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ADULT LEARNERS OF ENGLISH AS A FOREIGN LANGUAGE AND THEIR ATTITUDES TOWARDS CALL AND ONLINE LESSONS

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Abstract

The present study investigates the attitudes of adult learners of English as a second or foreign language towards computer-assisted language learning and online lessons via video conference. Participants in the study (N=270) completed an online questionnaire in which they showed their agreement or disagreement with a number of positive statements about computer-assisted language learning and online lessons. Participants reported having generally positive attitudes towards computer-mediated communication, and generally negative attitudes towards online lessons. These findings can provide insight for institutions and educators so as to provide the learners with learning environments and tools that they can find enjoyable, effective and convenient.

Keywords: Computer-mediated communication, online lessons, attitudes

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1. INTRODUCTION

Computer assisted language learning (CALL) and computer-mediated communication (CMC) have played a significant part in language learning over the last 60 years, and even more so in the last two decades with the widespread use of personal computers, the rise of the internet age, and with it the possibility for any potential language learner to access applications, web-based tools and other computer-based resources at their convenience. This has created an environment in which, if one desires to learn a language, there is a large number of options to choose from.

In an age where many individuals are learning by using computer-based tools and attending online lessons via videoconference, it is relevant to ask ourselves about what the learners are experiencing when following these routes for learning, what their attitude towards them is and what beliefs they hold about such tools.

The aim of this study is to learn about learners' perceptions of different aspects (such as usefulness and effectiveness) of computer-assisted language learning. Another one of its aims is to know about learner attitudes as regards an aspect of computer-mediated communication that has become especially relevant due to the COVID-19 pandemic: online lessons via video conference. In a time when many learners experienced online and distance learning for the first time, it is especially relevant to learn more about learner experience and attitudes towards that type of instruction model.

1.1. Justification and relevance of the study

This research could be interesting and relevant to English teachers of adult learners, especially those educators who encourage the use of CALL or teach English online via video conferencing software to groups of learners. This is currently an especially fitting subject of study, as many classrooms moved online due to the onset of the COVID-19 pandemic and the use of certain CALL tools has become widespread. The unprecedented number of language learners that had to engage in distance learning due to the COVID-19 pandemic makes it increasingly relevant to make needs analyses and to discover how to best support learners in distance and online learning environments, now and in future. Learning more about learner preferences may enable authorities, institutions and educators to better adapt to the learners' preferences in order to provide the best educational resources and programs possible.

1.2.Hypotheses, objectives and research questions

The research hypotheses for this study are as follows:

- Adult learners of English as a second language have a generally negative attitude towards CALL and towards lessons via video conference.
- Learners prefer the traditional face-to-face classroom than the online classroom if given the opportunity to choose.
- Adult learners of English as a second language who are at a higher proficiency level in the Common European Framework of Reference (C1-C2) have a greater preference for online lessons than learners who are at a lower proficiency level (A1-B2).
- There is an inverse correlation between the learners' age and the learners' preference for attending online lessons.
- Learners find synchronous learning with CALL more useful and effective than asynchronous learning with CALL.

The main objective of this study is to determine the attitudes of adults who are learning English as a foreign language towards the use of computer assisted language learning (CALL) and towards a specific form of computer mediated communication (CMC): online lessons by videoconference. This study has specifically targeted people who have experienced both traditional face-to-face English language courses and distance learning courses which include online lessons via videoconference.

The specific objectives are as follows:

- To determine positive and negative attitudes of adult ESL learners towards CALL and online lessons.
- To reach conclusions regarding the perceived effectiveness of CALL and CMC by adult ESL learners.
- To determine if there are significant differences between the perspectives of learners regarding online lessons depending on their age and on their language level.

- To help teachers to design and implement new strategies when using CMC and CALL in their teaching practice.

This study aims to respond to the following research questions:

- Do learners of English as a second language have a positive attitude or a negative attitude towards CALL tools?
- Do learners feel that using lessons via video conference as a means for instruction and language practice is as effective as instruction and language practice which are carried out in the classroom?
- What do learners consider most useful and instructive using CALL during class or on their own?
- Is there any correlation between the learners' language proficiency level and their preference for online lessons via video conference?
- Is there any correlation between the learners' age and their preference for online lessons via video conference?

1.3. Sections

In the second chapter of this study, we will look at the definitions of computer-assisted language and computer-mediated communication. The first section of the literature review begins with a look at the history of CALL. It also delves into the features of CALL that can be considered advantageous, and also into what can be considered the drawbacks of this kind of technology. We will also examine the relationship of computer-assisted language learning with learner autonomy and look into previous research concerning the attitudes of language learners towards CALL. The second section focuses on computer-mediated communication, and we will also examine the different types of CMC currently available, their affordances and downsides, with a special focus on online lessons and the attitudes that learners have been known to have towards them in the literature.

In the third chapter, the methodology is outlined, with specific subsections about the data collection methods, the participants, the instrument used to collect the data, and the procedures

used to analyze the data. In the fourth chapter, the results of the study will be examined and analyzed. The final chapter focuses on the results of the study and some final conclusions.

2. LITERATURE REVIEW

2.1.Computer assisted language learning (CALL)

According to Beatty, computer-assisted language learning is “any process in which a learner uses a computer, and, as a result, improves his or her language” (2010, p.7). This broad definition includes different kinds of activities, techniques and modes of instruction. The materials that may be considered “computer-assisted language learning materials” can range from applications and resources aimed directly at learning a language, and also those tools that are not specifically made for language learning but can be used to that purpose, such as word processors, literature, video games, and adapted non-CALL materials.

Computer assisted language learning has developed greatly over the last 70 years. This development is usually categorized in three phases: behavioristic CALL, communicative CALL, and integrative CALL (Barson & Debski 1996, as cited in Warschauer, 1996). Throughout the stages of CALL, there has been a development of computer technologies which has resembled the development experienced in the fields of language teaching and learning (Kern and Warschauer (1996), as cited in Derakshan et al., 2015).

The first stages of computer-assisted language learning were heavily influenced by behaviorism, hence why the first phase of CALL was dubbed behavioristic CALL. This stage was conceived in the 1950s and came to fruition in the 1960s and 1970s. During this stage, the usage of computers was mainly limited to repetitive language drills and grammar translation, as those were the methods being used at that time for language learning.

Communicative CALL became popular in the 1970s and 1980s. This approach focused on communication. Mainframe computers were replaced by personal computers. At this stage, the computer is viewed as a tutor, as stimulus and also as a tool to use and understand language. The learners practice skills but not only in a “drill” format.

Communicative CALL involves the student in making choices and interactions. During this stage we see the rise of online games in which the learner competes against the computer, the “knower-of-the-right” answer. There is also a development in the quality of the programs, which manage to hold student’s attention for more extended periods of time (Simonson and Thompson, 1997, p. 96).

The third stage in computer-assisted language learning is integrative CALL. As pedagogy starts to focus more on a social approach to language learning, so does CALL and its objectives. The name of this stage comes from its aim: to integrate all language skills, listening, speaking, writing and reading, but from the view that technology should be integrated fully into the language learning process. Two technological developments allowed this to happen: multimedia CALL and web-based CALL.

The widespread use of the internet provides learners with a myriad of opportunities for language learning. This also brings about the extended use of computer mediated communication, which provides learners with authentic communication channels, both synchronously and asynchronously. The latest developments in CALL have been related to virtual and augmented reality, chatbots, and speech recognition, which are already proving to be invaluable resources for language learners. With such a variety of tools that can be used for computer-assisted language learning, Skorczynska et al. (2016) highlight the need for computer-assisted language learning to be accompanied and complemented by the most recent developments in language teaching, and emphasize the importance of “applying sound pedagogical principles and language acquisition theories when developing specific uses of technology” (2016, p. 26).

In the following section, the pedagogical advantages of computer-assisted language learning are highlighted. There is also mention of some drawbacks that these tools may present for learners.

2.1.1. Advantages and disadvantages of CALL

Using CALL has been found to have several advantages in pedagogical terms that are worth mentioning. These include material authenticity, learner motivation, learner autonomy, learner interaction, and effectiveness for language learning.

Authenticity is one of the key advantages (Reinders and White, 2010), as CALL enables learners to learn the language using authentic materials such as videos, video games and audio clips. Roohi (2009, as cited in Rahimi and Yadollahi, 2011) points out that CALL can provide learners with motivation when learning English, as it presents learners with the opportunity to use authentic materials.

Motivation is an important element in language learning (Gilakjani, 2012). A number of researchers have looked into the importance of CALL when it comes to the motivation learners experience when they use such tools. Lamb (2017) reports on a number of benefits that CALL can provide in terms of motivation, including increased learner autonomy, individualized learning, the possibility of having more opportunities for communication, increasing the relevance of the foreign language for the language learner, and having alternative forms of assessment (among others). Panagiotidis et al. (2018) conducted a thorough literature review of the effects on computer-assisted language learning on motivation.

On the other hand, Vandewaetere and Desmet (2009, as cited in Rahimi and Yadollahi, 2011) relate the learner's success when using CALL with the motivation and attitudes that they may already have towards language learning. Navadal (2007, as cited in Rahimi and Yadollahi, 2011) subscribes to this when linking a learner's preexistent interest in English with their achievement and positive learning outcomes when using CALL.

CALL also promotes interaction, as it eases the difficulty that some learners have to interact with other learners and even with native speakers of the language that they are learning. Many applications can be used to provide learners with opportunities for communication both synchronously and asynchronously. This possibility of interaction does not, however, constitute an aid to the development of accuracy (Reinders and White, 2010) as there should be a specific course of action for this specific skill to be developed effectively. Dina and Ciornei (2013) also report that CALL aids in promoting language interaction between teacher and learners offering the chance to simulate certain phenomena, aside from providing the learners with methods and manners of organizing their study in an efficient way and also of modernizing their study and developing learner creativity.

In terms of feedback, CALL and CMC also create opportunities for learners to know what their needs are and how to fulfil them, and can also be relevant in terms of interaction with a teacher. These tools can provide backchannels that allows the learner to engage with learning activities and also allows teachers to give feedback (Harunasari, 2019).

Regarding the effectiveness of these tools for language learning there are a few studies that show how CALL tools can aid in language development. Barker and Torgeson (1995, as cited in Rahimi and Yadollahi, 2011) reported that using programs and integrated learning systems

allows learners to engage in reading instruction more effectively and it also improves their phonological awareness.

Golonka et al. (2014) conducted a study regarding the effectiveness and the effect of the usage of computer-based technologies on language learning. Tools such as electronic dictionaries, corpora, grammar checkers, e-portfolios, chats, virtual games and interactive tutoring systems were found to be effective as well as motivating for the learners in several ways.

According to Nalliveettil (2021), in a study about the development of engineering students' verbal ability via the use of web applications, "the overall test scores reveal that the input students received during the virtual and online modes are beneficial for enhancing English language proficiency" (Nalliveettil, 2021, p.94).

When it comes to the disadvantages of the use of computer assisted language learning, there are several constraints that are worth mentioning. According to Reinders and Hubbard (2013), using portable devices to learn languages can have negative aspects such as the distractions present in the environments in which they are used. These authors mention the need for the learner to control access to the device in order to avoid interruptions or tasks which are overwhelming to complete or difficult to process. Using technology for language learning requires that the learner has developed skills that allow him or her to choose the best technological device or tool for their learning objectives.

Having too much to choose from and not enough tools to decide which resource is best, or having too many materials and lacking a system to organize and process them may also aspects that hinder learning. Learners have to learn to find, select, and store the materials and resources that they use in a way that allows them to easily utilize them to learn the language (Reinders and Hubbard, 2013). This is a disadvantage as it requires abilities unrelated to language learning and the lack thereof may result in a negative experience with CALL.

In addition to that, learners also mention eye strain due to extended and continuous use of mobile and computer devices for their online lessons (Nalliveetl, 2021). This may be one of the key factors that may discourage learners from engaging in language learning on devices.

2.1.2. *Learner autonomy and CALL*

The idea of learner autonomy was defined by Holec (1981, p.3, as cited in Blin, 2004, p.377) as “the ability to take charge of one’s own learning”. This autonomy can be useful especially when limited teacher support is available or to enhance learning beyond the classroom. In Skinner and Austin’s view, (1999) giving learners the chance to have more control over their learning leads to an increase in learner motivation and confidence. Computer-assisted language learning has provided autonomy in several ways, as technology and computers prove to be a valuable tool for language learners and allow learners to participate actively in their learning process (Hashmi, 2016).

According to Blin (2004, p.378), independence as a learner entails: “taking responsibility for one’s own learning, setting objectives and making informed pedagogical decisions based on some form of self-evaluation”. As Shetzer and Warschauer (2000, as cited in Blin, 2004) state, an autonomous learner is able to organize their own learning and find answers to their questions by using learning tools both online and offline.

Different computer-based tools have proven to have positive effects on autonomy as far as language learning is concerned. Sanprasert (2010) conducted a study on the use of Content Management Systems (CMS) for language learner autonomy where 57 Thai EFL learners were split into experimental (learners who used the CMS for learning English) and control groups (learners who did not use the CMS but used the same learning materials). Quantitative analyses of the learner questionnaires and qualitative analysis via learner journals revealed that CMS users became more independent and confident learners and that CMS can promote learner autonomy.

Hubbard and Reinders (2013) also report on a series of benefits that CALL can have in terms of learner autonomy. For instance, learners can easily store and retrieve information that can aid their language learning and the resources that they use can be shared and updated with ease. Using CALL can also be cost-efficient, as it allows learners to be less reliant on having teachers and to be able to manage their own learning. Other advantages of CALL for learner autonomy include the learners’ ability to monitor and record their learning behavior and progress, the possibility of receiving feedback with or without support of a teacher or the help of peers through the use of parser-based tools, and the variety of options available to engage in computer-assisted activities. Among these options learners can find videos, drag-and drop

exercises, or social networking sites (Hubbard and Reinders, 2013). The tools that a learner can use when using a computer to learn a language provide the learner with flexibility and empowers the learner to make their own decisions. Technology and computers are a valuable tool for language learners and allow learners to participate actively in their learning process (Hashmi, 2016).

Using computer-based technology for language learning has also been found to promote learner autonomy when it comes to a learner's material conditions. Reinders and Hubbard (2013) emphasize the fact that by using technology, learners who would have generally had problems accessing resources because of their socioeconomic status or the fact that they live in rural areas now have better opportunities and are less reliant on teacher support that may be unavailable.

2.1.3. Learners' attitudes and their impact on CALL

Individual perceptions and attitudes towards technology have a powerful influence on the results obtained from the use of the technology. This is particularly relevant when technology is used for learning, as educators and learners will have specific objectives to achieve.

Attitudes towards technology have been analyzed from different perspectives and theoretical models. The technology acceptance model was introduced by Davis (1989, as cited in Turner, 2010) and it provided a basis to analyze and predict the acceptance of a certain technology by individuals or groups. This model was based on the theory of reasoned action (Ajzen and Fishbein, as cited in Turner, 2010) and provides a theoretical framework to assess the relationship between different factors involved in users' attitudes towards technology, such as perceived usefulness, perceived ease of use, attitude towards using the technology, the behavioral intention to use the technology, and the actual use of the technology (Davis et al., 1989, as cited in Turner, 2010).

Learners' opinions about the technology they use and their attitude towards its use for language learning is something that educators should take into account when implementing CALL in the classroom. According to Davis (1993) there are several factors that influence a learners' motivations as regards using technology, with usefulness being the most defining factor that influences motivation. Usefulness is followed by ease of use, which has a smaller direct effect on attitude and influences attitude indirectly "via its relatively strong effect on usefulness" (p. 482).

According to Lasagabaster and Sierra (2003) learner's attitudes should be taken into account when designing and assessing CALL programs, as doing so may influence positive learning outcomes. Lasagabaster and Sierra conducted a study in which they collected data on the attitude of 59 university students towards CALL programs and their effectiveness, and the study showed that the learners had a generally positive attitude towards CALL, both in terms of effectiveness and convenience. In that study, the results showed that learners did not use it on a daily basis, and only 15.3% of the sample reported using the computer very often.

There are studies which it is shown that students have a generally positive attitudes towards CALL. In 2011, Shifang and Xiuhong carried out a study on the attitudes of Chinese students' beliefs and attitudes towards CALL. The subjects of their study showed agreement with a number of ideas related to the use of CALL. 42% of the participants agreed that computers and the internet offered them "a lot of rich and real English materials", and 46% of participants showed agreement with the idea that "computers and the internet offered them with more access to learning English (Shifang and Xiuhong, 2011, p. 2002). When asked about their opinion about the statement "information can be better processed by computer, I can choose what I want and acquire information as much as possible in the shortest time", 56% of participants agreed or strongly agreed. The study showed that the attitudes of Chinese students were by and large positive and that the participants were "optimistic about the technology-based language learning" (Shifang and Xiuhong, 2011, p. 2003).

As regards learners' perceptions of the effectiveness of CALL for language learning, Bossaer (2012) conducted a study aimed at discovering student attitudes towards the usefulness of technology for improving their reading, listening, speaking, and writing skills in English. It was reported that the students taking part in his study did not necessarily view technology as very useful for studying speaking, with only 7.1% of the respondents thinking it is very useful, and 14.2% considering it useful. However, they deemed technology very useful for studying listening, with 50% of the participants believing it was very useful and 32.1% thinking it was useful. They held different opinions about writing, which only 7.1% found very useful and 21.4% found useful, and about reading, for which a majority considered technology to be somewhat useful.

Having a positive attitude is one of the most important factors that influence language-learning outcomes, as highlighted in Mahmoudi et al. (2012) in their paper about learners' attitudes and

their performance when engaging in computer-assisted language learning. This assertion has been confirmed by several authors such as Aklubut (2008), Bebetos (2009) and Brown (2004).

Different factors are taken into account by language learners when using CALL and forming their own opinion about these tools. Kan (2011) proposes criteria to evaluate self-access and online materials:

- Accessibility
- A clear purpose
- Contents which are reliable, updated and comprehensive
- Pedagogy – or the fact that the tool caters to the learners’ needs in a clear way
- The construction or design of the material

Although not applicable to all instances of CALL, as many of these are not specifically aimed at learning languages, this gives us an idea of what learners may expect when attempting to access online materials, both on their own or with the guidance of a teacher. This in turn will influence their attitudes towards the different types of CALL.

When it comes to how frequently learners use CALL tools and the bearing this may have on their views of this kind of technology, Lasagabaster and Sierra’s study (2003) showed that learners did not use it on a daily basis, and only 15.3% of the sample reported using the computer very often. On the other hand, Bossaer (2012) reported that the majority (32.1%) of the respondents of his study used computer technology to study English autonomously every day. It will be interesting to see how these findings relate to the results of this study in terms of the frequency of use of CALL tools.

2.2. Computer mediated communication (CMC)

According to the 2014 Internet Society Global Internet Report ¹ most of the countries in Europe, the US, Canada, New Zealand and Australia have an internet penetration level of 80%. The percentage of broadband internet connections is rapidly rising, with Western Europe, the

¹ https://www.internetsociety.org/wp-content/uploads/2017/08/Global_Internet_Report_2014_0.pdf

developed Asia-Pacific and North America having the highest percentage of broadband connections. In this scenario, it is safe to say that there is a large number of communications taking place through the use of the Internet, even more so if we take other aspects such as globalization into account.

Computer-mediated communication refers to all instances of communication that take place by means of a computer. This kind of communication is highly relevant when speaking of computer-assisted language learning, as it enables learners to take part in communicative activities through the use of technology. Computer-mediated communication has advanced a lot in the last ten years, with mobile instant messaging, social media networks, and interactive streaming platforms, and the development of previously existing tools such as video conferencing applications, chats, email, and forums.

Although not all computer mediated communication is aimed at language learning, it is currently an important aspect of computer-assisted language learning, as it gives learners the opportunity to communicate with other people regardless of their location.

Moreover, computer-mediated communication provides learners with the possibility to attend lessons online through video-conferencing software, and to engage in virtual learning environments with their classmates or peers. Online lessons taught by means of video-conferencing software are the aspect of computer-mediated communication that I focus on in this study.

2.2.1. Types of CMC and their applications for language learning

Computer mediated communication is generally classified as synchronous and asynchronous. Synchronous CMC is that which takes place as a real-time interaction in a shared-context. All the participants in communication are engaged simultaneously. Among the types of computer-mediated communication which are considered synchronous we can find video-conferencing software and chats.

A newer form of synchronous CMC could be social media live broadcasts in which broadcasters on platforms such as Youtube, Instagram or Twitch engage with their audience in real time. In recent years, there has been research about the educational potential of these synchronous tools that allow large numbers of users to access the same content at the same time and to interact

through chats or even through video participation. Payne et al. (2017) examined the potential of Twitch as a tool that enables this type of simultaneous interaction between learners and teachers, and also studied the need for instructor expertise when using this tool. They concluded that in certain cases, “livestreaming technologies like Twitch do have potential as a platform for interactive learning” (Payne et al., 2017, p.106). Another study that explores Twitch as a potentially educational tool was conducted by Pozo-Sánchez et al. (2021). This study concluded that Twitch optimizes flipped-classroom methodologies and increases learner motivation.

Asynchronous CMC is the type in which the communication is not simultaneous but takes place over time without requiring that the participants are connected at the same time. Key examples of asynchronous computer-mediated communication could be forums, online bulletin boards, most social media platforms, and wikis. As Hratinski (2008, p. 51) states, “[...] asynchronous e-learning, commonly facilitated by media such as e-mail and discussion boards, supports work relations among learners and with teachers, even when participants cannot be online at the same time. It is thus a key component of flexible e-learning”. Asynchronous CMC is particularly relevant when learners take part in distance courses, as it provides them with the opportunity to collaborate with peers even when they are not connected simultaneously, thus enhancing the learning process.

2.2.2. Advantages and disadvantages of computer mediated communication

Computer-mediated communication has been proven to have significantly positive effects on language learning. With respect to asynchronous CMC, it has been found to have positive outcomes when it comes to learner confidence and their ability to produce more language (Kern, 1996, as cited in Canto and Jauregi Ondarra, 2017). Furthermore, learners’ language is improved as it is more coherent and their discourse becomes more lexically and syntactically complex (Warschauer, 1996). Sykes (2005) also reports that using written chats enhances the learners’ use of pragmatic strategies as opposed to their face-to-face and voice chat interactions.

Using synchronous, text-based chats has also shown to be beneficial for oral language production. In Blake’s (2009) study about the potential of text-based internet chats for oral fluency, it was found that the participants that took part in the experimental group (which used text-based chats) experienced superior oral fluency gains compared to the group that participated in the face-to-face environment.

Language learning with synchronous technology such as videoconferencing allows the language to “come alive”, as this kind of computer-mediated communication allows learners to interact with others in different ways to enhance their communicative skills in the target language. (Wang and Sun, 2000, p. 170). These synchronous interactions over videoconference are a way in which learners can improve their skills in oral production and reception.

Videoconferencing has been shown to have an effect on the interest, motivation, and engagement that learners display when participating in learning. According to Leidner and Jarvenpaa (1995, as cited by Hrastinski, 2015, p. 36), “the main pedagogical assumption that motivates communicating synchronously is that participation is critical to the learning process”. Goodfellow et al. (1996, as cited in White, 2006) found that videoconferencing had significant benefits in terms of motivation, although the constraints of technology sometimes created issues. Papadima-Sophocleous and Loizides (2016) studied the benefits of including synchronous tutorials in distance learning courses. The data analysis showed that participants had a positive attitude towards the tutorials, experienced an increased understanding of their course materials, and felt more comfortable and reassured.

In their study about authentic social interaction using synchronous computer-mediated communication, Canto and Jauregi Ondarra (2017) divided their sample into three groups. One of the experimental groups would communicate with native English speakers via video communication software, the other experimental group would communicate using the virtual world software *Second Life*, and the control group would interact face-to-face. The researchers found that both experimental groups performed better and were more engaged than in the face-to-face control group.

When it comes to virtual worlds, they have been found to have benefits for language learning (Bryant, 2006, Thorne, 2008, as cited in Canto & Jauregi Ondarra, 2017). They can be a means for learners to engage in social interaction in authentic learning conditions difficult to recreate in face-to-face classroom settings (Dieterle and Clarke, 2008, as cited in Canto and Jauregi Ondarra, 2017).

Practicing speaking in classroom settings using video conferencing software has proven to be just as effective as real-life interaction (Romaña Correa, 2015, p. 154). In Romaña Correa’s study, it is reported that “Skype conference calls might be considered an influential CMC tool

to promote EFL adult A1 learners' speaking skill, especially for social interaction purposes out of classroom settings".

On the other hand, computer-mediated communication also has its drawbacks. Several authors mention CMC anxiety as one of the causes for learners' negative attitudes towards using computer mediated communication. According to Brown et al. (2004, p. 98),

"[...] individuals who have CMC anxiety may be at risk in those electronic environments that rely heavily on CMC for interactions, such as distance education and virtual teams. The findings indicate that some individuals will have more negative attitudes when put in a situation where they must communicate using text-based CMC".

Therefore, individuals experiencing anxiety related to the use of CMC tools may have negative attitudes towards situations where they need to communicate using CMC. Brown et al. (2004) emphasize the need for an assessment of individual attitudes towards CMC may be a means of ensuring positive outcomes, and of allowing individuals to make informed decisions as regards taking part in computer-mediated communication.

Aside from anxiety, another negatively aspect of computer mediated communication is "Zoom fatigue". "Zoom fatigue" is an expression used to describe "the tiredness, worry, or burnout associated with overusing virtual platforms of communication" (Lee, 2020, para. 1). It can become a discouraging factor for the consistent use of video-conferencing as a means for classroom instructions. "Zoom fatigue" is experienced by teachers and learners alike, and it can be a reason for learners to lose their initial motivation to participate in a synchronous course.

2.2.3. Learner's attitudes towards CMC

This paper seeks to address learner attitudes towards a specific type of CMC: videoconferencing when used in an online English language learning course. In this section the focus will be placed on learner attitudes towards this particular type of computer-mediated communication.

There are studies that show that learner attitudes towards the use of videoconferencing in language courses are by and large positive. Wang (2004) conducted research on the use of a videoconferencing tool (Netmeeting) for distance language learning, and also reported on the opinion of the participants in the study, who had taken part in a Chinese language course in which that technology was used. The respondents showed very positive attitudes to the use of

this kind of tool, finding it useful for building their confidence, reducing their anxiety when learning Chinese, and helping them feel less isolated when taking part in distance learning programs. It also provided benefits in terms of language development, as learners felt that they had opportunities to use language in context.

Budiman (2013) encountered similar results in a study in which participants were Indonesian university students taking elective synchronous Skype tutorials in their distance learning course. The students' attitudes were quite positive. 88% of respondents considered that having online tutorials by Skype enabled them to obtain direct responses and 59.5% found that it allowed them to build their self-confidence. A great number of students showed interest towards having more frequent Skype tutorials with their tutors (71.4%).

With the onset of the COVID-19 pandemic, there has been a rise in the number of studies about the use of synchronous videoconferencing technology for learning and teaching. Fujiono et al. (2021) explored this topic and conducted a case study on learner attitudes towards the use of Zoom Meetings and WhatsApp as teaching tools during the COVID-19 outbreak. Attitudes were generally positive in some aspects, with a significant number of participants showing interest towards the use of Zoom Meetings for online lessons. A number of participants exhibited more negative perceptions of the development of their listening and speaking skills when using these tools, but were more positive about their writing and reading skills. When questioned about their motivation regarding learning from home remotely, learners showed less enthusiasm as 21% considered themselves to be very motivated and 37% believed they were less motivated.

Wan Hassan et al. (2020) also conducted a study on this topic, aimed at revealing the perceptions of students involved in technical and vocational training about the use of Zoom Meeting webinars in teaching and learning activities. In their analysis of the results of the study, the authors rate the level of attitude and motivation shown by the students as moderately positive.

Another study performed on the use of learning management systems and videoconferencing software was performed by Alameri et al. (2020) with the participation 250 University of Jordan Graduates. The result showed that the respondents to the survey were very conscious of the use of the learning management systems (Moodle and Microsoft teams) and the videoconferencing software (Zoom Meetings) they had used. They showed positive attitudes towards the

usefulness of those tools, and also perceived them as helpful ways of accessing additional educational material and as a way to enhance interaction between teachers and students.

Alfadda et. al (2021) also provide powerful insight into this subject with their study on how the different aspects of the technology acceptance model (Davis, 1989, as cited in Alfadda et al. 2021) correlate with each other when studying learner perceptions of videoconferencing software when used for teaching and learning. The authors concluded that there was a “strong positive correlation between the actual use of Zoom and the students’ attitudes and behavioral intention”. Moreover, the authors determined that there was also a positive correlation between computer self-efficacy and the other variables taken from Davis’ technology acceptance model: perceived usefulness, perceived ease of use, behavioral intention of use, attitude toward use and actual use.

2.3. Summary

Having looked at the literature on the topic, it becomes apparent that there are a great number of benefits to using technology for language learning, whether it be apps, websites, multimedia or instances of computer mediated communication such as video conferencing software or chats. Some of the benefits mentioned include greater learner motivation, increased learner autonomy, more opportunities for interaction, and effective language development. The literature also provides insight into learner attitudes towards CALL and CMC and how these attitudes affect the usage, effectiveness and outcomes of using such tools.

3. METHODOLOGY

The methodology employed in this study aims to evidence the attitudes of a group of heterogeneous English language learners as regards the use of computer-based tools and computer-mediated communication to learn English as a foreign language. This chapter examines the research design, describes the participants involved in the study and specifies the methods of data collection and data analysis used.

3.1. Research design

This study is an instance of primary research, specifically of survey research, as the source of the data being analyzed is a questionnaire (Brown 2001). In terms of its general framework, this study is practical in nature, and cross-sectional. It is an instance of synthetic, primary research, and the methodology used was inductive. The data obtained from this research is quantitative in nature and the method of analysis to be employed is statistical.

3.1.1. Questionnaire

The questionnaire employed to extract the data in this study was close-ended and was used to obtain quantitative data. It was designed in Google Forms. The reason this tool was chosen was that it allows participants to easily access the questionnaire and because it is quite similar to responding a paper-based questionnaire.

The first part of the questionnaire consists of four questions where participants had to select their gender, age, level of education achieved, and their level of English proficiency in the Common European Framework of Reference for Languages (CEFR). The participants responded to the main questions in the questionnaire by selecting options on a symmetrical 5-point Likert scale to show their degree of agreement or disagreement with thirteen statements (see Table 1 below). The Likert scale was selected as the method of measuring the attitudes of respondents as it is one of the most commonly used methodologies in studies about attitude (Nunes, Antunes, & Silva, 2021; Iimura & Miyamoto, 2021; Teeter, Hussein, & Cole, 2020). Furthermore, the five-point symmetrical scale was chosen so as to provide the participants with the possibility of choosing options that were sufficiently in line with their beliefs but at the same time for the data obtained to be significantly clustered in fewer groups than in a seven-point scale. I would like to point out that in this case the Likert scale is actually a Likert-type

scale (Boone and Boone, 2012), as the aim of the study is not to obtain a general attitude related with a single item or idea, but to learn about the opinions of the participants regarding “mutually exclusive issues around the phenomenon under study” (Joshi and Kale, 2015, p. 398).

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Using CALL tools is easy.					
Using CALL tools is effective for learning English.					
I like using CALL tools.					
I usually use CALL tools.					
Using these kinds of tools helps me practice English.					
I prefer to use CALL in class than on my own.					
I learn more using CALL in class than on my own.					

Table 1 - First section of the questionnaire

As it can be observed in figure 1 the first section consists of five statements about computer-assisted language learning, and the second section (Table 2) consists of five more statements about computer-mediated communication in relation to lessons taught by means of video-conferencing software.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Lessons by video call are more effective for learning new content than face-to-face lessons.					
Lessons by video call are easier to follow than face-to-face lessons.					
You can attain the same objectives in a face-to-face lesson and in a lesson via video call.					
Lessons by video call are more productive than face-to-face lessons.					
Lessons by video call have no additional difficulties compared to face-to-face lessons					
I prefer lessons by video call to face-to-face lessons.					

Table 2 - Second section of the questionnaire

The final section consists of two statements regarding synchronous and asynchronous activities when used independently and when used as part of classroom activities (Table 3).

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I prefer to use CALL in class than on my own.					

I learn more using CALL in class than on my own.					
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Table 3 - Third section of the questionnaire

The objective of the different sections of the questionnaire was to respond to the research questions and fulfil the objectives of this study. In order to do so, a number of different questions were included so that learners could look at the subject (the usage of CALL tools and online lessons) from different perspectives and determine which ideas they showed more agreement with when asked about the topic.

3.1.2. Participants

The participants taking part in this study were 270 students of English as a foreign language in the “Escuela Oficial de Idiomas de Murcia” (the Official School of Languages of Murcia). A large variety of learners participated in the study, and included men and women from different age groups, ranging from 18 to 85 years of age, different educational backgrounds, and English language proficiency levels from CEFR levels A1 to C2. The specific details of the groups of learners involved and their backgrounds will be expounded below.

The reason why these participants were chosen was that all of the participants had experienced both face-to-face lessons and also online lessons by video call at different points of their course. Participants attended half of their lessons in person and joined the rest online. This allowed the participants to have significant knowledge about the usage of CALL and CMC tools as they had all been exposed to them over time and as part of a structured, teacher-led course.

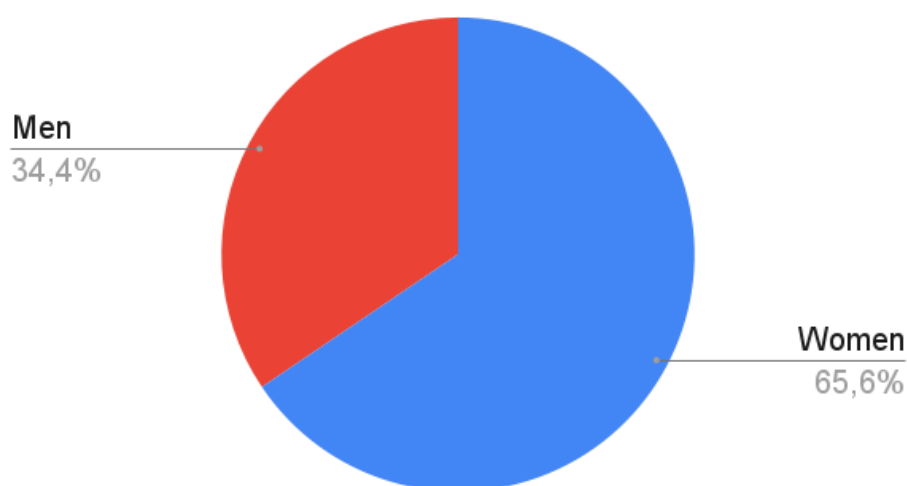


Figure 1- Participants by gender

As it can be observed in figure 1, a significant number of the participants were women, as only 34.4% of the participants were men.

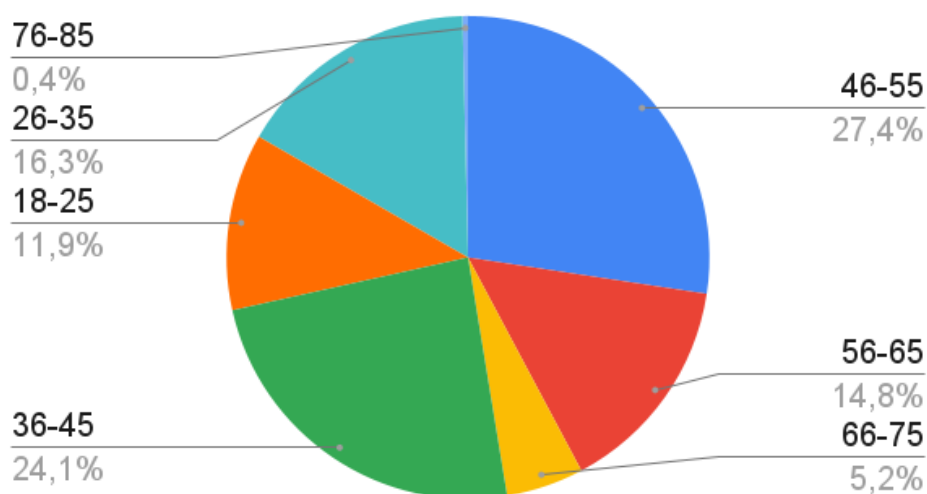


Figure 2- Participants by age

Participants of all age groups took part in the study, the greatest age group being those from 46 to 55 years old, followed by 36-45 year olds (figure 2).

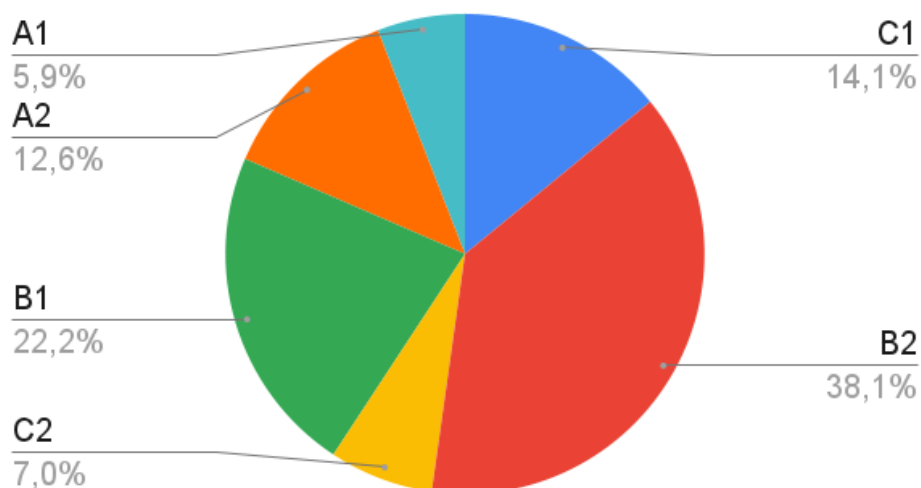


Figure 3 - Participants by CEFR English proficiency level

As it can be observed in figure 3, significant number of participants were taking part in a B2 language course in the Official School of Languages of Murcia at the time of the study (38.1%), followed by CEFR B1 level students (22.2%) and CEFR C1 level students (14.1%). The least numerous groups were the learners taking an A1 course (5.9%) and a C2 course (7.0%).

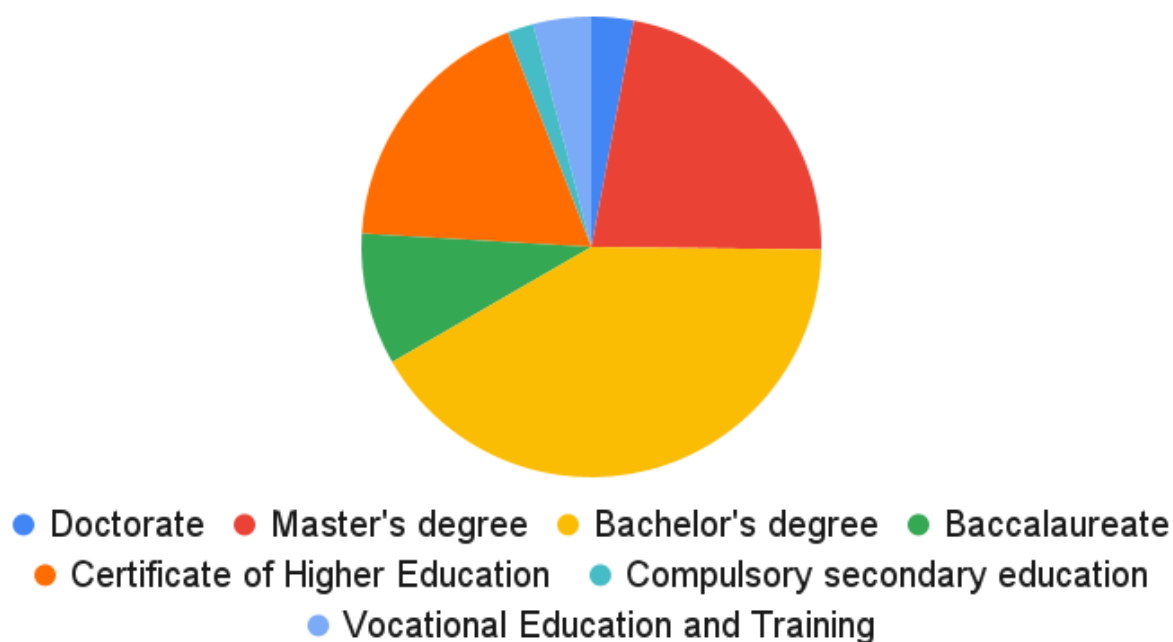


Figure 4 - Participants by highest educational level completed

As it can be observed in figure 4, out of all the participants, 41,5% had completed a Bachelor's degree, followed by those who had completed a Master's Degree (22.2%), and Certificates of Higher Education (18.1%). All learners taking part in the study had completed some form of compulsory secondary education.

3.2.Data collection

The questionnaire described above was distributed by the Official School of Language of Murcia's institutional communication channels. An email was sent to the students including a link to the online questionnaire. An initial cover letter was provided to explain the purpose of the questionnaire and so as to motivate the students to participate. The participants had access to the questionnaire from the 15th of April 2021 to the 3rd of May 2021. After this date the questionnaire was closed and no further responses were accepted.

Although the access to the questionnaire was open for eighteen days, the bulk of the responses was received from the 22nd of April to the 3rd of May, the closing date. This occurred as a result of security issues with the server where the mailing service of the Official School of Languages

of Murcia is located, which drove all the emails sent by the institution to the students' spam folders. Fortunately the issue was promptly resolved and I could proceed with the study.

3.3.Data analysis and method

For the data analysis of this study, I have used Google sheets. In order to answer the research questions, I have decided to focus on central tendency measures as what I aim to discover is what the general attitude is towards these tools.

I calculated the mean for all of the items present in the questionnaire by assigning each element on the Likert-type scale I used a number from one to five. Number 1 corresponded to “Strongly disagree”, number 2 with “disagree”, number 3 for “neutral”, number 4 for “agree” and number 5 for “strongly agree”.

I also used standard deviation as a dispersion measure so as to know whether the attitude towards each item was a generally held belief within the group or there was a significant amount of variety.

4. RESULTS AND DISCUSSION

Now I will proceed to analyze the results of the study and relate it to the research questions detailed previously. Table 4 shows the results of the questionnaire about the attitudes of the participants in the study in the form of means, accompanied by standard deviations to show how homogeneous the results were. As mentioned above, in the Likert-type scale used number 5 represented strong agreement and number 1 represented strong disagreement. Therefore, those figures closer to number 5 show greater agreement than those closer to number 1.

Item	Mean	SD
1. Using CALL tools is easy.	4.09	0.83
2. Using CALL tools is effective for learning English.	3.99	0.92
3. I like using CALL tools.	3.90	1.01
4. I usually use CALL tools.	3.85	0.99
5. Using these kinds of tools helps me practice English.	4.17	0.84
6. Lessons by video call are more effective for learning new content than face-to-face lessons.	2.29	1.07
7. Lessons by video call are easier to follow than face-to-face lessons.	2.33	1.11
8. You can attain the same objectives in a face-to-face lesson and in a lesson via video call.	2.39	1.15
9. Lessons by video call are more productive than face-to-face lessons.	2.21	1.05
10. Lessons by video call have no additional difficulties compared to face-to-face lessons	2.72	1.26
11. I prefer lessons by video call to face-to-face lessons.	2.11	1.20
12. I prefer to use CALL in class than on my own.	2.96	1.04
13 I learn more using CALL in class than on my own.	2.89	1.05

Table 4 - Questionnaire results: means and standard deviation

Learners on average had positive attitudes towards the first 5 statements, those aiming to establish learners' attitudes towards CALL tools in general. However, learners on average showed disagreement towards the rest of the items on the questionnaire, especially towards those associated with online lessons by videoconference.

In the section below, the results will be analyzed by answering the research question presented in the introduction to his paper. The purpose of this is to relate the items of the questionnaire to their specific purpose in the study.

4.1. Do learners of English as a second language have a positive attitude or a negative attitude towards CALL tools?

To answer this question, I have focused on the first five questions of the questionnaire, whose focus is the use of CALL tools. The mean of the responses showed agreement with the statement "using CALL tools is easy" with a standard deviation of 0.83. This shows that the

majority of the respondents had views that did not differ greatly from what was shown by the mean. 54.4% of the respondents agreed with this statement, and 30.7% strongly agreed with it. That means that 85.1% of the respondents viewed CALL as easy to use. 5.2% disagreed with the statement and 1.1% of the respondents strongly disagreed, while the rest of the respondents had neutral views of this statement. The data above is presented in Figure 5.

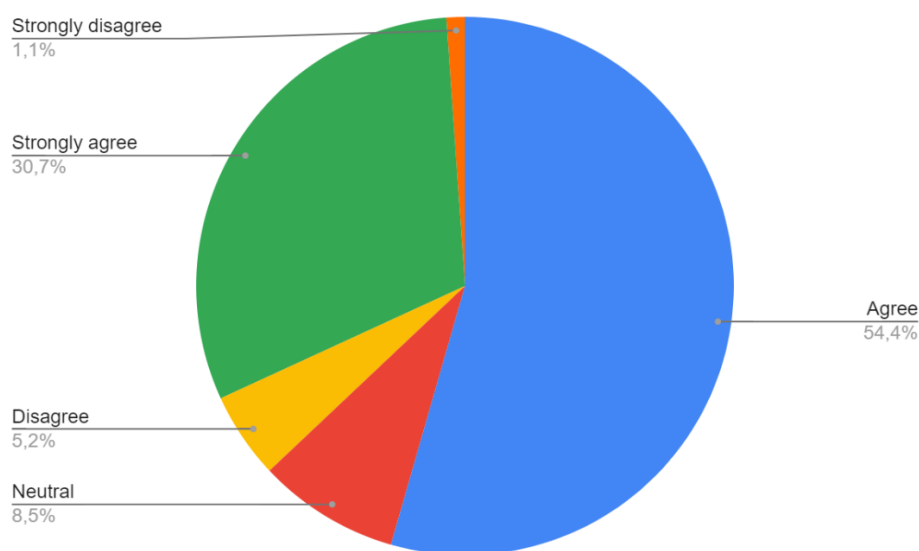


Figure 5 - Responses to statement 1: "Using CALL tools is easy".

The following statement on the questionnaire was “using CALL tools is effective for learning English”. After calculating the mean of the responses, the results show that the average attitude towards this statement was positive, with a standard deviation of 0,92. There was once again a majority of respondents who agreed with the statement (47.8%) or that strongly agreed with the statement (30.4%) (see Figure 6). Lasagabaster and Sierra’s study (2003, as cited in Mahmoudi, 2012) showed that learners had positive attitudes towards the effectiveness of CALL. The results of this study, which has almost four times the number of respondents, shows that this is a general trend and that since Lasagabaster and Sierra’s study in 2003, attitudes in this aspect have not changed. When it comes to disagreement and neutrality, 5.9% of the respondents disagreed with the statement and 1.9% strongly disagreed. 14.1% remained neutral about this statement.

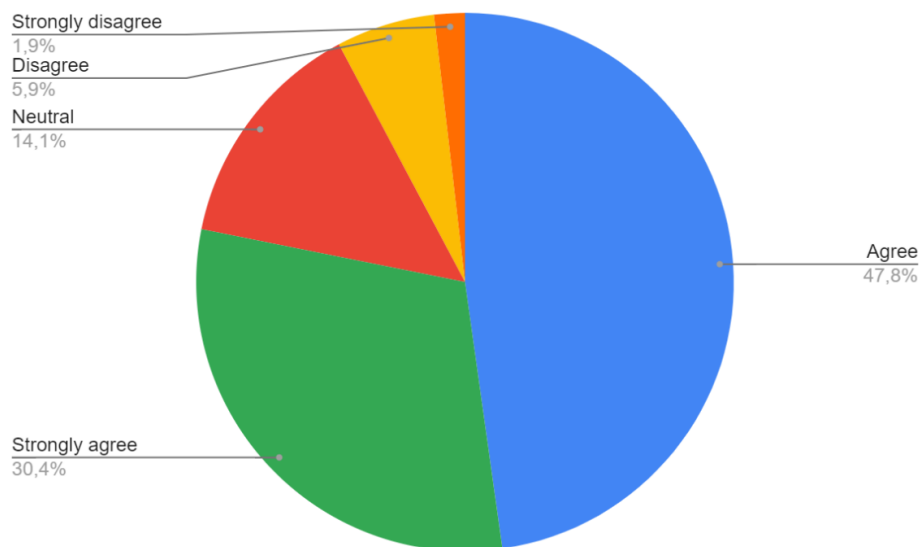


Figure 6 - Responses to statement 2: "Using CALL tools is effective for learning English".

The next statement on the questionnaire was "I like using CALL tools". In this case the results show, once again, that the participants have a positive attitude towards CALL tools and their use. 40.4% of the respondents agreed with the statement, and 31.1% of them strongly agreed (Figure 7). In this case, however, a greater number of respondents showed disagreement in comparison with the statements previously analyzed. 8.5% of the respondents disagreed with the statement and 2.2% of them strongly disagreed, with 17.8% of the participants remaining neutral about it. The mean of the responses was 3.90, with a standard deviation of 1.01.

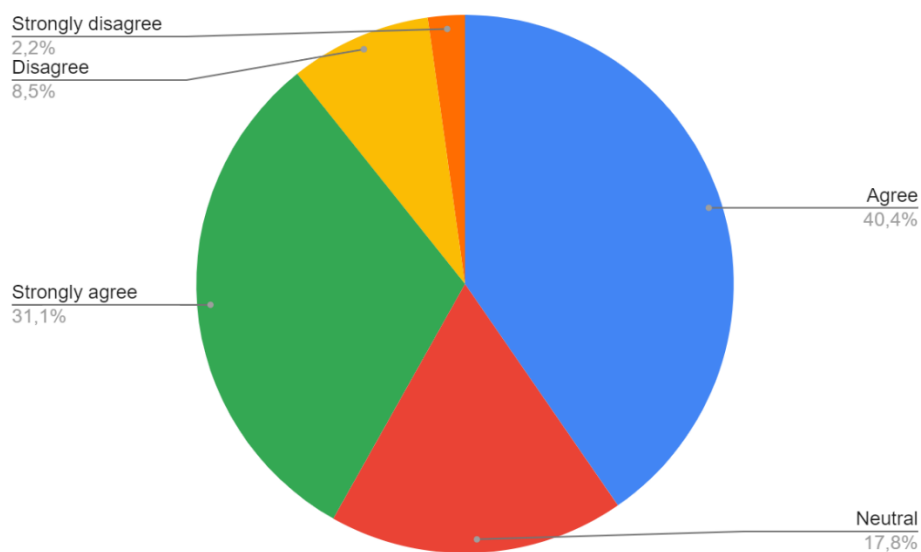


Figure 7- Responses to statement 3: "I like using CALL tools".

The following statement is “I usually use CALL tools”. We can see that a vast majority of the participants in this study perceive their usage of these tools as “usual” or “regular”. 43.1% of the participants agree with the statement, and 27.1% strongly agree with the statement, while 19.7% remain neutral, 7.4% disagree and 2.6% strongly disagree (see Figure 8).

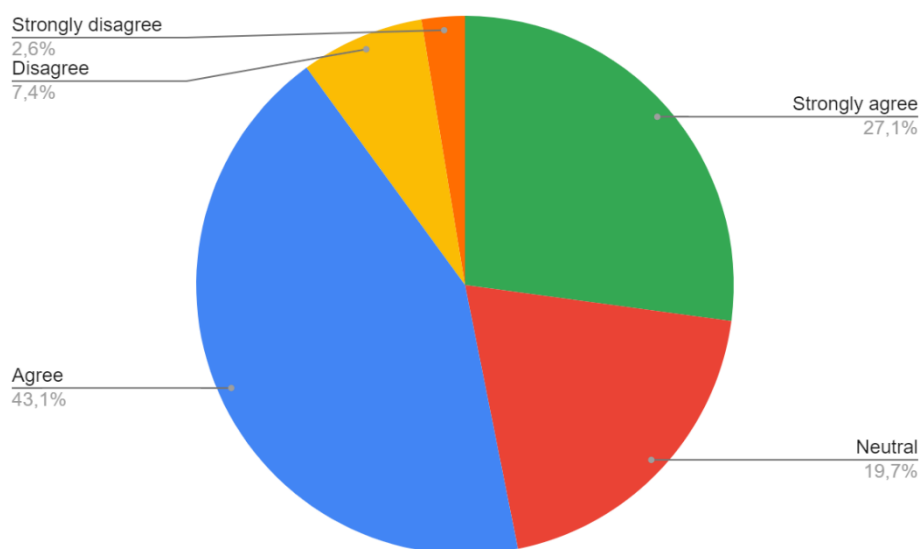


Figure 8 - Response to statement 4: "I usually use CALL tools".

I would like to refer to Lasagabaster and Sierra's 2003 study once again. In that study, the results showed that learners did not use CALL on a daily basis, and only 15.3% of the participants reported using the computer very often. In the current study we can see that there is an overwhelmingly positive response, which could imply that attitudes towards have evolved over the years or that CALL tools are more easily available for students at present, thus influencing the frequency of usage of these tools by learners.

Finally, the last statement is “Using these kinds of tools helps me practice English”. Yet again, the general attitude towards this statement is positive. This statement is the one that has the highest mean, which means that there was more agreement on this subject and also a smaller standard deviation, which means that most of the responses were situated close to the mean. 48% of the respondents agreed with this statement, 37.5% strongly agreed and only a minority of the respondents disagreed (4.1%) or strongly disagreed (1.1%) (see Figure 9).

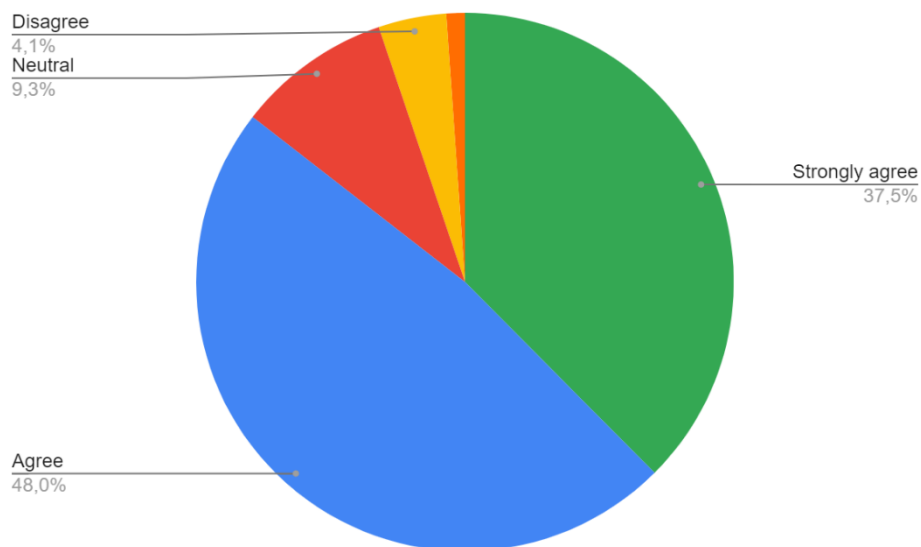


Figure 9 - Response to statement 5: is “Using these kinds of tools helps me practice English”.

Therefore, as regards the research question, it can be asserted that participants had a very positive attitude towards CALL tools, especially in terms of their effectiveness and perceived usefulness. We can relate these results to those of other studies such as those carried out by Shifang and Xiuhong (2011), which also showed the positive attitudes of participants towards using computer-based tools for learning English.

4.2. Do learners feel that using CMC, and specifically lessons via video conference, as a means for instruction and language practice is as effective as instruction and language practice which are carried out in the classroom?

In the section of the questionnaire that was designed to answer this question, the statements the participants responded to focused on their perceptions about lessons by video conference. At the time when the questionnaire was distributed the participants had been attending online lessons for almost an entire academic year (from March 2020 to March 2021).

When looking at the data for this section, we can observe that the general attitude is more negative than it is towards CALL tools. Participants had a generally negative attitude towards the statement “lessons by video call are more effective for learning new content than face-to-face lessons”. 40.7% of the participants disagreed with this statement and 24.1% strongly disagreed with it. Only 12.6% of the participants perceived this statement as true (Figure 10).

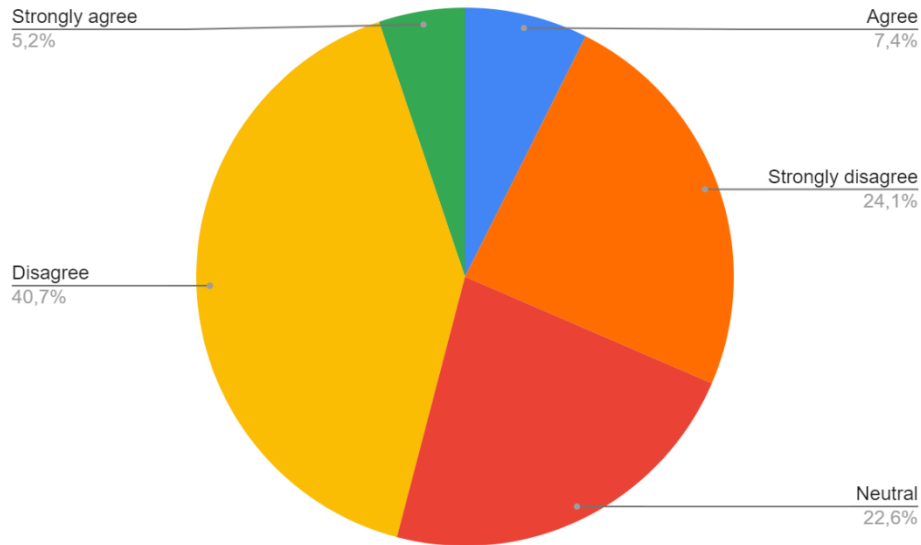


Figure 10 - Response to statement 6: "Lessons by video call are more effective for learning new content than face-to-face lessons".

When responding to the statement “lessons by video call are easier to follow than face-to-face lessons”, participants also showed a generally negative attitude. 9.3% of respondents agreed with the statement and 5.6% showed strong agreement. A large number of participants remained neutral (21.9% of respondents) and the vast majority of respondents perceived the statement as false, with 38.9% disagreeing and 24.4% strongly disagreeing. These results are presented in Figure 11.

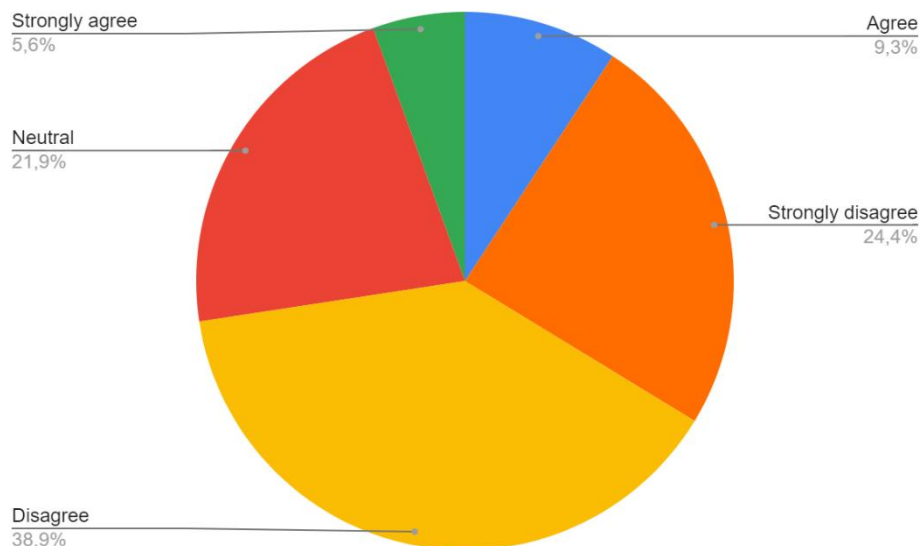


Figure 11 - Response to statement 7: "Lessons by video call are easier to follow than face-to-face lessons".

Participants had similar attitudes when responding to the statement “you can attain the same objectives in a face-to-face lesson and in a lesson via video call”. A slightly greater number of participants had positive attitudes towards this statement in comparison to the other statements in this section. As shown in Figure 12, 18.5% showed agreement with the statement, with 12.2% agreeing and 6.3% strongly agreeing. However, the general attitude was still generally negative or neutral. 39.6% of participants disagreed with the statement, 23% of participants strongly disagreed with the statement and 18.9% had a neutral stance towards it.

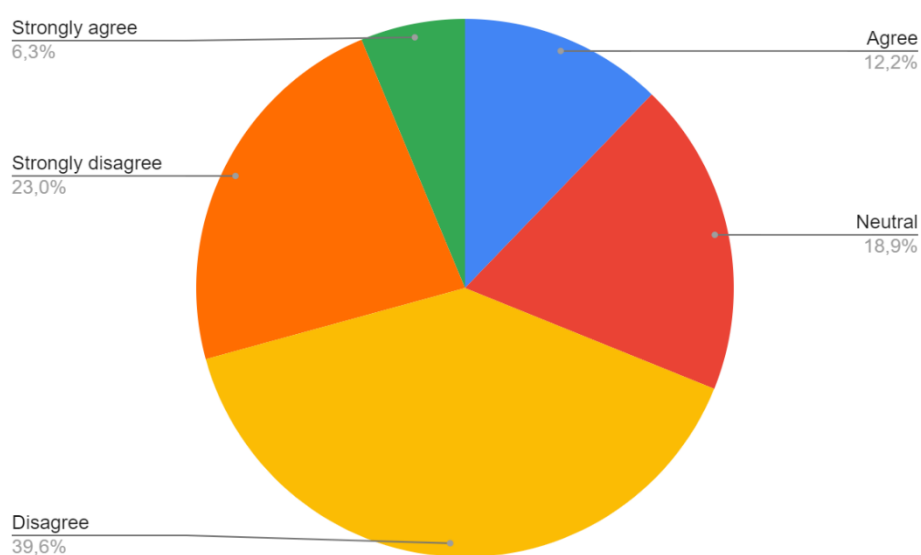


Figure 12- Responses to statement 8: "You can attain the same objectives in a face-to-face lesson and in a lesson via video call".

“Lessons by video call are more productive than face-to-face lessons” is the next statement in this section. This is another statement that gathered generally negative perceptions. 26% of respondents strongly disagreed with this statement and 43.5% disagreed with it, while only 7.4% agreed, and 4.5% strongly agreed. A significant number of participants had a neutral stance (18.6%) (see Figure 13).

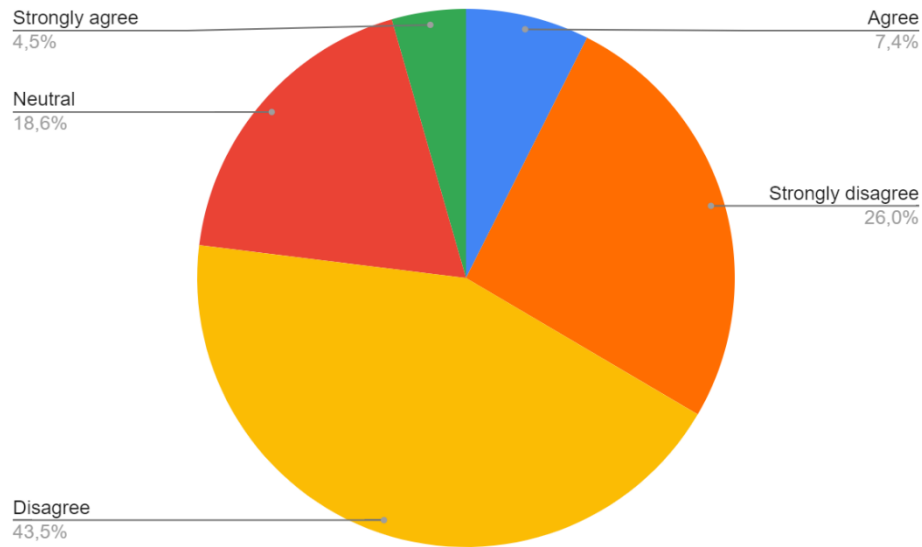


Figure 13 - Response to statement 9: "Lessons by video call are more productive than face-to-face lessons".

The next statement on the questionnaire is "Lessons by video call have no additional difficulties compared to face-to-face lessons". In this case, participants' views were the most positive out of all the statements in this section, although the general perception was negative nonetheless. 51% of respondents disagreed with this statement, while 17.8% agreed and 11.2% strongly agreed. 20.1% remained neutral about it. The data above can be found in Figure 14. The results for this statement could imply that participants do not have issues with the difficulty involved in attending online lessons as opposed to face-to-face lessons, but, as the other statements show, have a preference for face-to-face lessons that is not necessarily related with the difficulty of use of the technology.

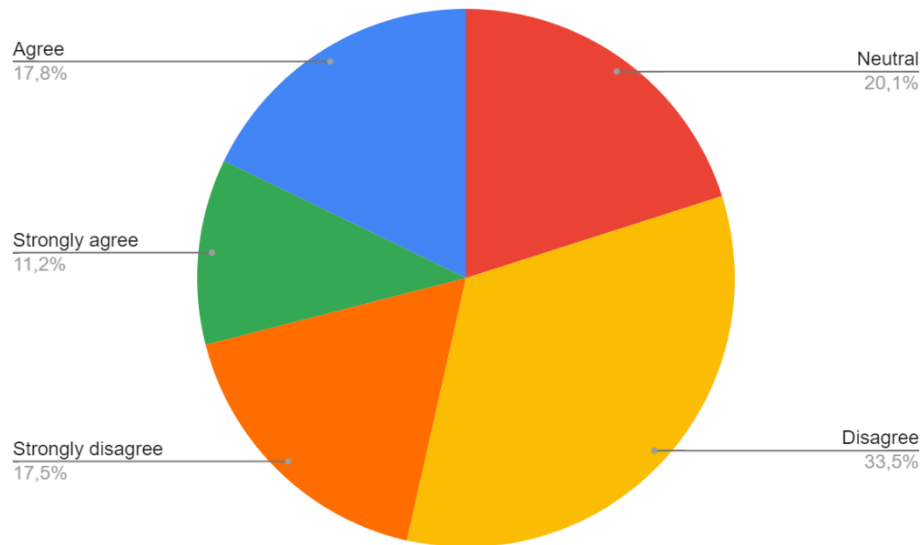


Figure 14 - Response to statement 10: "Lessons by video call have no additional difficulties compared to face-to-face lessons".

The final statement in this section of the questionnaire was "I prefer lessons by video call to face-to-face lessons". Once again, there was general disagreement with the statement, with 70.3% of the participants agreeing or strongly disagreeing with the statement. Interestingly, out of the participants who disagreed, a majority of them showed strong disagreement (39.4%), 10% more than those than only disagreed. Only 13.4% of participants agreed (6.3%) or strongly agreed (7.1%) with the statement (see Figure 15). This shows an overwhelmingly negative perception of online lessons when compared to traditional face-to-face lessons.

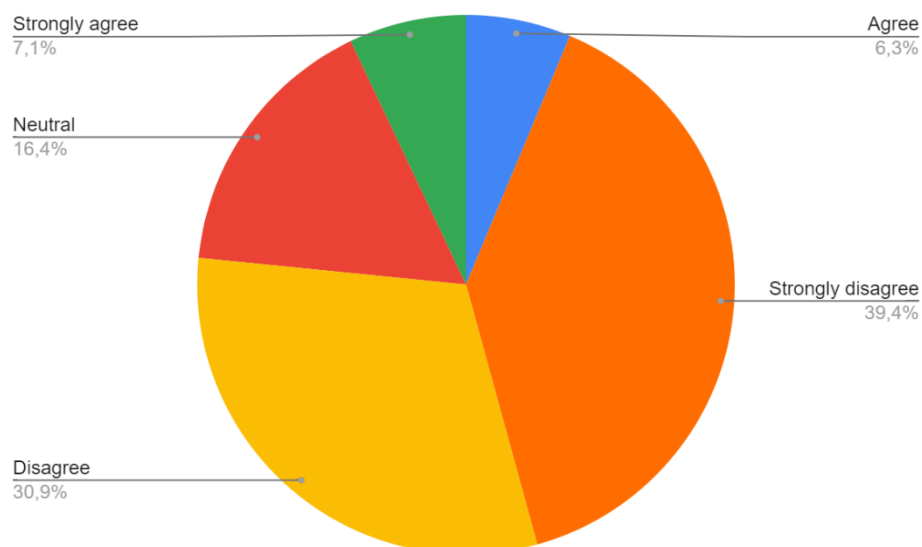


Figure 15 - Response to statement 11: "I prefer lessons by video call to face-to-face lessons".

4.3. What do learners consider most useful and instructive, synchronous or asynchronous activities?

The final section of the questionnaire focuses on participants' views about using CALL tools in class as opposed to using them on their own. A large number of respondents (38.3%) remained neutral when giving their opinion about the statement "I prefer to use CALL in class than on my own". This shows that to more than a third of respondents, it made no difference to use CALL tools during class time or to use it in their own time. When analyzing the rest of the responses for this statement, on the one hand, 26.8% of respondents disagreed, and 7.1% strongly disagreed. On the other hand, 19.3% of participants agreed, while 8.6% strongly agreed (see Figure 16).

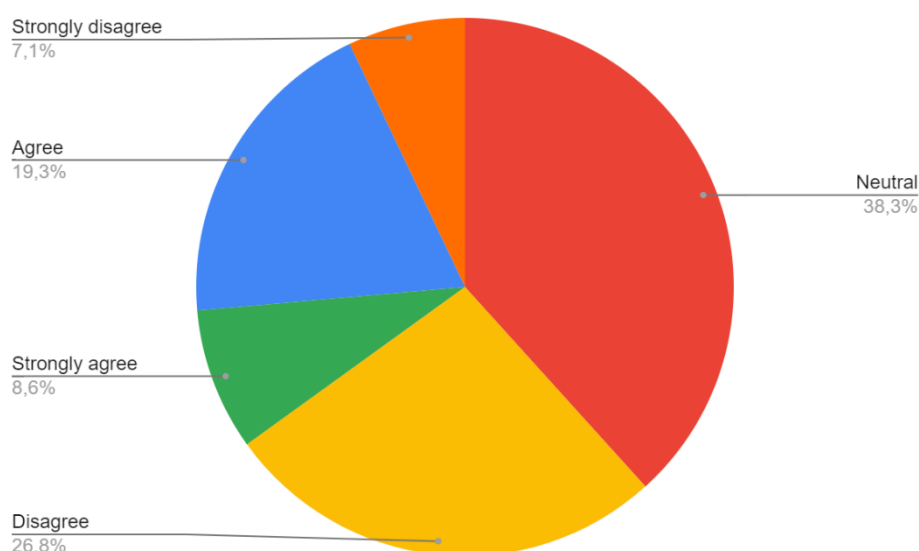


Figure 16 - Response to statement 12: "I prefer to use CALL in class than on my own".

The final statement in the questionnaire is "I learn more using CALL in class than on my own". In this case, 39% of respondents had a neutral stance towards the statement. The next most numerous group of respondents (29.4%) disagreed with the statement, followed by the respondents who agreed (14.9%). Fewer participants had strong attitudes for or against this statement, with 9.3% of participants showing strong agreement and 7.4% of participants showing strong disagreement. These results are shown in Figure 17.

Therefore, it can be established that most participants either disagreed with or had no preference for using CALL tools during their lessons and did not consider that they learned more using CALL tools during their lessons than on their own.

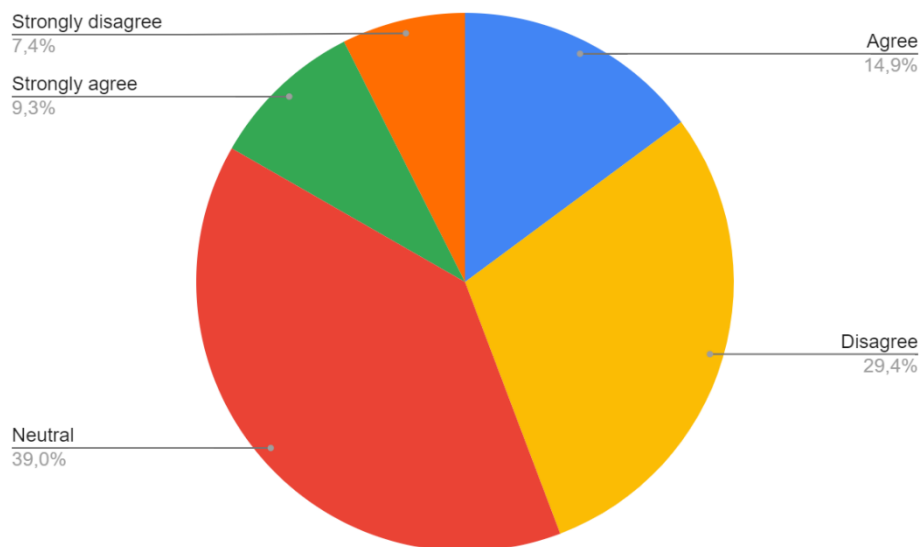


Figure 17 - Response to statement 13: "I learn more using CALL in class than on my own".

4.4. Is there any correlation between the learners' English language proficiency level and their preference for online lessons?

In order to analyze the relationship between the participants' English language proficiency level and their attitude towards online lessons via video conference, the responses to the statement "I prefer lessons by video call to face-to-face lessons" have been analyzed. The resulting correlation coefficient is -0.0252 , which evidences that, contrary to my hypothesis, there is no correlation between the participants' level of proficiency in English and their preference towards online lessons. As mentioned above, the participants' general attitudes towards online lessons were by and large negative.

4.5. Is there any correlation between the learners' age and their preference for online lessons?

After comparing the data gathered on the age of the participants and their attitude towards the statement "I prefer lessons by video call to face-to-face lessons", a correlation of $0,0076$ was found. This refutes my hypothesis that there would be inverse correlation between participants' ages and their attitude towards online lessons.

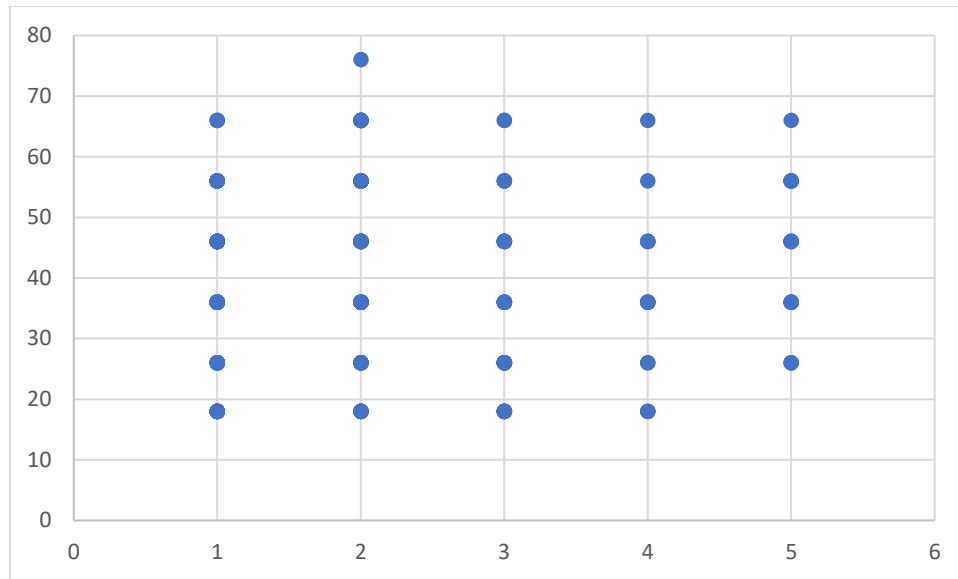


Figure 18 - Correlation between participants' ages and their attitudes towards online lessons via video conference

When analyzing the data, we can see that the negative attitude does not correlate with this variable, as a large number of respondents of all ages responded negatively to this statement on the questionnaire. Figure 18 shows the distribution of the participants' answers when responding to this statement.

5. CONCLUSIONS

One of the main goals of the current study was to determine whether adult learners of English as a second language have generally positive or negative attitudes towards computer-assisted language learning. The results have indicated that the participants have a generally positive attitude towards CALL tools, with a majority of students of different backgrounds showing agreement with statements about the ease of use, effectiveness, frequency of use and enjoyment of using computer-based learning tools. Learners also have positive views of the effectiveness of CALL tools

Returning to the hypothesis posed at the beginning of this study, it is now possible to state that my initial hypothesis that adult learners have a negative attitude towards CALL tools has been disproven. Adult students of English as a second language use and enjoy using these tools in general, as evidenced by the mean scores showing generally positive attitudes.

Another one of the main objectives of this study was to ascertain whether learners feel that lessons via videoconference as a means for instruction are as effective as face-to-face lessons carried out in the classroom. As evidenced by the results, adult learners of English have a mostly negative view of online lessons via videoconference. The participants viewed online lessons by videoconference as a worse alternative compared to face-to-face lessons in general, and all of the items on the questionnaire received low scores. These data seem to confirm my initial hypothesis that learners would have a negative attitude towards lessons via videoconference and also my second hypothesis: that learners would rather attend lessons in person rather than attend lessons via videoconference.

My conclusions about this topic would not go so far as to say that adult learners have a negative attitude towards online lessons as a rule, but more in the sense that, when comparing their past experiences in the classroom with their experiences in the online classroom, they felt that in some aspects online lessons could not measure up to certain aspects of classroom interaction in person. In this specific situation, the learners had also had no other choice but to adopt distance learning and videoconferences as a method of instruction due to the outbreak of COVID-19, and this may have influenced their views on the subject.

Regarding my third and fourth hypotheses, proficiency level in the Common European Framework of Reference did not influence the learners' attitude towards online lessons, and

neither does learners' age. When closely analyzing all the data, it was clear to me that all learners, regardless of age or English proficiency level, had generally negative views, with a few learners of similarly varied profiles having positive and very positive views of online lessons.

My final hypothesis was that learners would prefer using CALL during their lessons (synchronously) than in their own time outside their lessons (asynchronously). This hypothesis was also refuted, as the learners showed to specific preference for using CALL during their classes and most respondents remained neutral or disagreed with the statements presented.

These findings suggest that in general, learners have a positive attitude towards CALL, but when it comes to online lessons there is a resistance to abandon the physical, face-to-face classroom environment. From my point of view, the views expressed in the results of this study are inextricably linked to the situation in which the study was conducted. The COVID-19 pandemic obviously had an effect on the learners' views of the subject of online lessons, as apart from not being able to attend their lessons normally, they were also not able to leave their homes for extended periods of time or see their classmates outside of the classroom. In my opinion, this added to a perhaps already negative opinion of online lessons. I believe that future research lines could pinpoint what it is exactly about online lessons that learners have negative attitudes about.

This research will serve as a base for future studies due to the clear difference established between the overwhelmingly positive attitudes towards computer-assisted language learning tools and the negative attitudes towards online lessons via videoconference. The number of respondents taking part in this study makes the divide even more evident and can also be valuable for future research.

An important practical implication of this study is how these attitudes affect instruction and learning in online environments and how institutions and educators can work towards a model that better serves the needs and interests of learners. If institutions and teachers gain awareness of the fact that CALL tools do make learners feel engaged and motivated, and that learners generally enjoy them, they may end up making decisions that derive in classroom interactions that are more motivating and engaging for English language learners. On the other hand, it is important to address the implication of the negative attitudes towards online lessons, which need to be further studied in order to perform needs analyses and manage to improve learner

satisfaction. As evidenced by the literature, online lessons are a powerful means of instruction that can create positive environments and outcomes, but taking this model of instruction to its full potential involves addressing its negative aspects. That is one reason why I believe that more research needs to be carried out on this subject to clarify the details and implications of the negative attitudes expressed by learners in this study.

6. BIBLIOGRAPHY

- Afshari, M., Ghavifekr, S., Siraj, S., & Jing, D. (2013). Students' Attitudes towards Computer-assisted Language Learning. *Procedia - Social and Behavioral Sciences*, 103, 852-859. doi: 10.1016/j.sbspro.2013.10.407
- Akbulut, Y. (2008) Exploration of the attitudes of freshman foreign language students toward using computers at a Turkish state university. *The Turkish Online Journal of Educational Technology*, 7(1), 18-28.
- Alameri, J., Masadeh, R., Hamadallah, E., Ismail, H. B., & Fakhouri, H. N. (2020). Students' Perceptions of E-learning platforms (Moodle, Microsoft Teams and Zoom platforms) in The University of Jordan Education and its Relation to self-study and Academic Achievement During COVID-19 pandemic. *Advanced Research and Studies Journal*, 11(5), 21-33.
- Alfadda, H. A., & Mahdi, H. S. (2021). Measuring Students' Use of Zoom Application in Language Course Based on the Technology Acceptance Model (TAM). *Journal of Psycholinguistic Research*. <https://doi.org/10.1007/s10936-020-09752-1>
- Almahboub, S.F. (2000) *Attitudes toward computer use and gender differences among Kuwaiti sixth-grade students*. [Doctoral dissertation, University of North Texas].
- Azizinezhad, M., & Hashemi, M. (2013). A Look at the Status of Computer Assisted Language Learning and its Applications. *Procedia - Social and Behavioral Sciences*, 93, 121-124. doi: 10.1016/j.sbspro.2013.09.163
- Barker, T. A., & Torgesen, J. K. (1995). An Evaluation of Computer-Assisted Instruction in Phonological Awareness with below Average Readers. *Journal of Educational Computing Research*, 13(1), 89-103. <https://doi.org/10.2190/TH3M-BTP7-JEJ5-JFNJ>
- Barson, J. & Debski, R. (1996). Calling back CALL: Technology in the service of foreign language learning based on creativity, contingency and goal-oriented activity. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning* (pp. 49–68). Second Language Teaching and Curriculum Center, University of Hawaii.

- Beatty, K. (2010). *Teaching and researching computer-assisted language learning* (2nd ed). Longman.
- Bebetsos, E. and P. Antoniou (2009). Gender differences on attitudes, computer use and physical activity among Greek university students. *The Turkish Online Journal of Educational Technology*, 8(2), 63-67.
- Blake, C. (2009). Potential of Text-Based Internet Chats for Improving Oral Fluency in a Second Language. *The Modern Language Journal*, 93(2), 227-240. <https://doi.org/10.1111/j.1540-4781.2009.00858.x>
- Blin, F. (2004). CALL and the development of learner autonomy: Towards an activity theory perspective. *ReCALL* 16.2, 377-395.
- Boone, H. N., & Boone, D. A. (2012). Analyzing Likert Data. *Journal of Extension*, 50(2).
- Bossaer, A. (2012). Student Perceptions of Computer-Assisted Language Learning: Needs Analysis, Feedback, Learner Autonomy and General Attitude Towards CALL. *CULTURE AND LANGUAGE*, 77.
- Brown, S.F.R. and C. Vician (2004) Who's afraid of the virtual world? Computer-Mediated Communication. *Journal of the Association for Information Systems*, 5, 99-107.
- Bryant, T. (2006) Using world of warcraft and other MMORPGs to foster a targeted, social, and cooperative approach toward language learning. Academic Commons. <https://web.archive.org/web/20061013063948/http://www.academiccommons.org/commons/essay/bryant-MMORPGs-for-SLA>
- Budiman, R. (2013). Utilizing Skype for Providing Learning Support for Indonesian Distance Learning Students: A Lesson Learnt. *Procedia - Social and Behavioral Sciences*, 83, 5-10. <https://doi.org/10.1016/j.sbspro.2013.06.002>
- Canto, S., & Jauregi Ondarra, K. (2017). Language learning effects through the integration of synchronous online communication: The case of video communication and Second Life. *Language Learning in Higher Education*, 7(1). doi: 10.1515/cercles-2017-0004

- Davis, F. (1989). Perceived usefulness: Perceived ease of use and user acceptance of information technology. *Management Information Systems Quarterly*, 13(3), 319-340.
- Davis, F. D.; Bagozzi, R. P.; Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35, 982-1003, doi:10.1287/mnsc.35.8.982
- Davis, F. (1993). User acceptance of information technology: system characteristics, user perceptions and behavioral impacts. *International Journal of Man-Machine Studies*, 38(3), 475-487. doi: 10.1006/imms.1993.1022
- Dieterle, E., Clarke, J. (2009). Multi-user virtual environments for teaching and learning. In Pagani, M. (Ed.), *Encyclopedia of multimedia technology and networking* (2nd ed.) (pp. 1033–1041). Idea Group.
- Dina, A., & Ciornei, S. (2013). The Advantages and Disadvantages of Computer Assisted Language Learning and Teaching for Foreign Languages. *Procedia - Social and Behavioral Sciences*, 76, 248-252. doi: 10.1016/j.sbspro.2013.04.107
- Escobar Fandiño, F., & Silva Velandia, A. (2020). How an online tutor motivates E-learning English. *Heliyon*, 6(8), e04630. doi: 10.1016/j.heliyon.2020.e04630
- Fishbein, M. & Ajzen, Icek. (1975). *Belief, attitude, intention and behaviour: An introduction to theory and research*. Addison-Wesley.
- Fujiono, F., Paulina, P., Hidayati, N., Natchiar, F. (2021). Impact of Distance Learning through Zoom Application and WhatsApp Group on Students' Attitude and English Aptitude: A Case Study on Students of ICT due to Covid-19 Outbreak. *Kontribusia (Research Dissemination for Community Development)*, 4(2), 455-458. doi:10.30587/kontribusia.v4i2.2744
- Gilakjani, A. P., Leong, L. M., & Sabouri, N. B. (2012). A Study on the Role of Motivation in Foreign Language Learning and Teaching. *International Journal of Modern Education and Computer Science*, 4(7), 9-16. <https://doi.org/10.5815/ijmecs.2012.07.02>

- Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70–105. <https://doi.org/10.1080/09588221.2012.700315>
- Goodfellow, R., I. Jeffreys, T. Miles & T. Shirra (1996). Face-to-face language at a distance? A study of a videoconferencing try-out. *ReCALL* 8.2, 5–16.
- Harunasari, S. Y., Halim, N. (2019). Digital Backchannel: Promoting Students' Engagement in EFL Large Class. *International Journal of Emerging Technologies in Learning (IJET)*, 14(07), 163. <https://doi.org/10.3991/ijet.v14i07.9128>
- Hashmi, N. A. (2016). Computer-Assisted Language Learning (CALL) in the EFL Classroom and its Impact on Effective Teaching-learning Process in Saudi Arabia. *International Journal of Applied Linguistics and English Literature*, 5(2). <https://doi.org/10.7575/aiac.ijalel.v.5n.2p.202>
- Hrastinski, S. (2015). *Participating in Synchronous Online Education*. School of Economics and Management, Lund University.
- Hrastinski, S. (2008). Asynchronous and synchronous e-learning. *EDUCAUSE Quarterly*, 31 (4) 51-55
- Iimura, D., & Miyamoto, S. (2021). Public attitudes toward people who stutter in the workplace: A questionnaire survey of Japanese employees. *Journal Of Communication Disorders*, 89, 106072. doi: 10.1016/j.jcomdis.2020.106072
- Joshi, A., Kale, S., Chandel, S., & Pal, D. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396-403. <https://doi.org/10.9734/BJAST/2015/14975>
- Kan, S. O. (2011). Critique of a language-learning website. *US-China Education Review*, 8(5), 675-68.
- Lamb, M. (2017). The motivational dimension of language teaching. *Language Teaching*, 50(03), 301–346

- Lasagabaster, D. and Sierra, J. (2003) Students' evaluation of CALL software programs. *Education Media International*, 40 (3-4), 293-304.
- Lederman, L.C. (1982) Suffering in Silence. *Group and Organization Studies*, 7(3), 279-294.
- Lee, J. (2020). A neuropsychological exploration of Zoom fatigue. *Psychiatric Times*.
<https://www.psychiatrictimes.com/view/psychological-exploration-zoom-fatigue>
- Leidner, D. E., & Jarvenpaa, S. L. (1995). The Use of Information Technology to Enhance Management School Education: A Theoretical View. *MIS Quarterly*, 19(3), 265.
<https://doi.org/10.2307/249596>
- Likert R. (1932) A technique for the measurements of attitudes. *Archives of psychology*.
- Mahmoudi, E., Samad, A., & Razak, N. (2012). Attitude and Students' Performance in Computer Assisted English Language Learning (CAELL) for Learning Vocabulary. *Procedia - Social and Behavioral Sciences*, 66, 489-498. doi: 10.1016/j.sbspro.2012.11.293
- Nævdal, F. (2007). Home-PC usage and achievement in English. *Computers & Education*, 49, 1112-1121. <https://doi.org/10.1016/j.compedu.2006.01.003>
- Nalliveettil, G. M. (2021). Developing verbal ability of ESL engineering students: Impact of web applications. *Research Journal of English Language and Literature (RJELAL)*.
- Nunes, P., Antunes, M., & Silva, C. (2021). Evaluating cybersecurity attitudes and behaviors in Portuguese healthcare institutions. *Procedia Computer Science*, 181, 173-181. doi: 10.1016/j.procs.2021.01.118
- Panagiotidis, P., Krystalli, P., Arvanitis, P. (2018). Technology as a Motivational Factor in Foreign Language Learning. *European Journal of Education*, 1(3), 43-52.
<https://doi.org/10.26417/ejed.v1i3.p43-52>
- Papadima-Sophocleous, S., & Loizides, F. (2016). Exploring the benefits and disadvantages of introducing synchronous to asynchronous online technologies to facilitate flexibility in learning. In S. Papadima-Sophocleous, L. Bradley, & S. Thouësny (Eds.), *CALL*

- communities and culture – short papers from EUROCALL 2016* (pp. 363-368). Research-publishing.net. <https://doi.org/10.14705/rpnet.2016.eurocall2016.589>
- Payne, K., Keith, M. J., Schuetzler, R. M., & Giboney, J. S. (2017). Examining the learning effects of live streaming video game instruction over Twitch. *Computers in Human Behavior*, 77, 95-109. <https://doi.org/10.1016/j.chb.2017.08.029>
- Pirasteh, P. (2014). The effectiveness of computer-assisted language learning (CALL) on learning grammar by Iranian EFL learners. *Procedia - Social and Behavioral Sciences*, 98, 1422-1427. doi: 10.1016/j.sbspro.2014.03.561
- Pozo-Sánchez, S., López-Belmonte, J., Fuentes-Cabrera, A., & López-Núñez, J.-A. (2021). Twitch as a Techno-Pedagogical Resource to Complement the Flipped Learning Methodology in a Time of Academic Uncertainty. *Sustainability*, 13(9), 4901. <https://doi.org/10.3390/su13094901>
- Rahimi, M., & Yadollahi, S. (2011). Foreign language learning attitude as a predictor of attitudes towards computer-assisted language learning. *Procedia Computer Science*, 3, 167-174. doi: 10.1016/j.procs.2010.12.029
- Reinders, H., & Hubbard, P. (2013). *Contemporary Computer-assisted Language Learning*. Bloomsbury Academic.
- Romaña Correa, J. (2015). Skype™ conference calls: A way to promote speaking skills. *PROFILE Vol. 17*, No. 1, January-June 2015.
- Roohi, E. (2009) Exploring the effects of using CALL as a discriminator of L2 performance of Iranian EFL learners. Paper presented in the 7th International TELLSI Conference. Yazd University.
- Sanprasert, N. (2010). The application of a course management system to enhance autonomy in learning English as a foreign language. *System: An International Journal of Educational Technology and Applied Linguistics*, 38(1), 109–123. <https://doi.org/10.1016/j.system.2009.12.010>

- Sarac, H. (2013). Belief, knowledge and expectations on language instruction via ICT: A close/critical look by experts. *Procedia - Social and Behavioral Sciences*, 70, 696-701. doi: 10.1016/j.sbspro.2013.01.111
- Shetzer, H. and Warschauer, M. (2000) An electronic literacy approach to network-based language learning. In Warschauer, M. and Kern, R. (eds.), *Network-based Language Teaching: Concepts and Practice*. Cambridge University Press (pp. 171–185).
- Shifang, T., Xiuhong, L., & Hao, D. (2011). A study on Chinese students' beliefs and attitude towards CALL. *2011 International Conference on Mechatronic Science, Electric Engineering and Computer (MEC)*, 2001-2004. <https://doi.org/10.1109/MEC.2011.6025882>
- Simonson, M. R., & Thompson, A. D. (1997). *Educational computing foundations*. Merrill.
- Skinner, B. & Austin, R. (1999). Computer Conferencing: Does It Motivate EFL Students?. *ELT Journal*, 53(4), 270-279. <https://www.learntechlib.org/p/59234/>.
- Skorczynska, H., del Saz Rubio, M., Carrió Pastor, M.L. (2016). Second language teaching an technology. An overview. In Carrió Pastor, M.L. (ed.) *Technology implementation in second language teaching and translation studies* (pp. 13-32). Springer.
- Sykes, J. (2013). Synchronous CMC and Pragmatic Development: Effects of Oral and Written Chat. *Calico Journal*, 22(3), 399–431. <https://doi.org/10.1558/cj.v22i3.399-431>.
- Teeter, S., Hussein, N., & Cole, J. (2020). Assessing changes in attitudes toward engineering and biomechanics resulting from a high school outreach event. *Journal Of Biomechanics*, 103, 109683. doi: 10.1016/j.jbiomech.2020.109683
- Thorne, S.L. (2008) Transcultural communication in open internet environments and massively multiplayer online games. In Sally Magnan (Ed.), *Mediating discourse online* (305–327). John Benjamins.
- Turner, M., Kitchenham, B., Brereton, P., Charters, S., & Budgen, D. (2010). Does the technology acceptance model predict actual use? A systematic literature review.

Information and Software Technology, 52(5), 463–479.
<https://doi.org/10.1016/j.infsof.2009.11.005>

Vandewaetere, M., & Desmet, P. (2009). Introducing psychometrical validation of questionnaires in CALL research: The case of measuring attitude towards CALL. *Computer Assisted Language Learning*, 22(4), 349-380.
<https://doi.org/10.1080/09588220903186547>

Wan Hassan, W.A.S., Ariffin, A., Ahmad, F., Hamzah, N., Rubani, S.N.K., Zakaria, N. (2020). Hassan, W. (2020). Students' perceptions of using Zoom meet webinar during Covid-19 pandemic in technical and vocational education. *Journal of Critical Reviews*, 7(19), 6.

Wang, Y. (2004). Supporting synchronous distance language learning with desktop videoconferencing. *Language, Learning and Technology* 8(3), 90–121.

Wang, Y. & Sun, C. (2000). Synchronous distance education: Enhancing speaking skills via Internet-based real time technology. *Proceedings of the First International Conference on Web Information Systems Engineering*, 2, 168-172.
<https://doi.org/10.1109/WISE.2000.882876>

Warschauer M. (1996) Computer assisted language learning: An introduction". In Fotos S. (ed.) Multimedia language teaching. Logos International: 3-20.

White, C. (2006). Distance learning of foreign languages. *Language Teaching*, 39(4), 247-264.
<https://doi.org/10.1017/S0261444806003727>