. Araştırma içerisinde ilgili katılımcılarla, öğretmenlerin sanal öğrenme ortamındaki yalnızlığını ölçmeye yönelik bir anket yürütülmüş, aynı zamanda ikinci bir veri toplama aracı olarak yarı yapılandırılmış görüşme tekniğine başvurulmuştur.

Bu çalışma, öğretmenlerin tutumlarıyla sanal öğrenme ortamları arasında sıkı bir ilişki olduğunu ortaya koymaktadır. Araştırma sonucunda elde edilen temel bulgular, katılımcı öğretmenlerin sanal sosyalleşme düzeylerinin yalnızlık düzeylerinden daha yüksek olduğunu ve sanal paylaşımın en düşük düzeyde gerçekleştiğini göstermektedir.

**Anahtar kelimeler:** Sosyal Ortam, Sanal Öğrenme, Sanal Öğrenme Ortamı,  
Gazimağusa, Kuzey Kıbrıs

## DEDICATION

*This thesis is dedicated to my family.*

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# TABLE OF CONTENTS

ABSTRACT .....	iii
ÖZ.....	iv
DEDICATION .....	vi
ACKNOWLEDGMENT .....	vii
LIST OF TABLES .....	x
LIST OF ABBREVIATIONS .....	xii
1 INTRODUCTION .....	1
1.1 Aim of the Study .....	5
1.2 Research Questions .....	5
1.3 Limitations .....	7
1.4 Definition of Key Terms .....	7
2 LITERATURE REVIEW .....	9
2.1 Considering factors in Virtual learning Environment.....	12
2.2 Problems faced by Teachers in Virtual Learning Environment.....	13
2.3 Challenges and Solutions of Virtual Learning Environment (E-Learning) .....	15
3 METHODOLOGY .....	20
3.1 Research Design .....	20
3.2 Population .....	22
3.3 Data Collection Tools and Techniques .....	22
3.4 Data Analysis .....	23
3.5 Validity and Reliability .....	24
4 FINDINGS AND DISCUSSIONS .....	25
4.1 Teachers' level of virtual socialization .....	25



4.1.1 Teachers’ level of virtual socialization according to the age.....	26
4.1.2 Teachers’ level of virtual socialization according to the gender.....	27
4.1.3 Teachers’ level of virtual socialization according to the teaching field.....	28
4.1.4 Teachers’ level of virtual socialization according to the experience year ...	29
4.2 Teachers’ level of virtual sharing .....	30
4.2.1 Teachers’ level of virtual sharing according to the age .....	31
4.2.2 Teachers’ level of virtual sharing according to the gender .....	32
4.2.3 Teachers’ level of virtual sharing according to the teaching field.....	32
4.2.4 Teachers’ level of virtual sharing according to the experience year.....	33
4.3 Teachers’ level of virtual loneliness .....	34
4.3.1 Teachers’ level of virtual loneliness according to the age .....	35
4.3.2 Teachers’ level of virtual loneliness according to the gender.....	36
4.3.3 Teachers’ level of virtual loneliness according to the teaching field.....	37
4.3.4 Teachers’ level of virtual loneliness according to the experience year.....	38
5 CONCLUSION .....	40
REFERENCES .....	42
APPENDICES.....	52
Appendix A: Interview Questions .....	53
Appendix B: Questionnaire .....	55
Appendix C: Research Authorization.....	56

## LIST OF TABLES

Table 1: Demographic information of the primary school teachers.....	22
Table 2: General level of teachers' virtual socialization .....	25
Table 3: Descriptive statistics of virtual socialization according to the age .....	26
Table 4: Teachers' level of virtual socialization depending on age .....	27
Table 5: Teachers' level of virtual socialization depending on gender .....	27
Table 6: Level of teachers' virtual socialization depending on teaching field .....	28
Table 7: Teachers' level of virtual socialization depending on the teaching field .....	28
Table 8: Descriptive statistics of virtual socialization depending on the experience year .....	29
Table 9: Teachers' level of virtual socialization according to the experience year....	29
Table 10: General level of teachers' virtual sharing.....	30
Table 11: Descriptive statistics of the teachers' level of virtual sharing depending on age .....	31
Table 12: Teachers' level of virtual sharing depending on age.....	31
Table 13: Teachers' level of virtual sharing depending on gender.....	32
Table 14: Level of teachers' virtual sharing depending on teaching field.....	33
Table 15: Teachers' level of virtual sharing according to the teaching field .....	33
Table 16: Descriptive statistics of virtual sharing depending on the experience year	34
Table 17: Teachers' level of virtual sharing according to the experience year .....	34
Table 18: General level of teachers' virtual loneliness.....	35
Table 19: Descriptive statistics of the teachers' level of virtual loneliness depending on age .....	36
Table 20: Teachers' level of virtual loneliness depending on age.....	36

Table 21: Teachers' level of virtual loneliness depending on gender .....	37
Table 22: Level of teachers' virtual loneliness according to the teaching field .....	37
Table 23: Teachers' level of virtual loneliness depending on the teaching field .....	38
Table 24: Descriptive statistics of virtual loneliness depending on the experience year .....	38
Table 25: Teachers' level of virtual loneliness according to the experience year .....	39

## **LIST OF ABBREVIATIONS**

ICT	Information and Communications Technology
VLE	Virtual Learning Environment
TRNC	Turkish Republic of North Cyprus
SPSS	Statistical Package for Social Science
ANOVA	Analysis of Variance

# Chapter 1

## INTRODUCTION

Various aspects of cultural, economic, political and social life almost stand to be influenced by newer technologies; virtual socialization is one of the consequential impacts of these technologies. The extent and manner these technologies reforms and propel our lives towards living in a virtual environment is part of what this work will give us insight to. Social relations are necessary for human life and prosperous (Cacioppo & Patrick, 2008) (Harlow, 1958). When social relations are cut off, people try to feel alone (Peplau & Perlman, 1982). Feelings of isolation, in turn, foster attempts to reconnect or re-create new relations (Cacioppo & Patrick, 2008; Weiss, 1973). Ironically, however, to feel loneliness can also process the danger for rejection and isolation through a vicious cycle of maladaptive perceptions, cognitions and behaviors (Cacioppo & Hawkley, 2005, 2009; Duck, Pond, & Leatham, 1994). For example, the feel of loneliness are accompanied by a deepen vigilance for social warning (van Roekel et al., 2013), heightened distrust of others (Rotenberg, 1994) and deepen expectations for rejection (Downey, Freitas, Michaelis, & Khouri, 1998). Much higher loneliness is also connected with more negative perceptions of social actions in general (Hawkley, Burleson, Berntson, & Cacioppo, 2003) and of adjacent others in particular (Tsai & Reis, 2009). Moreover, loneliness and social rejection have been associated with a host of maladaptive behaviors such as increased aggressive behaviors towards the offending party (Twenge, Baumeister, Tice, & Stucke, 2001), reduced motion oriented social scheme (Nurmi & Salmela-Aro, 1997)

and decreased prosocial behaviors (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007). These behaviors all together have the potential to decrease the quality of interactions and develop loneliness (e.g., Downey et al., 1998; Nurmi, Toivonen, Salmela-Aro, & Eronen, 1996).

We live in a virtual world, and the trend is fast growing into every aspect of human existence including the learning environment. Virtual socialization is, in a layman's language Internet socialization or online socialization. As businesses are becoming virtual, so are education and other forms of learning. But as virtual as they are, humans are made to socialize since we are social beings, hence the term virtual socialization. Despite its numerous advantages in this technological growing world, it also has disadvantages. One important fact about virtual socialization is how individuals, especially those new to any of its platform seek an avenue to share information in order to establish a relationship with other members (Galvin and Ahuja, 2003: Journal of Management).

It is admissible to say that the virtual loneliness's term is so fresh and yet has never been broadly discussed in investigation. To look at the term virtual loneliness, it will be explained in line with the term loneliness. Loneliness refers to the psychological distress and negative feelings people experience from their subjective dissatisfaction regarding interpersonal relationships, and is occasionally accompanied by depression, isolation, and negative behavior (Schmidt and Sermat, 1983). Peplau and Perlman (1982) also defined loneliness as a subjective psychological state, which is not pleasant and happens as a solution of the inconsistency between the existent social relations of an individual and in demand social relations of an individual. Weiss (1973), gives definition for loneliness as an impression that occurs as a result of

lacking properties like closeness, sincerity and feeling sharing in social relations or the insufficiency of the relations individual has; and sees loneliness as a problem which is related to the interpersonal relations' quality rather than quantity.

The virtual world in which we live has necessitated the place of sharing by online community members. Virtual teachers for instance, share knowledge with their students and the trend continues. If in non educative online forums, a lot of individuals share one form of information or the other. This is why the term "globalization" has become effective because the world has gradually become a global village as individuals from different regions of the world learn and share basic information about their localities thus enhancing the spread of information and learning in general. There cannot be a successful definition of virtual world without the mention of sharing. For instance in Rouse (2006) definition of virtual community, she defines it as a group of people coming together with the purpose of sharing feelings, interests and ideas. The emphasis here is the word "share".

Virtual learning environment is one of the on-going trends in our primary education today. At that, the parts played by virtual teachers are unveiling and they are different from the ones played by the conventional classroom teachers. Juan R. Pimentel (1999) characterizes a "virtual learning environment" as a domain as one that permits learners to see the earth, evaluate circumstances and execution, perform activities and continue through encounters and lessons that will permit them to perform better with more experience on redundancy on the same errand in comparable circumstances. This meaning of a virtual learning environment underscores the significance of learning. Learners in a virtual domain are relied upon to make utilization of and incorporate illustrations, perceptions, encounters, circumstances, principles, ideas and

methods in a persistent (e.g., step by step or week by week), changeless (i.e., conferring information into memory) design to enhance the execution of the execution of errands. (p. 75-76). When considering virtual environments, series of the above listed types, does not constitute a virtual learning environment unless there is information and social interaction about or around the information. Some examples of social interactions include emails, discussion boards, instant messaging, blogs and podcasts.

Virtual environment entails that multi-user or collaborative are environments or systems are environments which users experience other participants as being present in the same environment and interacting with them – or ‘being there together’ (Schroeder 2006). Scholars have argued for more than ten years for a clear definition of virtual environments and virtual reality technology as “a computer generated display that allows or compels the user (or users) to have a sense of being present in an environment other than the one they are actually in and to interact with that environment” (Schroeder 1996: 25); or, in short, ‘being there’. Virtual environment has been used to mean a continuous online community; that users experience as continuing over time and that have large populations, which they experience in common with other users as a world for social interaction.

In social sciences environment is becoming very essential in any given field. The learning environment is the major focus of this research, as said by Juan in 1999 about virtual learning environment as an environment that learners are expected to make use of and in this environment includes, observations, experiences, situations, rules, concepts and techniques in a continuous (e.g., day by day or week by week), permanent (i.e., committing knowledge into memory) fashion to improve the



performance of the execution of tasks, Morahan-Martin (1999) investigate the aspect of teachers romantic relationships their interactions and how the social networks affect their lives. The study sought to analyze the anxiety perceptions exhibited by the social support of the students that used social networks. The results indicate that the aspect of social support for the teacher candidates was low for those who have a romantic relationship, but the level of interaction anxiety is generally low. The interaction anxiety tends to increase with the time periods that members spend on the social networks. Studies show that due to the fact that these teachers would be expected to have better communication skills in their profession, then they ought to indulge in more real life instances rather than the virtual environments (Morahan-Martin, 1999).

The findings carried out in this research work has not been carried out in Turkish Republic of North Cyprus, Famagusta, this is what arose the interest of the researcher to carry out a finding of virtual environment.

### **1.1 Aim of the Study**

The main purpose of this study is to investigate teachers' perspective about a virtual learning environment, with regards to virtual socialization, virtual sharing and to investigate the loneliness level of primary school teachers in virtual environment.

Research also, focuses on exploring teacher's attitude towards teaching and learning process within virtual environment, such as loneliness, socialization and content sharing amongst colleagues and students.

### **1.2 Research Questions**

1. What is the teachers' level of virtual socialization?

- a. What is the teachers' level of virtual socialization according to the age?
  - b. What is the teachers' level of virtual socialization according to the gender?
  - c. What is the teachers' level of virtual socialization according to the teaching field?
  - d. What is the teachers' level of virtual socialization according to the experience year?
2. What is the teachers' level of virtual sharing?
- a. What is the teachers' level of virtual sharing according to the age?
  - b. What is the teachers' level of virtual sharing according to the gender?
  - c. What is the teachers' level of virtual sharing according to the teaching field?
  - d. What is the teachers' level of virtual sharing according to the experience year?
3. What is the teachers' level of virtual loneliness?
- a. What is the teachers' level of virtual loneliness according to the age?
  - b. What is the teachers' level of virtual loneliness according to the gender?
  - c. What is the teachers' level of virtual loneliness according to the teaching field?
  - d. What is the teachers' level of virtual loneliness according to the experience year?

### 1.3 Limitations

This thesis was limited geographically to the Famagusta District of North Cyprus, thereby neglecting some other part of the Turkish Republic of North Cyprus. It is also limited by the teachers in the survey who teaches in 2014-2015 academic year.

### 1.4 Definition of Key Terms

**Virtual Loneliness:** is the inconsistency between the remaining social relations of the individual and the desired social relations in the virtual environments. (*Ertugrul, Ozgen and Ibrahim 2014*)

**Virtual socialization:** This term is used to mean online socialization by various online users in any of the available online platforms.

(<http://serendip.brynmawr.edu/exchange/node/9856>)

**Virtual sharing:** This term explains the various levels of information, ideas, materials and feelings distributed by various online users.

(<http://whatis.techtarget.com/definition/virtual-community>)

**ICT:** (Information and Communications Technology) the utilization of science to the handling of information as indicated by customized guidelines with a specific end goal to determine results. In the most stretched out sense, ICT incorporates all correspondences, data and related innovation. – (*Zhang, P., Aikman, S., & Sun, H, 2008*).

**Virtual Environment:** it entails that multi-user or collaborative are in an environments or systems which users experience other participants as being present

in the same environment and interacting with them – or being there together” -  
(Schroeder, 2006)

**Virtual Learning Environment:** (VLE) is a term used to describe the wide variety  
of online learning platforms and technologies; it is online environment. - (Irene,  
2009)

## **Chapter 2**

### **LITERATURE REVIEW**

The term loneliness can be explained in many ways, but it is evident that it causes people a lot of pain. It is a feeling that emerges when people's expectations are not adequately met by the current situation of their life. The aspect of Internet obsession has a positive relationship with the issue of loneliness. Studies conducted amongst teachers show that social networks kept people busy and away from the loneliness state (Whitty & McLaughlin, 2007).

The increase growth and acceptance of modern technology has enhanced virtual trends. People of all categories now share information with one another leading to faster spread of information and knowledge sharing. Apart from the fact that individual can now share important information with ease and speed, the virtual world has broken colour, race and social prejudices barrier to effective communication thus enhancing the wide spread of virtual socialization. The advent of cyberspace has brought to the fore the fulfillment of the human's innate tendency to interact and relate with others (Turkle, 1995).

The educational use of the virtual teaching strategy is found to be very effective, especially if undertaken following the right strategies. A number of guidelines are set that specify how the online learning strategies ought to be conducted. One feature that is important is the structure, if a good social structure is available, then the network

interactions can be easily built. The social structure of the online education program differs widely when compared to that of the face-to-face instances. The other factor that is important is the process (Grigg, 2014). In the virtual learning, three phases are very important. These phases include the initiation phase, activity phase and the wrap-up phase. These phases are all distinct and they seek to require different things from the teachers and learners. The primary school teachers should ensure that learners are able to gain something from every stage. Mediation is the third stage, and it is very important as it determines how the interactions are carried out (Johnston, Greer, & Smith, 2014). In this part, the moderator who is also the teacher needs to know when to keep quiet and when to talk to the learners.

The primary level school teachers that are employed for virtual teaching programs may be lonely an effect that may lead to internet addiction. In fact, the two issues that are the Internet addiction and loneliness may lead to each other. This implies that a lonely primary school teacher may end up being addicted to the Internet, and also a teacher addicted to the Internet may end up being lonely (Çuhadar, 2012). These two effects are mainly due to the nature of the virtual teaching work that these teachers are exposed to. The issue of Internet addiction is associated with psychological challenges such a depressive mood, loneliness and passion (Sahin, 2014).

Aydin & Kecik, (2014) seem to ascertain that the social habitation would be very appropriate for the formal learning. This is to say that formal education would be better if undertaken in a more relaxed and calm environment. This would translate to the aspect of hyper-learning as people would enjoy education (Aydin & Kecik, 2014). This would mean that learning is available at the needed time and is irrespective of one's location. This would be very effective while compared to the traditional

method, where learning took place in a certain place at a specified period of time (Wilson & McPake, 1998).

Morahan-Martin & Schumacher (2003) claim that the social networks are important as they ensure that primary school teachers of the virtual schools do not end up feeling lonely. Though there exist a number of differences between the social networks that can be found on the Internet and those found in real life. The social networks on the Internet are rather flexible and easy to use. The social networks in real life require more willingness from the users as they entail meeting up with people on regular time periods and forming strong bonds (Morahan-Martin & Schumacher, 2003). The social networks on the Internet run on different schedules and people rarely meet with each other out of the Internet setting. The Internet makes communication to be easy because the time and geographical boundaries are eliminated (Morahan-Martin & Schumacher, 2003).

There are different forms of social media networks that are used in Turkey, these include platforms such as Facebook and Twitter. Facebook attracts users of different ages. The platform has millions of users that share and interact using pictures, videos and general chats. The users of Facebook explain that they join the network in order to meet with their old friends and be able to communicate with new people.

Saunders (2008) claims that various studies conducted on the use of social networks amongst young people shows that they mainly join social networks so as to communicate with other people. These studies reveal that the use of the Internet may lead to loneliness among the users (Saunders, 2008). The students and also teachers who rely on the use of computers for entertainment purposes may end up having a

high score of loneliness. These users may end up feeling asocial mainly due to their continued use of platforms such as Facebook (Saunders, 2008). The sharing levels are high in the social networks and they lead to problems of sharing expected in the real life situation. This is because these users end up having excessive communication with other people on Facebook. The attitudes that primary school teachers have on the notion of using the social media varied depending on a number of factors such as their grade level, income level, whether they were members of these social sites at the moment and time spent on social media.

## **2.1 Considering factors in Virtual learning Environment**

The factors that are important in predicting the success level of the primary teachers in a virtual environment include self-esteem, beliefs and control (Guzzetti & Stokrocki, 2013). If a primary school teacher has good control of their life, then they are set to perform better as they will be able to have self-motivation to complete the tasks given via the online mechanisms. The second factor is that these teachers and students ought to be able to be very responsible for their actions. The other aspect is having a better understanding of the technology and use of the technology devices such as computers (Guzzetti & Stokrocki, 2013). The technology also needs to be readily available so that learners and teachers can easily access information at the needed time. Teachers at primary school level should be in control of their social environment in order to minimize lonely tendencies (Davis & Roblyer, 2005). The organizations and the teachers are also expected to play an important role in the virtual education so as to ensure that students get the most out of the learning process. Teachers can influence the work habits of their students through constant monitoring and working together with them. Parental input is also important in determining the ethics that are acquired by the students (Dawes, 1999).



## **2.2 Problems faced by Teachers in Virtual Learning Environment**

Hawkins, Barbour, & Graham (2011) work shows that there is a problem with the use of computer mediated relationship and the fact that these are not genuine. The levels of social bonding also seem to be wanting. The online platform cannot be clearly measured to detect the impact that these pose on the real life. Virtual communities show a different form of social habitation. With regards to the aspect of education, the informal part takes place in our daily lives. This goes to show that if based on proper strategy, the informal form of education can be properly undertaken with the aid of the virtual communities and the Internet. Through this, the lifelong learning process would be properly adopted in the society (Hawkins, Barbour, & Graham, 2011).

In the research work on the issue of loneliness and isolation by Hara and Kling (1999) they found out that not only were teachers in the virtual environment lonely, they were also frustrated (Tuukkanen & Wilska, 2015). The main challenges that lead to loneliness and frustrations were revolving around the aspect of technological problems. The other issue was the communication skills that were held by these teachers (Şahin, 2014). There was an issue with finding information on the internet mainly due to slow internet or broken links. These meant that teachers ended up feeling lonely. The teachers were also not able to get enough feedback from students, this can lead to a feeling of isolation.

In any virtual learning environment, virtual socialization and sharing are indispensable, but problems such as over reliance on technology and members' exclusion are obvious setbacks. In virtual learning, socialization and sharing level is quite reduced depending on both parties (teacher and pupils) because a lot of factors

come to play. If pupils are in the right frame of mind and enthusiastic, effective learning will take place, but if pupils are uninterested, lack the right attitude to learn and feel excluded, no matter the effort the tutor puts in, it will amount to nothing. Thus, factors that affect learning in real life situations like environment, pupils' attitude, discipline, home background also affect virtual learning. The teacher, on the other hand, can forget the purpose of teaching to impart knowledge and see positive change in his/her pupils, and then focus only the content (Stiles, 2000). This can have negative effect on the general virtual learning option and the overall success.

Kupczynski, Weisenmayer & McCluskey (2010) claim that the virtual environment is very difficult for primary school teachers mainly because they tend to be distant from the students. This makes the teachers to be lonely because they cannot interact in the capacity that they would wish. The problem is that the courses in the virtual environment for the primary level are prepared in a very formal manner, which tends to make them appear dull and boring to the young students (Zane, 2004). These courses may also be structured in a manner where the students are not able to voice their opinions or comments. This leads the students to be distant from their teachers and avoid sending their comments to the virtual classrooms mainly because they are not at ease. The virtual environment thus becomes very strict and students are not able to relax. Therefore, these students do not communicate effectively with their teachers (Liu, Carr & Strobel, 2009). This leads the teachers to be mostly alone and not able to form strong social relationships with their students. Thus teachers end up becoming lonely and feeling distanced (Rice, 2006).

Arbaugh, Bangert & Cleveland-Innes (2010) argue that virtual environment, learning at primary level is very dependent on the two-way communication that takes place

between the students and teachers. This process enable students to acquire knowledge in a more meaningful manner just like the case that takes place in the traditional classroom learning initiatives (Arbaugh, Bangert & Cleveland-Innes, 2010).

### **2.3 Challenges and Solutions of Virtual Learning Environment (E-Learning)**

Educating and learning in an e-learning environment happens uniquely in contrast to in the conventional classroom and can display new difficulties to teachers and learners taking an interest in this web-learning environment. Innovation helped learning instruments is rapidly changing the substance of instruction, transitioning the classroom just learning environment to an online just or mixed web learning background.

The conceivable difficulties educators and learners face in an e-learning environment must be considered with a specific end goal to guarantee learner achievement. Thusly, there are two parts in e-discovering that should be considered while talking about approaches to enhance these difficulties. The first is the educator's part and the second, the understudy's part. Both parts incorporate a move far from conventional instructor understudy connections, parts, and obligations, to virtual space parts. In any case, it is the teacher's essential parts inside of the learning environment, which will overcome difficulties, bolster, and support understudy achievement.

Virtual learning environment can yield positive result if well tailored towards the overall purpose of virtual sharing and socialization. If the teacher can make his/her teaching so interesting to the point of adequately passing the needed information required by the pupils, there will be more acceptance of this medium by many. The

avenue should be seen as most online platforms where people socialize and familiarize themselves with one another.

Having identify some major problems and setbacks to this virtual learning system, the following are the suggested solutions:

Although student motivation can only truly happen intrinsically, creating the right online environment where students want to learn and feel successful is the primary the responsibility of the instructor or course designer. Davis & Roblyer (2005) maintain in the virtual schools, the primary school teachers need to ensure that they offer support to students and instill good qualities in them. This is especially important in the virtual environment because despite the fact that primary school teachers may be very motivated and responsible, the virtual learning system may be discouraging and the teachers may end up feeling isolated. The types of teachers together with the frameworks set are found to be major factors that influence the students' performance (Anderson, 2012). The virtual education in itself raises a different kind of primary school teachers that are independent and who have a greater autonomy (Haddad & Jurich, 2002). This is achieved, especially when the teachers are more committed, which tends to encourage the participation rate of these students. Research shows that students who do not have a teacher that follows up on their learning in many cases, they end up not complementing their courses or having a low participation rate (Shernoff & Csikszentmihalyi, 2009).

According to Martin, in today's online environments there is a lack of teacher presence, face-to-face interaction, and tech support (2009). The most well planned and explicitly laid out online instructional environment is not enough to sustain

learner interest or support intrinsic motivation. On the other hand learners new to an online learning environment typically lack the level of metacognition awareness, time management skills, and self-directed learning needed to be successful (Martin, 2009).

To promote student motivation the primary role falls to the teacher to anticipate and prevent motivational challenges unique to e-learning. One way this can be done is by increasing face-to-face interactions through a variety of technological modes (Martin, 2009). Online learning does not have to be isolated to merely email communication and web based only classroom interactions. Learners often have anxiety about learning online and need to feel connected, reassured, and safe to contribute in their new learning environments (Terry & Leppa, 2009; Hastie, Hung, Chen, & Kinshuk (2010). E-learning environments often lack a variety of communication options creating an unwelcoming online learning atmosphere (Terry & Leppa, 2009; Martin, 2009; Hastie et al., 2010), which only the instructor can control. To help alleviate student anxiety e-mentors should provide various and alternative ways of interacting and communicate through the use of such applications like Skype, chat forums, or discussion boards.

Inadequate time spent on course improvement and configuration can be a gigantic contributing variable to ineffectively created web learning encounters and a noteworthy test for e-learning teachers. By Archambault (2010), the measure of time expected to outline and actualize a well plan lesson, on the web, is an essential thought. Archambault showed that educators reported an expansion in the measure of time they spent making e-learning courses due to new substance, new advancements, and better approaches for drawing in online learners.

One approach to beat the test of time building up an online course is for teachers to work together frequently inside of their e-learning proficient groups. Working together with different educators ought to be spent sharing, creating, and making (Terry and Leppa, 2009; Hastie et al., 2010). This joint effort and talk minimizes the time spent arranging and planning. An approach to conquer the test of a very much created general course outline ought to be tended to because of the learner and ought to incorporate these general course qualities: (a) open doors for learners to team up, (b) an entrenched convention for conveying, (c) clear execution desires, and (d) open doors for learners to pick the mode in which assignments are made and displayed (Hastie et al., 2010). All together for teachers and learners to be fruitful these qualities are fundamental to the general course plan and e-learning environment.

In training, the computerized gap is most usually characterized as the crevice between those understudies who have, don't have, and know how to utilize the web and the data innovations that are as of now changing instruction (Bernard, 2011; Hall, 2013). By (2003), the "advanced partition is stamped not just by physical access to PCs and availability additionally by access to the extra assets that permit individuals to utilize innovation well" (p. 6). Because of the reasonableness of numerous data advances today the present importance of computerized partition is changing from having entry, to knowing how to utilize the advances (Bernard, 2011). Thusly the computerized separate still goes about as a test for instruction and all the more particularly e-learning situations. In instruction the advanced gap has, most as of late, turn out to be more about shutting the hole between utilizing the assets fittingly to acquire quality instructive results than not having entry to the innovation (Warschauer, 2003; Bernard, 2011). The nature of learning results, and all the more imperatively the fruitful utilization of the normal innovation assets, all depend on the

measure of experience and solace level every learner has with these particular asset advances (Warschauer, 2003).

Giving learners the chance to work together, share, and make will build the learner's utilization of different advancements, upgrade their e-learning knowledge, and bolster self-coordinated and progressing learning (Clark and Mayer, 2011; Li and Irby, 2008). Amid this time the educator must consider the learner's mechanical inadequacy's and acknowledge different capacity levels; willing to permit learners decision with the normal execution destinations given it results in the proper learning results (Bernard, 2011). The learner ought to make inquiries, look for extra data from valid sources, reflect regularly, and associate with different learners in scholastic talk identified with the internet learning targets. Having an online group where learners can work together in a sheltered and regarded learning environment will close the hole of the new advanced separation, and in doing as such makes a society of computerized locals helpful for powerful e-learning (Warschauer, 2003; Li and Irby, 2008; Clark and Mayer, 2011).

## **Chapter 3**

### **METHODOLOGY**

This chapter includes research method, populations and samples, data collection tools and techniques, data analysis.

#### **3.1 Research Design**

Each research as its own way of been designed uniquely, can either be qualitative or quantitative or might use a mixed-approach in data gathering. Researcher can also decide which research method can feet it research purpose. As for this thesis, it makes use of an administered questionnaire and in-depth interview to derive data's for it finding, it can be said to be mixed-approach. Qualitative (semi-structured interview) and Quantitative Research method (questionnaire) will be used for this study, as survey will be primary schools, situated in Famagusta District of North Cyprus. This study will be investigated based on the virtual sharing, virtual socialization and virtual loneliness affecting primary school teachers in virtual environment.

Denzin and Lincoln have specific thought about a qualitative research in the handbook of "subjective exploration". Denzin and Lincoln (2005) portray qualitative research as including "... an interpretive naturalistic way to deal with the world. This implies subjective scientists study things in their normal settings, endeavoring to comprehend or translate wonders as far as the implications individuals convey to them."



While applying qualitative research methods, the accentuation is put on the regular setting and the points of perspectives of the exploration members. Also, unique thought is given to the analyst as individual. He or she is not the free spectator in a white coat – a photo that is frequently drawn when regular researchers are portrayed. Maybe, in subjective examination self-reflection about one's own particular state of mind and position and part in the public arena is essential. As Denzin and Lincoln compose: "Behind all examination stands the history of the gendered scientist, who talks from a specific class, racial, social and ethnic group point of view" (2010).

The same happens when you direct research and essentially don't consider that the thing you search for may be red or blue or even designed rather than highly contrasting. There are various popular cases where real revelations were deferred or where perceptions were disregarded in light of the fact that they didn't fit common hypothesis and hence repressing advancement and information era. When you are intrigued, examine the as of now specified books by Thomas Kuhn (2010) and Paul Feyerabend. (1996).

According to Cohen (1980), quantitative research is defined as social research. It utilizes exact systems and observational articulations. He expresses that an exact proclamation is characterized as an elucidating articulation about what "is" the situation in "this present reality" rather than what "should" to be the situation.

Also, Creswell (1994) has given a brief definition of quantitative research as a kind of exploration that is 'explaining marvels by gathering numerical information that are investigated utilizing scientifically based techniques (specifically insights).'

### 3.2 Population

Random sampling technique will be used to gather data from all the primary schools in Famagusta TRNC (Turkish Republic of North Cyprus). One of the best things about simple random sampling is the ease of assembling the sample. It is also considered as a fair way of selecting a sample from a given population since every member is given equal opportunities of being selected.

The total number of primary schools in Famagusta, TRNC is 32. The total number of schools makes up the entire population and sample of the study. The primary school teachers' demographic information is shown in Table 3.2.1 below:

Table 1: Demographic information of the primary school teachers

Variable		Frequency (N)	Percentage (%)
Gender	Female	108	70.6
	Male	45	29.4
	Total	153	100

As it presented by Table 1, 153 primary school teachers from Famagusta primary schools were selected as participants. Just about 70.6% (108) of the primary school teachers were female, 29.4% (45) of them were male.

### 3.3 Data Collection Tools and Techniques

Questionnaire will be used in collection of data for the study. It will be prepared into three different sections that cover the major parts of our study topic, which are, virtual sharing, virtual loneliness, and virtual socialization. A five point Likert Scale instrument is used to measure the degree of response from respondents, which are, Agree as (4), Neutral as 3, Disagree as 2, Strongly disagree as 1. The questionnaire consists of 20 items. The study also adopted a decisive sampling approach in

selecting participant that will answer the 10 interview questions prepared for this research. The items were constructed to bridge the gap and lapses realized as a result of the administration of questionnaire while gathering data for audience; and also to validate their responses.

The data will also be collected into a database in Statistical Package for the Social Sciences (SPSS), the data will also analyzed according to descriptive statistics test. Frequency tables and descriptive analysis will be prepared to show the results related to each research questions.

Descriptive statistics are utilized all through information investigation as a part of various distinctive ways. Just expressed, they allude to means, ranges, and quantities of legitimate instances of one variable. *Descriptive statistics* are used to describe or summarize data in ways that are meaningful and useful. Descriptive statistics is at the heart of all quantitative analysis.

### **3.4 Data Analysis**

For the purpose of this research, the researcher further carried out study on randomly selected teachers from 8 different teaching fields of English, physical education, music, drawing, classroom teaching, kindergarten, technology design, and special education. The total numbers of teachers used as sample in this study were 153, of which each and every one of them was administered with a questionnaire. Amongst the number of the sample audience for this study, consisted a gender disparity of 108 female and 45 male. And their age range lies between ages 21- 42 and above.

Furthermore, interview questions were adopted in other to argue the falls of the administered questionnaires, and also validate the questionnaire. 10 interview items

were asked to randomly select active participants, where the first four questions focused on virtual socialization, the next three questions focused on virtual sharing and the remaining three questions tries out information concerning virtual loneliness of the teachers of the various primary schools used as sample for this study.

### **3.5 Validity and Reliability**

Research requires tried and true estimation. Nunnally (1978). Measurements are dependable to the degree that they are repeatable and that any arbitrary impact, which tends to make estimations not the same as event to event or condition to situation, is a wellspring of estimation mistake. Gay (1987) reliability is the extent to which a test reliably measures whatever it quantifies. Mistakes of estimation that influence dependability are arbitrary errors and blunders of estimation that influence legitimacy are methodical or consistent mistakes.

To test the validity, this thesis gathered currently and relevant data from instructors in the primary school, the data gathered is recent so it can be said to be valid. On the other hand, it is reliable as in-depth answers were gotten through the semi-structured interview that was carried out by the researcher through mobile communication for the reliability aspect of this survey, it is therefore reliable. The reliability was calculated using Cronbach's Alpha. Cronbach's Alpha internal consistency coefficient was  $\alpha = 0.829$ . This means that the questionnaire is acceptable in terms of reliability since it is greater than 0.70.

## Chapter 4

### FINDINGS AND DISCUSSIONS

The aim of this study is to investigate loneliness level of primary school teachers in virtual environment. Also, the study is going to examine some other factors, such as virtual socialization, virtual sharing and virtual loneliness.

#### 4.1 Teachers' level of virtual socialization

In this section, teachers' level of virtual socialization was examined and the minimum, maximum, mean and standard deviation were obtained. Table 2 shows the level of teachers' virtual socialization.

Table 2: General level of teachers' virtual socialization

	<b>N</b>	<b>X</b>	<b>%</b>	<b>Std. Deviation</b>
<b>Virtual Socialization</b>	153	22.89	71.88	4.37

As it seen from Table 2, the arithmetic average of teachers' level of virtual socialization's result is 22.89. And it is 71.88%. According to obtained results, it was determined that teachers' level of virtual socialization has high level. Korkmaz, Usta and Kurt (2014)'s study supports the results obtained in this research. Data gathered in the interviews have been maintained the quantitative data. Teachers' opinions about virtual socialization were evaluated. Primary school teachers' assessments concerning virtual socialization are as follows:

I have friends that have similar thoughts and ideas in the virtual environment. We do the same things, share the same problems, so we can talk about them (R8)

I think socializing can't be in virtual environment. Socializing can be in person's personal life and in his real life (R3).

This can be backed up with the words of Wentworth (1980) proposes exactly such a synthesis. He suggests that an adequate view of socialization must leave room for free will and human autonomy, though noting the patterned social structures and processes that influence individuals.

#### **4.1.1 Teachers' level of virtual socialization according to the age**

A one-way ANOVA test has conducted in order to determine the level of teachers' virtual socialization according to the age. Descriptive statistics of virtual socialization according to the age is shown in Table 3 below:

Table 3: Descriptive statistics of virtual socialization according to the age

<b>Age</b>	<b>N</b>	<b>X</b>	<b>Std. Deviation</b>
<b>21-25</b>	18	22.88	4.93
<b>26-30</b>	38	23.89	3.68
<b>31-35</b>	18	23.00	4.53
<b>36-41</b>	26	20.88	5.09
<b>42 and above</b>	53	23.13	4.02

Teachers' level of virtual socialization depending on age is shown in Table 4 below:

Table 4: Teachers' level of virtual socialization depending on age

	<b>Sum of Squares</b>	<b>Sd</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>
<b>Between Groups</b>	146.241	4	36.560	1.962	.103
<b>Within Groups</b>	2758.086	148	18.636		
<b>Total</b>	2904.327	152			

As it seen form Table 3 and 4, there was no significant effect of age on teachers' level of virtual socialization at the  $p > 0.05$  level [ $F=1.96$ ,  $p=.103$ ]. According to the results of the analysis, the level of virtual socialization of 26-30 age group have been identified a higher. This result can be interpreted that there was no significant relationship between age and virtual socialization.

#### 4.1.2 Teachers' level of virtual socialization according to the gender

According to the T-test results, teachers' level of virtual socialization by gender has shown on Table 5 below:

Table 5: Teachers' level of virtual socialization depending on gender

<b>Gender</b>	<b>N</b>	<b>X</b>	<b>Std. Deviation</b>	<b>df</b>	<b>t</b>	<b>Sig.</b>
<b>Female</b>	108	22.62	4.52	151	1.208	.229
<b>Male</b>	45	23.55	3.94			

As it seen from Table 5, though the arithmetic average of males is high, there was no significant difference. This finding can be interpreted that there was no significant relationship between gender and teachers' level of virtual socialization. Guzzetti and Stokrocki (2013) study provides background information that aids in the understanding of virtual socialization with the learning environment.

#### 4.1.3 Teachers' level of virtual socialization according to the teaching field

In this section, teachers' level of virtual socialization according to the teaching field was examined as shown on Table 6.

Table 6: Level of teachers' virtual socialization depending on teaching field

<b>Teaching Field</b>	<b>N</b>	<b>Mean</b>	<b>Sd</b>
<b>English</b>	14	23.21	3.80
<b>Physical education</b>	8	19.87	3.44
<b>Music</b>	7	23.85	5.36
<b>Art</b>	6	20.50	3.61
<b>Primary school teaching</b>	94	23.12	4.42
<b>Preschool</b>	19	23.15	4.84
<b>Special education</b>	4	22.25	2.50
<b>Technological design</b>	1	26.00	.

Teachers' level of virtual socialization depending on the teaching field is shown in Table 7 below:

Table 7: Teachers' level of virtual socialization depending on the teaching field

	<b>Sum of Squares</b>	<b>Sd</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>
<b>Between Groups</b>	132.993	7	18.999	.994	.438
<b>Within Groups</b>	2771.334	145	19.113		
<b>Total</b>	2904.327	152			

As it seen from Table 6 and 7, there was no significant difference. But, it was determined that, Music (23.85) and English (23.21) had a little bit higher difference than others. Guzzetti and Stokrocki (2013) helps to perform the analysis of the results and consequently, it can be interpreted that there was no significant relationship between teaching field and virtual socialization.



#### 4.1.4 Teachers' level of virtual socialization according to the experience year

A one-way ANOVA test has conducted to test statistical meaningfulness to compare teachers' level of virtual socialization according to the experience year. Descriptive statistics of virtual socialization depending on the experience year is shown in Table 8 below:

Table 8: Descriptive statistics of virtual socialization depending on the experience year

	<b>N</b>	<b>X</b>	<b>Std. Deviation</b>
<b>0-4</b>	23	23.56	4.42
<b>5-9</b>	38	23.31	4.21
<b>10-14</b>	27	21.25	5.10
<b>15 and above</b>	65	23.09	4.04

The teachers' level of virtual socialization according to the experience year is shown in Table 9 below:

Table 9: Teachers' level of virtual socialization according to the experience year

	<b>Sum of Squares</b>	<b>Sd</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>
<b>Between Groups</b>	91.833	3	30.611	1.622	.187
<b>Within Groups</b>	2812.494	149	18.876		
<b>Total</b>	2904.327	152			

As it seen from Table 8 and 9, there was no a significant effect of experience year [F=1.622, p=0.187] on the virtual socialization at the  $p > 0.05$  level. The results of the analysis showed that there was no a significant relationship between experience year and virtual socialization.

## 4.2 Teachers' level of virtual sharing

In this section, teachers' level of virtual sharing was examined. Table 10 shows the general level of teachers' virtual sharing.

Table 10: General level of teachers' virtual sharing

	<b>N</b>	<b>X</b>	<b>%</b>	<b>Std. Deviation</b>
<b>Virtual Sharing</b>	153	14.52	41.42	5.68

As it seen from Table 10, the teachers' level of virtual sharing result is 14.52. And it is 41.42%. The minimum level of teachers' virtual sharing is 7 and the maximum level is 35. According to these results, it was determined that teachers' level of virtual sharing has low level. This finding is supported by other research results in this field category (Özen & Korukçu Sarıcı, 2010). Data obtained in the interviews have been supported the quantitative data. Based on the results of semi-structure method conducted with the teachers, the teachers said:

You know that we have people in virtual environment that we also have in our private life. So I share with that kind of people. But I won't share with the people my private life that I know just from virtual environment (R11).

I have a problem of self-expression. And sometimes there occur the problem of misunderstanding. But the major problem that I encounter in a virtual environment is self-expression. So, I will never share anything in virtual environment (R5).

I don't share my thoughts with stranger on virtual environment, as you can see it is virtual. I believe there should be privacy. Each information shared on virtual environment should be personal, thereby not trusting anyone (R9).

As it understood from above statements, it was revealed that many teachers believe information shared on virtual environment should be privacy and should not shared with strangers.

#### 4.2.1 Teachers' level of virtual sharing according to the age

A one-way ANOVA test has conducted to examine statistical meaningfulness to associate teachers' level of virtual sharing according to the different age groups.

Descriptive statistics of the virtual sharing depending on age is shown in Table 11 below:

Table 11: Descriptive statistics of the teachers' level of virtual sharing depending on age

<b>Age</b>	<b>N</b>	<b>X</b>	<b>Std. Deviation</b>
<b>21-25</b>	18	13.50	7.03
<b>26-30</b>	38	13.71	4.88
<b>31-35</b>	18	12.16	3.27
<b>36-41</b>	26	14.84	6.07
<b>42 and above</b>	53	16.09	5.88

Teachers' level of virtual sharing depending on age is shown in Table 12 below:

Table 12: Teachers' level of virtual sharing depending on age

	<b>Sum of Squares</b>	<b>Sd</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>
<b>Between Groups</b>	277.441	4	69.360	2.218	.070
<b>Within Groups</b>	4628.729	148	31.275		
<b>Total</b>	4906.170	152			

As it seen form Table 11 and 12, there was no significant effect of age on teachers' level of virtual sharing at the  $p>0.05$  level [ $F=2.218$ ,  $p=0.070$ ]. According to the results of the analysis, 42 and above age groups shares more information in virtual environment than other age groups. But as a result, it can be interpreted that there was no significant relationship between age and virtual sharing.

#### **4.2.2 Teachers' level of virtual sharing according to the gender**

According to the T-test results, teachers' level of virtual sharing by gender has shown on Table 13 below:

Table 13: Teachers' level of virtual sharing depending on gender

<b>Gender</b>	<b>N</b>	<b>X</b>	<b>Std. Deviation</b>	<b>df</b>	<b>t</b>	<b>Sig.</b>
<b>Female</b>	108	13.99	5.68	151	1.808	.073
<b>Male</b>	45	15.80	5.53			

As it seen from Table 13, though the arithmetic average of males is high, there was no significant difference. This finding can be interpreted that there was no significant relationship between gender and teachers' level of virtual sharing.

#### **4.2.3 Teachers' level of virtual sharing according to the teaching field**

In this part, teachers' level of virtual sharing according to the teaching field was examined as shown on Table 14.

Table 14: Level of teachers' virtual sharing depending on teaching field

<b>Teaching field</b>	<b>N</b>	<b>Mean</b>	<b>Sd</b>
<b>English</b>	14	14.28	6.05
<b>Physical education</b>	8	14.00	7.42
<b>Music</b>	7	14.28	3.35
<b>Art</b>	6	14.00	7.48
<b>Primary school teaching</b>	94	14.69	5.33
<b>Preschool</b>	19	15.00	7.30
<b>Special education</b>	4	11.00	2.94
<b>Technological design</b>	1	16.00	.

Teachers' level of virtual sharing depending on the teaching field is shown in Table 15 below:

Table 15: Teachers' level of virtual sharing according to the teaching field

	<b>Sum of Squares</b>	<b>Sd</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>
<b>Between Groups</b>	63.831	7	9.119	.273	.964
<b>Within Groups</b>	4842.339	145	33.395		
<b>Total</b>	4906.170	152			

As it seen from Table 14 and 15, there was no significant difference. It was determined that, preschool teachers (15.00) had a little bit higher difference than others. In totally according to the results of analysis, it can be interpreted that there was no significant relationship between teaching field and virtual sharing.

#### **4.2.4 Teachers' level of virtual sharing according to the experience year**

A one-way ANOVA test has conducted to check statistical importance to compare teachers' level of virtual sharing according to the experience year. Descriptive statistics of virtual sharing depending on the experience year is shown in Table 16 below:

Table 16: Descriptive statistics of virtual sharing depending on the experience year

	<b>N</b>	<b>X</b>	<b>Std. Deviation</b>
<b>0-4</b>	23	15.30	6.77
<b>5-9</b>	38	12.50	4.09
<b>10-14</b>	27	13.77	5.08
<b>15 and above</b>	65	15.73	6.02

The teachers' level of virtual sharing according to the experience year is shown in Table 17 below:

Table 17: Teachers' level of virtual sharing according to the experience year

	<b>Sum of Squares</b>	<b>Sd</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>	<b>Mean Difference</b>
<b>Between Groups</b>	280.580	3	93.527	3.013	.032	from 5-9
<b>Within Groups</b>	4625.590	149	31.044			to 15 and
<b>Total</b>	4906.170	152				above

As it seen from Table 16 and 17, there was a significant effect of experience year [F=3.013, p=0.032] on the virtual sharing at the  $p > 0.05$  level. The 15 and above age group shares more information than the other age groups. The mean difference is significant at the 0.05 level. Proserpio and Gioia (2007) work on teaching virtualization provides useful information in analyzing the research findings.

### **4.3 Teachers' level of virtual loneliness**

In this section, teachers' level of virtual loneliness was examined and the minimum, maximum, mean and standard deviation were obtained. Table 18 shows the level of teachers' virtual loneliness.

Table 18: General level of teachers' virtual loneliness

	<b>N</b>	<b>X</b>	<b>%</b>	<b>Std. Deviation</b>
<b>Virtual Loneliness</b>	153	12.79	51.2	3.62

As it seen from Table 18, the arithmetic average of teachers' level of virtual loneliness's result is 12.79. And it is 51.2%. According to obtained results, it was determined that teachers' level of virtual loneliness has middle level. Morahan-Martin and Schumacher (2003)'s study backings the findings gained in this research. Data collected in the interviews have been maintained the quantitative data. Teachers' opinions about virtual loneliness were assessed. Primary school teachers' assessments concerning virtual loneliness are as follows:

I don't feel lonely in a virtual environment, because I have friends to chat with. However my major problem in the virtual environment is misunderstanding with friends (R13).

The person needs to have good communication skills and have to know his mother tongue well. If my partner knows the language well so I won't feel myself lonely (R15).

It shows that how important mother tongue is in a virtual environment.

#### **4.3.1 Teachers' level of virtual loneliness according to the age**

A one-way ANOVA (Analysis of Variance) has conducted to test statistical meaningfulness to compare the teachers' level of virtual loneliness according to the age. Descriptive statistics of virtual loneliness according to the age is shown in Table 19 below:

Table 19: Descriptive statistics of the teachers' level of virtual loneliness depending on age

Age	N	Mean	Std. Deviation
21-25	18	12.55	2.81
26-30	38	12.78	3.55
31-35	18	12.88	2.88
36-41	26	13.65	4.04
42 and above	53	12.43	3.95

Teachers' level of virtual loneliness depending on age is shown in Table 20 below:

Table 20: Teachers' level of virtual loneliness depending on age

	Sum of Squares	Sd	Mean Square	F	p
Between Groups	27.277	4	6.819	.513	.726
Within Groups	1967.441	148	13.294		
Total	1994.719	152			

As it seen form Table 19 and 20, there was no significant effect of age on teachers' level of virtual loneliness at the  $p > 0.05$  level [ $F = .513$ ,  $p = .726$ ]. According to the results of the analysis, it can be interpreted that there was no significant relationship between age and virtual loneliness. The research findings is given factual support by Morahan-Martin and Schumacher's work (2003).

#### 4.3.2 Teachers' level of virtual loneliness according to the gender

According to the T-test results, teachers' level of virtual loneliness by gender has shown on Table 21 below:



Table 21: Teachers' level of virtual loneliness depending on gender

<b>Gender</b>	<b>N</b>	<b>X</b>	<b>Std. Deviation</b>	<b>df</b>	<b>t</b>	<b>Sig.</b>
<b>Female</b>	108	12.67	3.51	151	.641	.522
<b>Male</b>	45	13.08	3.89			

As it seen from Table 21, though the arithmetic average of males is a little bit high, there was no significant difference. This finding can be interpreted that there was no significant relationship between gender and teachers' level of virtual loneliness. The work by Korkmaz, Usta, and Kurt (2014) helps in the establishment of a parallel overview between social virtualization and loneliness in a learning environment. .

#### **4.3.3 Teachers' level of virtual loneliness according to the teaching field**

In this part, teachers' level of virtual loneliness according to the teaching field was examined as shown on Table 22.

Table 22: Level of teachers' virtual loneliness according to the teaching field

<b>Teaching field</b>	<b>N</b>	<b>Mean</b>	<b>Sd</b>
<b>English</b>	14	12.92	3.40
<b>Physical education</b>	8	13.62	4.95
<b>Music</b>	7	12.14	2.96
<b>Art</b>	6	16.00	5.65
<b>Primary school teaching</b>	94	12.82	3.46
<b>Preschool</b>	19	11.52	3.40
<b>Special education</b>	4	12.75	2.98
<b>Technological design</b>	1	11.00	.

Teachers' level of virtual loneliness depending on the teaching field is shown in Table 23 below:

Table 23: Teachers' level of virtual loneliness depending on the teaching field

	<b>Sum of Squares</b>	<b>Sd</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>
<b>Between Groups</b>	104.295	7	14.899	1.143	.340
<b>Within Groups</b>	1890.424	145	13.037		
<b>Total</b>	1994.719	152			

As it seen from Table 22 and 23, there was no significant difference. It was determined that, music teachers had a little bit higher difference than others. In totally according to the results of analysis, it can be interpreted that there was no significant relationship between teaching field and virtual loneliness.

#### 4.3.4 Teachers' level of virtual loneliness according to the experience year

A one-way ANOVA test has conducted to check statistical importance to compare teachers' level of virtual loneliness according to the experience year. Descriptive statistics of virtual loneliness depending on the experience year is shown in Table 24 below:

Table 24: Descriptive statistics of virtual loneliness depending on the experience year

	<b>N</b>	<b>X</b>	<b>Std. Deviation</b>
<b>0-4</b>	23	12.65	3.43
<b>5-9</b>	38	13.36	3.56
<b>10-14</b>	27	12.25	3.10
<b>15 and above</b>	65	12.73	3.98

The teachers' level of virtual sharing according to the experience year is shown in Table 25 below:

Table 25: Teachers' level of virtual loneliness according to the experience year

	<b>Sum of Squares</b>	<b>Sd</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>
<b>Between Groups</b>	20.920	3	6.973	.526	.665
<b>Within Groups</b>	1973.799	149	13.247		
<b>Total</b>	1994.719	152			

As it seen from Table 24 and 25, there was no significant effect of experience year [F=.526, p=.665] on the virtual loneliness at the  $p>0.05$  level. The 5-9 age groups feel much more loneliness than the other age groups. The results of the analysis showed that there was no a significant relationship between experience year and virtual loneliness.

## **Chapter 5**

### **CONCLUSION**

The main aim of the current study is to examine loneliness level of primary school teachers in virtual environment. Virtual Environment Loneliness Scale (VELS) was employed for the current study. Virtual Environment Loneliness Scale consists of five dimensions and considering these dimensions the findings were discussed. The following results were obtained in accordance with the findings.

The study stressed that the majority of primary school teachers' virtual socialization level is higher than the other factors of virtual environment. The result is 71.88%. Teachers' level of virtual socialization did not show any difference in terms of age, gender, teaching field and experience year. Obtained results presented that virtual socialization demonstrates a statistical meaningful difference in terms of virtual environment.

Besides of this, obtained results indicated that, there was no significant meaningful statistical difference about primary school teachers' virtual sharing level in terms of age, gender and teaching field. Teachers' level of virtual sharing result is 41.42%. According to this result, it was determined that teachers' level of sharing has low level. However, study revealed that there is a significant meaningful difference about teachers' level of virtual sharing according to the experience year.

The findings of the present study also concluded that there was no significant meaningful statistical difference about teachers' level of virtual loneliness according to the age, gender, teaching field and experience year. The arithmetic average of teachers' level of virtual loneliness result is 12.79. And it is equal to 51.2%. According to these results, it was determined that teachers' level of virtual loneliness has middle level.

As a result of this study, it could be concluded that some of the primary school teachers feel lonely in the virtual environment. Results, which obtained from the semi-structured interview, indicated that there are some primary school teachers having general problems with using virtual environment.

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## **APPENDICES**



## **Appendix A: Interview Questions**

### **Virtual Socialization**

1. Do you have friends having the similar thoughts, ideas and doing the same things with you in Virtual Environment?

**If Yes:** What are the common characteristics?

**If Not:** a) What is the reason of not having?

b) Is it a problem not to have them? Why?

2. Do you like to comment on the thoughts and ideas shared by others in the Virtual Environments?

**If Yes:** Why do you feel the need to comment?

**If Yes:** How and using what tools do you comment?

**If Not:** Why?

3. What kind of features should people have for socializing in virtual environments?

4. How do you think how much it is important to establish the ability of adaptation and friendship in the Virtual Environment? Is it OK without it?

### **Virtual Sharing**

1. Do you share your private life, ideas, thoughts and views on similar issues with your friends in Virtual Environments?

**If Yes:** Do you think it is ok to do like this?

**If Not:** Why? What kind of problems do you feel?

2. How much do you trust your friends in Virtual Environments?

**If Yes/If Not:** Why?

3. The problem with the trusting is your friends or virtual environment structure?

### **Virtual Loneliness**

1. Do you feel yourself lonely in the Virtual Environment?

**If Yes/If Not: Why?**

2. What kind of problems do you have?

3. Do you have problems like self-expression or misunderstood?

## Appendix B: Questionnaire

Sevgili katılımcılar,  
Ben Valiyeve Lamiya, Doğu Akdeniz Üniversitesinin Eğitimde Bilgi ve İletişim Teknolojileri Yüksek Lisans Programı öğrencisiyim. Tez çalışmam kapsamında sanal ortamdaki yalnızlığı ölçmek üzere aşağıda yer almakta olan anket ve sorular oluşturulmuştur. Lütfen size uygun olan seçeneği işaretleyiniz.

Katılımınız için teşekkürler.

- Yaşınız:  
 21 – 25     26 – 30     31 – 35     36 – 41     42 ve üzeri
- Cinsiyetiniz:  
 Kadın     Erkek
- Öğretmenlik Branşınız:  
.....
- Kaç yıldır öğretmenlik mesleğini sürdürmektесiniz?  
 0 – 4     5 – 9     10 – 14     15 ve üzeri

	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
5. Sanal ortamda oldukça sosyal bir insanım.					
6. Sanal ortamda çevremdeki insanlarla birçok ortak yönüm var.					
3. Sanal ortamda ilgilerim ve fikirlerim çevremdekilerce paylaşıyor.					
4. Sanal ortamda kendime yakın hissettiğim insanlar var.					
5. Sanal ortamda kendimi çevremdeki insanlarla uyum içinde hissediyorum.					
6. Sanal ortamda arkadaşım yok.					
7. Sanal ortamda yardım için başvurabileceğim hiç kimse yok.					
8. Sanal ortamda kendimi bir grubun üyesi olarak hissediyorum.					
9. Sanal ortamda daha çok dertleşebileceğim insanlar var.					
10. Sanal ortamda daha çok sohbet edebileceğim kişiler var.					
11. Sanal ortamda beni daha çok anlayan insanlar var.					
12. Sanal ortamlar bana içime kapanıklığımı ve mutsuzluğumu unutturuyor.					
13. Sanal ortamlar benim için gerçek hayattaki problemlerden kurtulmanın tek çıkış yoludur.					
14. Sanal arkadaşlarıma gerçek hayattaki arkadaşlarımdan daha fazla güvenirim.					
15. Sanal ortamda gerçek hayata göre çok daha rahatım.					
16. Sanal ortamda kimse beni ilgilendirmiyor.					
17. Sanal ortamda hiç kimse beni gerçekten iyi tanımıyor.					
18. Sanal ortamlardaki arkadaşlıklar bana sahte geliyor.					
19. Sanal ortamlarda kendimi ifade etmekte zorlanırım.					
20. Sanal ortamlarda gerçek ortamlara göre sık sık yanlış anlaşılırım.					

## Appendix C: Research Authorization



**KUZEY KIBRIS TÜRK CUMHURİYETİ  
MİLLİ EĞİTİM BAKANLIĞI  
İLKÖĞRETİM DAİRESİ MÜDÜRLÜĞÜ**

Sayı: İÖD.0.00-35/2015/İB - 635

Lefkoşa, 10 Nisan 2015

Sayın Lamiya VALİYEVA,  
Doğu Akdeniz Üniversitesi,  
Gazimağusa.

Müdürlüğümüze bağlı Gazimağusa Bölgesi ilkokullarında görev yapan öğretmenlere uygulamak istediğiniz, “İlköğretim Kurumlarında Görev Yapmakta Olan Öğretmenlerin Sanal Ortamdaki Yalnızlıkları” konulu anket çalışmanız ve ekinde sunulan sorular, Talim ve Terbiye Dairesi Müdürlüğü tarafından incelenmiştir.

Yapılan incelemede anketin uygulanması uygun görülmüştür.

Anketi uygulamadan önce okul müdürlükleri ile temas kurulması ve anket tamamlandıktan sonra da sonuçların **Talim ve Terbiye Dairesi Müdürlüğü**'ne iletilmesi hususunda gereğini saygı ile rica ederim.

**Ali NİZAM**  
Müdür

/AA

Tel (90) (392) 228 3136 - 228 6893  
Fax (90) (392) 228 7158  
E-mail meb@mebnet.net

Lefkoşa-KKTC