Teleconferencing is becoming increasingly popular within the educational community. This paper attempts to approach the phenomenon with regards to the human side and explores the social factors that arise and appear to influence this modern educational method. To achieve that, the subject in hand is approached in a holistic way, by citing literature and performing a research study.

The literature review provided a general description for “communication”, as well as more specialized terms like “distance communication” and “teleconference”. Moreover, the scientific research that was conducted, dealt with the analysis of the data that was collected via interviews. Namely, the study delves into the presentation of the research’s findings, as well as a direct comparison of those, with the conclusions the rest of the scientific community has so far come up with. It was proved that the majority of the sample has a positive stance towards any developments technology might bring to further facilitate and enhance distance learning.

**Keywords:** social factors, communication, teleconferencing

1 **INTRODUCTION**

The term social dimension refers to something that concerns society. It is a broad concept that can affect all people who live, work, move and interact in a particular geographical area. If we narrow down the term society and give it a smaller dimension, we will end up having a community. Communication plays an important and decisive role within the boundaries of a community, especially considering how reactions and behaviors are affected and evolved through new technologies. For example, people that are not so social or popular with those around them, can easier deal and cope with them via computer communication. On other hand, extroverts and sociable people might not have trouble dealing with in person communication in their everyday life (Sabor, Arfeen, Mohti, 2017).

2 **FACE-TO-FACE COMMUNICATION**

There are several researchers and sociologists who have tried, over the years, to define the meaning of the term “social presence”. In the end, it has been commonly accepted that as “social presence”, we can define the ability of learners to interact and act socially within a social context of exploration (Blau et all, 2017). Face-to-face communication is suitable for the transmission and exchange of various information through verbal and non-verbal messages. Several researches and studies have shown that, when it comes to the field of education in specific, the majority of people would work and behave much more comfortably in an environment built upon face-to-face communication, than one that relies on digital communication. In essence,
communication established between learners and the educator covers both their educational and emotional needs (Zygouris, & Mavroidis, 2011). The educator is essentially "responsible" for the group's bonding and guidance over the course and progress of the learning process. That can be achieved much more easily through the directness that is offered by a traditional physical classroom environment (Sabor et al., 2017). According to Gorham (1988), all behaviors and interactions that individuals showcase in live communication contribute significantly to the development of emotional learning and even enhance the overall process. Although there are no surveys comparing social skill development between online and in person learning, most researchers believe that direct communication fosters the development of social skills in a better way, especially considering the fact that the educator’s physical presence tends to inspire confidence to the learners (Zygouris et al., 2011).

2.1 DISTANCE COMMUNICATION

The term distance communication describes the ability of a person to communicate with someone else from a distance with the help of technology, and not necessarily by sharing the same space in physical presence. This form of communication is a subject of research. What concerns the academic community the most, is the influence this phenomenon has on the person's behavior and on shaping the interaction that takes place in its course (Unwin, 2018).

Studies carried out, both domestically and abroad, focus on this exact issue. They indicate that not only internet communication is widely accepted as a concept these days, but also learners seem to actually prefer leaning towards such approach, in comparison to live communication (Blau et al., 2017). Most studies conclude that, when learners do not come into visual contact with the educator, then their emotional and psychological state is apparently calm. That is quite logical, since the anxiety that comes with eye contact is not present in this particular case (Alqurashi, 2017).

Students can stay in touch and be consistent when it comes to fulfilling their curriculum duties at any given time of the day. Participation in the digital classroom is carried out from the comfort and familiarity that brings the environment of their own personal space. Even by taking part during the actual course of the teleconference, the student does not have the same level of stress, nor the same degree of insecurity in any report (Alqurashi, 2017). Monitoring is done from a comfortable and familiar environment based on research, so the learner feels and participates more comfortably in the process. Even by being present on the teleconference’s platform the actual time the course is live, the learner does not usually feel stressed or insecure due to visual exposure (Alqurashi, 2017). When someone takes part in a session of distance communication, or more specifically in a process of teleconferencing such as the ones that we study, that allows participants to have visual contact of each other. That is the exact moment their social characteristics are formed.

What is more, there is always the possibility that some of the learners are introvert and, as a result, not that much expressive towards the rest of the classroom. In that case, participating in a distance learning session might make such students feel uncomfortable or perhaps even isolated, and thus the need for in person communication is considered to be a necessity in order to help them reduce or even eliminate the problems that they have come to face (Zygouris et al., 2011).
2.2 OTHER FACTORS THAT AFFECT COMMUNICATION

The studies that have been conducted so far, showed that the gender of the individual also plays an important role in the social dimension of the subject. Relevant researches that took place in Norway on the matter of gender representation in the sector new technologies, support three different assumptions. In the first case, gender is not related to, and does not affect or influence people’s attitudes towards ICT fluency (gender blind discourse). In the second one prevails the male supremacy in ICT. And finally, the third scenario is characterized by a feminist dialectic that is supported by the majority of both sexes, and that ultimately bridges the gap that is supposedly apparent as far as ICT fluency goes (Chatzigeorgiou, & Karagiorgis, 2009).

Of course, the factors of the learners’ place of origin and current residence could not be missing from the subject’s social dimension. While anyone could be willing to participate in a distance learning program, that is not always possible solely due to technological restraints, e.g. a bad internet connection/reception (Lionarakis, 2008). According to earlier studies, this dimension does not go unnoticed, although it seems to be a problem that has been over the time slowly eliminated. The age factor is also something worth mentioning, seeing how it influences participation to a certain extent. Not simply regarding the decision of attending the distance learning program itself, but rather due to the fact that older people are not too familiar with teleconferencing platforms and their interface.

It makes sense for the younger generations, i.e. people up to the age of 30, to be more comfortable and knowledgeable concerning the benefits one might have from online communication (Lionarakis, 2008).

3. TELECONFERENCE: DEFINITION AND TYPES

The ever-expansive utilization of new technologies has hastily brought great developments in relative knowledge and broader scientific. At the same time, navigation across the already established knowledge with the help of new tools, such as an online database for example, is now easier than ever (Gkiosos, & Mavroidis, Koutsoumpa, 2008). In order to be able to address the topic of educational teleconferencing, we need to first take a look at the term outside of the learning process. A teleconference is considered to be an either synchronous or asynchronous procedure, which takes place from a distance through means of modern technology that allow two or more individuals to communicate and interact with each other under a common environment (Panetsos, 2002). Therefore, the common definition that is been attached to the term is that of the information exchange that takes place between several participants with the assistance of interconnected devices (Lionarakis, 1996, Davies and Samways, 1993).

This innovative idea started to be excessively used in Greece halfway through the 90’s with the foundation of the Hellenic Open University and the coming of the Internet (Lionarakis 2006; Anastasiadis, 2014).

One of the benefits of educational teleconferencing is that it allows the educators and their students to interact with each other by exchanging messages, pictures and sound clips «in real time». Modern distance learning is versatile both in time management as well as physical space, while leaving a window open for the learners to plan accordingly regarding the way they would interact with or react to the progression of a course they attend. The most positive point though of teleconferencing
is arguably that of the directness and the sense of community it brings to communication (Anastasiadis, 2014).

More specifically, it would be rather interesting to get proper feedback from actual teleconference participants, regarding whether or not they feel satisfied by the programs themselves and their end result. As many studies have shown after all, it is important for the students to be able to have an opinion of their own on the matter and to be in a position to express it, in order for these platforms to be improved down the line (Gkiosos et al., 2008).

A research conducted by Loizidou-Hadjitheodoulou and their colleagues (2001), proved that the discussion around each teleconferencing session revolves and actually takes place, is characterized by a significant, useful and meaningful form of communication. In addition to that, non-verbal speech, which is something present in face-to-face education, is absent in the case of distance learning. The role of the educator here is to develop and include in his/her approaches, ways to convey those messages that are usually expressed via non-verbal speech (Zygouris et all, 2011).

4. METHODOLOGY
4.1 LITERATURE REVIEW

The methodological approach which is to be used in a research is of vital importance, considering the fact that it brings together theory and reality. It consists of three stages with the first one being that of data analysis. Consequently, comes the discussion that is evoked as a result of the previous stage. Lastly, in the third stage researchers are expected to present the conclusions they reached once the rest of the processes were over, as well as give any suggestions they might end up having on how the result of their work would eventually benefit the matter in hand. Purpose of said research should be, proving in detail the value, be it social, scientific or academic, of its findings (Howard & Sharp, 2001). In order to succeed in this goal, researchers are tasked to put together a questionnaire in the form of an interview that follows a comprehensible, yet well-detailed structure. By following that approach they ensure that they have access to the data they seek to obtain, in a short period of time (Korres 2015).

According to Howard and Sharp (2001), the interview makes it possible for someone to gain access to higher quality of information in comparison to a typical questionnaire. The main difference between the two comes down to the arrangements of their individual conduction. Interviews require excellent preparation and right handling of time scheduling in conjunction with the human factor. A proper theoretical background is necessary, of both the specific vocabulary the researcher intends to use in order to approach the matter, as well as the sought out data itself. Otherwise, there is the danger of allowing the interviewees to go off-topic with their responses, making it difficult for the researcher to group together all corresponding information and ultimately leading to the failure of the entire research (Howard et al., 2001).

4.2 DATA ANALYSIS

The aim of the study is to determine the social factors that affect an individual during a teleconference session. The research that took place in order to investigate the matter, was conducted in the form of an interview. Thirteen (13) people in total, of various backgrounds, were approached, out of which five (5) were teachers, two (2) social workers, one (1) speech therapist, two (2) chemical engineers, one (1) physiotherapist
and one (1) coming from the sector of business management. They were all chosen according to the following criteria: everybody had to have the first year of a distance learning program Bachelor’s degree, or a Master’s degree, or a PhD) successfully completed while going into the second, they should also have participated in at least one session of teleconferencing throughout their life and, last but not least, they should be familiar with ICT.

The questions of the interview were shaped based on the specific topics that came to be from the literature review that was conducted. Therefore, according to previous studies, and solely based on the human aspect, the factors that could potentially affect the process of teleconference are: the age (Lionarakis, 2008), the gender (Chatzigeorgiou, & Karagiorgi, 2009), the place of residence (Lionarakis, 2008), visual contact and the emotions or reactions that may be caused by that, as well as verbal speech or the lack of it there of. By taking all of the aforementioned variables under consideration, it came out to be that all of them happen to take part into the formation of someone’s social profile. Thus, the topics that were identified as in need of investigation are as follows:

1. The educator’s ICT fluency.
2. The familiarity of the learners with teleconferencing environments.
3. The factors that benefit teleconferencing or act as obstacles in it.
4. The established relationship between the educator and the learners in face-to-face communication.
5. The learners’ psychology and whether or not that is affected during the teleconference.
6. The preference between teleconference and face-to-face communication.

5. RESULTS

The sample of the interviewed participants consisted of thirteen (13) people, out of whom four (4) were male and nine (9) female. Their age varied from 24 to 34 years old, with 6 of them being between 24 to 27 years and the 7 rest between 28 to 34 years old. All of them were asked the following questions and each one of them gave their own individual response as presented right below.

(a) Which are the social factors that exist / emerge during a videoconference and how do they come to be?

Of the interviewees, all thirteen (13) have participated in a teleconferencing process. Five (5) out of thirteen (13) participate in such a process more than once on a weekly basis during these days. According to theory, the main social factor that exists / emerges during a videoconference is stress. All thirteen (13) respondents stated that:

"In the beginning it was an unprecedented process for me and I experienced anxiety, which only lasted for the first few minutes."

Seven (7) respondents claimed that, for the first month, they experienced the same awkwardness and anxiety as the first time during the first minutes of the videoconference. The remaining six (6) respondents claimed they did not face any difficulties beyond the initial stress and, as they noted, the whole process is a matter of familiarization.
"Comfort and familiarity are the dominant feelings in the subsequent course of a videoconference."

Social factors also include social / family obligations. A very small percentage, of four (4) out of thirteen (13) participants, mentioned that due to increased family responsibilities they have less time for attending. Two (2) out of those four (4) claimed that:

"It requires communication in person, but due to multiple obligations internet communication is also convenient!"

While in contrast the other two (2) stressed that:

"There is no reason for face-to-face communication while teleconferencing exists. It covers exactly the same needs!"

(b) How and how well do people interact during educational teleconferencing and during face-to-face communication

All the interviewees split teleconferencing communication into two parts, communicating with the teacher and the team, and communicating only with the teacher. A large proportion (ten (10) out of thirteen (13)) responded by claiming that:

"I am reluctant to ask multiple questions and request more information, because there are plenty of people involved and it takes more time and patience to answer all the questions."

"The relationship with the teachers is good in face-to-face communication, without meaning that it is not good through a platform."

"The relationship with the teachers is good, but it depends on other factors such as personal or emotional."

Three of the respondents noted that during an educational teleconference:

"Interaction and performance are more about the techniques of the tutor."

The majority (nine (9) out of thirteen (13)) cooperate and interact with the same directness as in face-to-face communication. Two claimed that:

"Teleconferencing communication completely covers my needs."

"I feel the same comfort as in person and there is nothing making communication difficult."

But they are more likely to feel and interact more comfortably in person, as all respondents admitted that:

"Face-to-face communication offers direct communication and more comfort."
All thirteen (13) argued that they had no difficulty in asking something either in person or through teleconferencing. But everyone agreed that:

"We feel more comfortable in terms of time in face-to-face communication."

Concluding this segment, it is also worth mentioning that three respondents have never met with their tutor because of distance, but that does not seem to concern or affect them, and as they claim:

"There has been no need for face-to-face communication so far and there will probably be no need."

(c) **Advantages affecting the individual in this process**

According to all 13 interviewees, teleconferencing can save both time and money. It is a relatively new way of communication and education and offers the opportunity to learn new technological applications. Cooperation and digital communication contribute positively and keep the participants interested. Finally, the phenomenon of teleconferencing complements the educational process.

(d) **Disadvantages affecting the individual in this process**

9 respondents noted that:

"Performance is mainly affected by the connection factor."

Everyone agreed that:

"Poor technical support, which has to do with internet connection and sound quality, in terms of microphone and noise, consist factors that make teleconference difficult."

Six respondents argued that:

"Good knowledge and proper handling of electronic platforms is essential!"

6. **DISCUSSION**

The purpose of this research is to investigate the social factors that affect the individual regarding the teleconferencing process. According to the literature (Blau et al. 2017), (Alqurashi, 2017), these factors are anxiety, comfort felt through eye contact or distant communication, insecurity and familiarity gradually emerging through the process. Furthermore, (according to Hatzigeorgiou & Karagiorgi 2009; Lionarakis 2008) gender, social obligations, place of residence and age seem to affect the individual. In this survey, the main factors that seem to play an important role are all of the above, except for place of residence and age. Anxiety, eye contact, social obligations and gender are the main factors though. Gender may be the most determining factor, as men seemed to be calmer and more comfortable in general.

Teleconferencing is a mean of enhancing knowledge transfer. Learning and education never stops, but it is interrelated with evolution and the continuous
interaction of the teacher and the student (Gkiosos et al. 2008). How and how much a person interacts through this way of communication and through face-to-face communication is the next research question that concerned us. Information concerning the proper handling of a platform to enable the trainees to cope with communications, but also the way that the teacher handles the teleconference time are key factors that influence the interaction that one will develop in the distant communication process, as it is obvious from the interview. The role of the instructor therefore includes developing those skills created by the lack of non-verbal communication (Zygouris et al. 2011).

In this research, both the advantages and disadvantages that emerged, were directly related to the educational process of teleconferencing. Saving time and money, as well as the freedom resulting from the flexibility of a program are the most important advantages, as the interviewees admit. Audiovisual coverage weakens distance restrictions (Anastasiadis 2014). Family and professional obligations lead to keeping the individual in sync with the innovative process.

However, there are also difficulties in a teleconference. Bad internet connection and bad sound quality (in relation to the various noises that may exist) play a key role. Technical issues that may be related to video, image, microphone or connectivity that make it difficult to communicate, should be resolved as swiftly as possible. In order to achieve proper communication, transmission and reception need to be clear from any surrounding obstacles / noises (either internal or external) (Panagiotakopoulos, et.al., 2013; Armakolas, et. Al., 2018)

7. CONCLUSIONS

The analysis above leads to the following conclusions that arise from the research questions raised:

For the first research question, which concerned the social factors that exist and how they are shaped, the conclusion is the following. There are social factors relating to the character of each person (more sociable, more introverted, more anxious) which take longer to develop for the individual to accept the process of teleconferencing and communication through a digital platform. There are also social factors that are related to external elements, like social obligations, place of residence etc., which occur in the life of an individual and can either be addressed without directly affecting the individual or not.

Concerning the second research question, related to the interactions of the individual in teleconferencing and communication in person, the research concludes that the interaction in distance learning depends more on the teacher. A teacher who creates the right climate and provides correct and timely information on the whole process has to become the link through which a successful teleconference will be held and to bypass the negative effects of such social factors. How well will the teacher organize his/her lesson and actions and also how well will s/he be prepared for any difficulty that arises is also important. In direct communication, the above also play a primary role, but psychology and the individual’s willingness for participation and interaction are more crucial.

As far as the advantages and disadvantages are concerned, the conclusions are clear. Time and money saving are irrefutable arguments for anyone who is mindful of this matter. Furthermore, engaging and learning about new technological achievements enhances overall knowledge and it can only be a qualification. The phenomenon of teleconferencing facilitates distance learning and even seems to
facilitate to a large extent, based on our modern lifestyles, the transmission of knowledge and the flexibility to acquire it. As for the disadvantages, proper organization will help avoid a lot of difficulties and adversities and it will help address whichever issue emerges more directly. Besides, let us not forget that tackling difficulties helps us evolve and learn how to handle certain situations better.

Communication in person is and forever will be a milestone even in this age of technological advancement. The literature review, as well as the majority of the respondents in this survey and the various surveys that are being carried out in Greece and abroad indicate that communication in person is a necessary and perhaps indispensable part of the learning process. However, teleconferencing seems to constantly gain ground in this field and to evolve rapidly and effectively.

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