Zooming in: Interpreters' perspective towards remote simultaneous interpreting (RSI) ergonomics

Uzaktan Sözlü Çeviride (USÇ) ergonomi: Zoom kullanımına çevirmen bakış açısı

Research/Araştırma

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ABSTRACT

This paper examines the usability of the Zoom platform from the perspective of professional conference interpreters. In the aftermath of lockdowns and travel restrictions during the Covid-19 pandemic, Remote Simultaneous Interpreting (RSI) rushed into the lives of conference interpreters. This gave rise to the development of several Simultaneous Interpreting Delivery Platforms (SIDPs). They have in time become the new offices of practicing interpreters, each requiring a new set of skills and quick adaptation in a short period of time. Zoom, although not an SIDP but rather an online meeting platform, also offers interpretation features and is at the moment the most common platform used also for remote simultaneous interpreting worldwide. In order to assess the usability of the platform by the conference interpreters, the study applied the USE questionnaire developed in 2001 by Lund based on three pillars - Usefulness, Satisfaction, and Ease of Use – on professional conference interpreters in Turkey. The findings suggest that the Zoom platform has high usability scores. Coupled with this there is also significant appetite among the interpreters towards the improvement of the platform, which could be an indicator of interpreters' desire to better the existing RSI ergonomics. In conclusion, the paper also points to future areas of required research in relation to ergonomics of remote interpreting.

Keywords: remote simultaneous interpreting, ergonomics, usability, ease of use, SIDPs

ÖZET

Bu makale, Zoom platformunun kullanılabilirliğini profesyonel konferans çevirmenlerinin bakış açısından incelemektedir. Covid-19 salgını sırasında uygulanan sokağa çıkma ve seyahat kısıtlamalarının ardından Uzaktan Simultane Çeviri (USÇ), konferans çevirmenlerinin hayatına hızlıca girmiştir. Bu durum çeşitli Simultane Çeviri Platformunun (SIDP'ler) geliştirilmesine yol açmıştır. Konferans çevirmenleri yeni beceriler geliştirerek bu platformlara hızlıca uyum sağlamak

zorunda kalmıştır. Kendisini bir SIDP olarak tanımlamayan Zoom platformu, çevrimiçi bir toplantı platformu olup, uzaktan simültane çeviri imkanı da sunmaktadır. Bu çalışma, Zoom platformunun kullanılabilirliğini değerlendirmek için 2001 yılında Lund tarafından üç ölçüte (Yararlılık, Memnuniyet ve Kullanım Kolaylığı) dayalı olarak geliştirilen USE anketini orijinal dili olan İngilizce olarak Türkiye'deki profesyonel konferans çevirmenlerine uygulamıştır. Bulgular, Zoom platformunun yüksek kullanılabilirlik puanlarına sahip olduğunu göstermektedir. Bununla birlikte, çevirmenler arasında platformun iyileştirilmesine yönelik hatırı sayılır bir istek de görülmüştür ve bu durum, çevirmenlerin mevcut USÇ ergonomisini iyileştirme arzusunun bir göstergesi olarak yorumlanabilir. Sonuç bölümünde makale aynı zamanda uzaktan çevirinin ergonomisiyle ilgili araştırma ihtiyacı olan alanları da ortaya koymuştur.

Anahtar Sözcükler: uzaktan sözlü çeviri, ergonomi, kullanılabilirlik, kullanım kolaylığı, eşzamanlı çeviri platformları

1. Introduction

Usability is a quality or characteristic of a product that denotes how easy the product is to learn and to use (Dillon, 2001). Usability is also an ergonomic approach and a group of principles and techniques aimed at designing usable and accessible products, based on user-centred design (Simões-Marques & Nunes, 2012). These concepts are central to the issue of remote interpreting as they are key concepts impacting the take-up and dissemination of any product. Since the Covid-19 pandemic, Zoom has been the most widely used platform for remote simultaneous interpreting around the world (Caniato, 2021) and in Turkey (TKTD, 2020). Concerns have been raised vis-à-vis remote interpreting even before the pandemic which resulted in the publication of a position paper on distance interpreting by the International Association of Conference Interpreters (AIIC, 2018). This paper was updated in March 2020 (AIIC, 2020) to include more specific requirements. Coupled with the increasing use of RSI during the pandemic and in a "no-alternative" scenario, new guidelines and checklists (AIIC, 2020) were prepared by AIIC to respond to the new concerns of conference interpreters in relation to working conditions and working environments introduced by this new modus operandi. This paper, against this relatively newer landscape of remote interpreting attempts to investigate the usability of the Zoom platform from the perspective of Turkish conference interpreters while exploring concepts of usability and ergonomics in relation to the evolving RSI practices.

1.1 Background

Remote interpreting was first introduced to the lives of interpreters through practices such as telephone-based interpreting, videoconferencing and web-conferencing. The Australian immigration service is commonly credited with establishing the first service for telephone-based interpreting, the Telephone Interpreting Service (TIS), in 1973 (Braun, 2015). Since then, the definition of remote interpreting has evolved; the most significant change was introduced due to the Covid-19 pandemic. Due to restrictions brought along by the pandemic, remote interpreting became not an only option or a preference but rather an imposition that, in a way, had to be welcomed by professionals and end users alike.

1.2 Some definitions about RSI

Remote simultaneous interpreting (RSI) refers to any simultaneous interpreting activity that is performed by an interpreter or a team of interpreters who are not working physically in the same place with the speakers, participants, staff and employers of the assignment. According to ISO Standard 20108, it is defined as "interpreting of a speaker in a different location from that of the interpreter, enabled by information and communications technology (ICT)" (ISO, 2017).

Organizers of multilingual events, public and private institutions in need of interpreting services, or employers in general, resort to RSI for several reasons:

(1) mobility constraints: the speakers might be in different locations around the world, from which neither of them has the opportunity to travel,

(2) the urgency of the meeting: an emergency might occur to necessitate an impromptu gathering,

(3) limitations of space: sometimes the conference/meeting venue might not accommodate the required number of simultaneous booths or the interpreting team might be too crowded to meet the language combinations required by the event.

For the purposes of this paper, RSI will refer to remote simultaneous interpreting practices that took place due to the Covid-19 pandemic restrictions which in parallel resulted in the quick emergence and use of online meeting platforms such as Zoom, Google Meet, Skype, Webex, Microsoft Teams etc. By the same token, Simultaneous Interpreting Delivery Platforms (SIDPs) such as Kudo, Interprefy, Voiceboxer, Interactio, Speakus, Verspeak etc. were also established as platforms for such interpreting practices. Among available platforms, Zoom has a unique place.

Zoom does not characterize itself as a SIDP but as an online meeting platform, yet offers interpretation features. Zoom is a video-based conferencing program that is used via mobile or computer applications for its9 millions of users to connect for meetings, live chats, and webinars (Wise, 2022). With the introduction of lockdowns and travel restrictions, the application found itself an unprecedented place in the most downloaded lists of both Apple and Google Play. For example, in 2020, Zoom was downloaded 485 million times and now has 350 million daily meeting participants. (Wise, 2022). According to Forbes Advisor, Zoom is "an industry leader and one of our favourite telecommuting apps". (Matthews-El & Watts, 2022)

This exponential growth of the Zoom platform and its high level of reception by businesses was echoed in the interpreting community. When compared to SIDPs, Zoom was considered to be more technically and economically accessible and used in meetings where interpreting took place. On the other hand, although not sufficiently explored yet, reception by the interpreters have not been that hassle-free. Studies are just emerging from the field to shed light upon several aspects, including interpreter's reluctance or hesitation to use remote interpreting platforms. Reviewing literature in

the field presents a preliminary idea on the issue, which will be further explored in the following chapter.

In light of these developments, the International Association of Conference Interpreters (AIIC) issued several position papers and guidelines. By the same token, AIIC members have also been important contributors to the development of ISO standards in areas of concern as they are part of the relevant working committees. Since 2017, Working Group 3 has been working on issues such as standards for quality and transmission of sound and image input for simultaneous interpreting (ISO 20108) and the most recent one ISO/ PAS 24019:2020 on simultaneous interpreting delivery platforms — Requirements and recommendations. Although International Standards were already in place for community, legal, and healthcare interpreting, ISO 23155:2022 "Interpreting services — Conference interpreting — Requirements and recommendations" was only published on January 2, 2022. It was approved unanimously by ISO experts representing their respective National Standards Boards (https://slator.com/what-conference-interpreting-providers-need-to-know-about-iso-231552022/). This standard is especially significant since it emphasizes the cognitive load of conference interpreters and the need for visual and oral communication between colleagues during their performance as interpreters. This perspective brings to the fore concepts such as risk management, occupational health and safety, and the responsibilities of the conference interpreting service providers (CISP).

From a technical point of view, official standards so far referred to three important indicators for quality sound and image transmission: packet loss value, jitter, and latency. ISO standard 20108 puts forward video and transmission requirements as:

(1) all frequencies between 125 and 15000 Hz +/−3 dB must be transmitted (ISO 20109:2016: 3).

(2) image quality must be good enough to avoid blurring and freezing of the video.

(3) audio must be synchronized with the images with a maximum delay of 45 ms or advance of 125 ms.

(4) latency (from the source to the interpreters) must be lower than 500 ms.

The initial draft of this standard had a more detailed set of requirements such as:

(1) video quality must be at least 720p at 50 Hz or 1080p at 25 Hz, and the signal must be compressed using at least H.264 at 1152 kbps.

(2) the packet loss value should not exceed 0.2%

(3) jitter should be lower than 15 ms.

(4) the latency (roundtrip) in the system shall not exceed 200 ms (Ziegler & Gigliobianco, 2018).

In light of these standards, it may be useful to look at Zoom's recommendations for these technical features. According to Zoom (Accessing Meeting and Phone Statistics - Zoom Support, n.d):

(1) a packet loss of 2% or less is recommended,

(2) a jitter of 40ms or less is recommended

(3) a latency of 150ms or less is recommended.

Audio frequency on Zoom is deemed acceptable if in the range of 16 to 48kHz. It is vital to note that in reference to all these technical standards, recommendations, guidelines, and requirements the Zoom platform does not have any commitment toward professional conference interpreters. Its purpose of existence is to enable frictionless video communication (About us, Zoom) and not a seamless and quintessential interpreting platform. On the other hand, these specs are important for the SIDPs. It is of great concern that the recent UN Geneva test of seven RSI platforms fell short of meeting the audio and video requirements (Brady & Pickles, 2022). Three main problems were listed:

(1) loss of audio frequencies, meaning transmission frequency is too low to distinguish between certain sounds,

(2) low signal to noise ratio, meaning the sound is not up to par with the sound quality required for interpreting with all the environmental factors such as interference, background noise, connection problems etc.,

(3) aggressive dynamic range compression, which can lead to serious ear-related health problems as a result of prolonged exposure to compressed frequencies (Brady & Pickles, 2022).

On top of these studies, EU interpreters' strike also reflect on sound quality among other technical problems. Their concerns were mainly: Use of substandard microphones, noisy environments, poor broadband connection, failure by remote speakers to follow guidelines, sound quality issues on some interpreting platforms, hearing damage reported by about 100 staff interpreters (Txabarriaga, 2022). These in line with the concepts measured and studied within the USE questionnaire in an attempt to explore what professional conference interpreters think about usability of this platform during RSI.

1.3 Some definitions of Usability

According to ISO, usability is the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use where effectiveness is about achieving the intended goal(s); efficiency is about the resources needed by users to achieve their goals and it is important that users are satisfied with their experience (ISO, 2018). Definitions of usability always emphasize the "context of use", which in this case is an emergency use of various videoconferencing platforms in an apocalyptic scenario to be able to run in a business-as-usual scenario. The Covid-19 pandemic created unprecedented working

environments not only for interpreters but also for all professions worldwide requiring people to adapt. Echoing what was written by Wells in 1945, "Adapt or perish, now as ever, is nature's inexorable imperative", interpreters were no exception to the rule when it comes to rapid reception of remote interpreting practices (Wells, 1945).

Another important aspect of usability is the element of interaction. Usability is not entirely about the process but also about the outcome of interacting with a system, product or service (ISO, 2018). In that sense, usability as a concept intertwines with ergonomics. According to the Merriam-Webster dictionary, ergonomics is an applied science concerned with designing and arranging things people use so that the people and things interact most efficiently and safely (Merriam-Webster, n.d). Also called, human engineering and biotechnology, ergonomics refers to understanding the relationship of people with a specific design and bettering it to optimize both the design and contentment of the people. In other words, ergonomics is an effort to create a win-win scenario for the designer and the user.

Therefore, it would come with no surprise that companies always seek tools and ways to measure how usable their products and services are so that they increase customer satisfaction, which will in turn hopefully mean an increase in their sales. Usability questionnaires also help researchers and human factors practitioners understand and reveal users' perception of outcomes and interactions (Hornbæk, 2006).

Some of the most well-known usability questionnaires are the Questionnaire for User Interaction and Satisfaction (QUIS) (Chin, Diehl, & Norman, 1988), the Software Usability Measurement Inventory (SUMI) (Kirakowski & Corbett, 1993), the Computer System Usability Questionnaire (CSUQ) (Lewis, 1995), the questionnaire System Usability Score (SUS) (Brooke, 1996), and the USE questionnaire (Lund, 2001). There is a wide reception of the questionnaire in the literature (Faria et al., 2016; Filippidis & Tsoukalas, 2009; Hashim, Hussin, Othman, & Ahmad, 2016; Kiselev & Loutfi, 2012; Salameh, 2017). One reason could be the simple wording the USE questionnaire and its easily comprehensible style (Lund, 2001). This adds another important upside as execution is not complicated and be done without any special training. Another reason for higher reception could be the fact that researchers do not need to purchase it to use the questionnaire because it has a public domain license (Faria et al., 2016). Research in the area also has shown that the correlation between the USE and the SUS was significant and strong (Gao et al., 2018).

1.4 Previous Research in the Field

There are very few quantitative and qualitative studies that tested and assessed remote interpreting. UNESCO Paris-Nairobi experiment of 1975; ISDN video telephony experiment by the European Telecommunications Standards Institute in 1993; the European Commission's test in 1997 (Zaremba, 1997) and in 2000; United Nation's 1999 and 2001 concentrated more on technical aspects of the issue such as the technical set-up, audio and video transmission, room view, etc. The International Telecommunications Union's collaborative study with *École de Traduction et*

Interprétation (ETI) in 1999 (Moser-Mercer, 2003) was the first controlled experiment to assess human factors in an RSI setting such as psychological aspects like coping with the stress of a novel work environment; medical aspects such as having to rely on a screen to derive the visual support information necessary for carrying out the interpreting task; processing information from multiple sources (multi-modal information processing); operating multiple controls (multi-tasking); motivation; social isolation, and others (Moser-Mercer, 2005). European Parliament's two tests in 2001 and the European Council's test in 2001 also revealed a range of physiological and psychological problems, which recurred in different technical conditions and which seemed to be caused by the overarching condition of remoteness (Braun, 2015).

To date, several aspects of RSI have been studied such as stress (Moser-Mercer 2003; Roziner & Shlesinger 2010), visual input (Rennert, 2008), presence (Mouzarakis, 2006) and performance (Moser-Mercer 2003; Roziner & Shlesinger 2010). Yet, there has been no standalone research delving in the usability, or the ergonomics of RSI platforms considering the RSI dynamics of the post Covid-19 professional environment, meaning that the use of these platforms was not a choice but rather an imperative.

2. Study

This chapter is concerned with the methodology of the study, the instrument used for the study as well as data analysis, and limitations.

2.1 Methodology

The study aimed at assessing the usability of Zoom as perceived by professional conference interpreters. To this end, Lund's usability survey, USE Questionnaire was used as a data collection tool. The survey was sent to 75 professional conference interpreters, all of whom are members of the sole national professional association in Turkey - the Conference Interpreters Association of Turkey (TKTD). Convenience sampling is applied together with snowball sampling in order to reach professional interpreters who are not a member of the national organization by asking members of the national organization to forward the questionnaire via e-mail or WhatsApp groups.

2.2 Method and Instrument

The USE Questionnaire is considered a valid and reliable questionnaire for assessing user interfaces in three pillars: Usefulness, Satisfaction and Ease of Use (Gao et al, 2018). Within the scope of this study, a total of 36 questions were asked in relation to each feature of Zoom as they appear on the screen. As there are 11 icons for these features on a typical Zoom interface for an interpreter, these questions were repeated for each of these icons. The list of these icons is presented in Table 1.

Table 1

Name of the Icons as They Appear on the Zoom Screen

1	Mute
2	Stop Video
3	Security
4	Participants
5	Chat
6	Share Screen
7	Reactions
8	Interpretation
9	Breakout Rooms
10	More
11	Language Bar

The questionnaire was constructed using seven-point Likert rating scale: 7-strongly agree; 6-agree; 5-more or less agree; 4-undecided; 3-more or less disagree; 2-disagree; 1-strongly disagree. The questionnaire was transposed to Google forms for anonymous data collection. An overview of the USE Questionnaire applied in the research (Lund, 2001) is presented in Table 2.

Table 2

USE Questionnaire with three dimensions (Lund, 2001)

		Questions
	1	It helps me be more effective
	2	It helps me be more productive
	3	It is useful
Usefulness	4	It gives me more control over the activities in my life
	5	It makes the things I want to accomplish easier to get done
	6	It saves me time when I use it
	7	It meets my needs

	8	It does everything I would expect it to do
Ease of Use	1	It is easy to use
	2	It is simple to use
	3	It is user friendly
	4	It requires the fewest steps possible to accomplish what I want to do with it
	5	It is flexible
	6	Using it is effortless
	7	I can use it without written instructions
	8	I don't notice any inconsistencies as I use it
	9	Both occasional and regular users would like it
	10	I can recover from mistakes quickly and easily
	11	I can use it successfully every time
Satisfaction	1	I am satisfied with it
	2	I would recommend it to a friend
	3	It is fun to use
	4	It works the way I want it to work
	5	It is wonderful
	6	I feel I need to have it
	7	It is pleasant to use

2.3 Data Analysis

Responses to the questionnaire was compiled vie Google Forms and analysed using Numbers by Apple Inc. and StatPlus allowing descriptive statistical analysis. Some of the responses (Q35. List the most positive aspects and Q36. List the most negative aspects) had to be manually entered to see frequency of occurrence of answers.

2.4 Limitations

When it comes to assessing usability of products or user interfaces, subjectivity inevitably comes into play while trying to value client or customer experience since usability is dependent on multiple factors such as: background, education, aptitude, personal interests, context, etc. Against this backdrop full of variables, existing questionnaires try to standardize and frame an approach towards usability to have a set of data that can speak to developers of these products and researchers. That is why

these questionnaires come with certain limitations. Although the USE questionnaire is proven to be reliable and valid (Gao et al, 2018), shortcomings such as too restricted and uniform answers due to the use of the Likert scale questions together with an element of subjectivity, particularly with the two open-ended questions are elements that must be borne in mind.

Another element to consider when analysing data is the relatively newer concept of remote simultaneous interpreting and the relevant platforms. Although it has been approximately two and a half years of practice, the experience per se of the conference interpreters might not be mature enough to talk about it and duly express their sentiments as accurately and eloquently as desired. Another possibility is that the period of reflection on the use of the systems may be too short to retrospectively analyse just how efficient it is.

The tool used in the study is the USE questionnaire, and the questionnaire by design must encompass all the icons (features) of Zoom to give an overall usability score. However, not all icons are necessarily used during RSI assignments, such as Security, Share Screen, Reactions, or More. Results indicate that the undecided respondents are highest in these questions as these are indeed less relevant to their task. This non-relevance might have created a disinclination by the respondents towards the completion of the questionnaire.

Nevertheless, these icons presented on the screen are all part of the interface design and absence of interaction from the interpreters' do not dismiss the possibility of their interaction with the interpreters such as the issue with the Chat icon as later explored in the results section.

As for the representativeness of this study, 16 responses were collected as opposed to the 75 professionals contacted. This might be concluded as a relatively low turnout, at nearly 22%, considering the target group. However, detailed answers received to the open-ended questions by the respondents show genuine effort and desire to reflect experience, even if the responses were obtained from a limited number of professionals.

As is expressed in the relevant literature on the use of the Likert scales, though these scale questions facilitate quantitative analysis, they also curtail the responses participants can give and furthermore do not allow for nuanced thoughts to be expressed. (Saldanha, 2014).

3. Findings

The research aimed at focusing on raw usability data independent of age, experience and background data, which could also be an interesting topic of further research in the area. Questions addressing these factors were not included in this study.

Initial analysis of the first section, which is Usefulness, shows that out of 1408 responses (11 icons x 8 statements x 16 respondents), 1006 responses appear to be on an Agree scale (≥ 5) as opposed to 77 on a Disagree scale (≤ 3) with 325 being Undecided

(= 4). The relatively high number of undecided respondents (23%) was an important result and necessitated respondent-level analysis. The breakdown of undecided answers is as follows: More (N=65); Security (N=61); Breakout Rooms (N=49); Reactions (N=35); Share Screen (N=23); Chat (N=20); Interpretation (N=20); Stop Video (N=18). These icons happen to be the least interacted icons during remote simultaneous interpreting as interpreters will not normally seek to control security settings, manage breakout rooms or the interpretation though relevant icons, do presentations via share screen, participate in discussions by using reactions button or chat function. The remaining 34 undecided answers were distributed to the remaining icons as follows: Mute (N=14); Participants (N=11) and Language Bar (N=9) in a descending order. Mean, median, mode and standard deviation of this section is presented in Table 3.

Table 3

Mean, median, mode and standard deviation values of Usefulness

	Mean	Median	Mode	Standard Deviation
Mute	6	7	7	1
Stop Video	6	6	7	1
Security	5	4	4	1
Participants	6	6	7	1
Chat	5	5	5	1
Share Screen	6	6	7	1
Reactions	5	5	4	2
Interpretation	6	6	7	1
Breakout Rooms	5	5	4	1
More	5	4	4	1
Language Bar	6	6	6	1

In the second section, which is Ease of Use, there are a total of 1936 responses (11 icons x 11 statements x 16 respondents). Out of all the three dimensions (Usefulness, Ease of Use, Satisfaction), this section had the lowest number of undecided responses (N=312). 1560 responses appear to be on an Agree scale (≥ 5) as opposed to 64 on a Disagree scale (≤ 3). This data is an important indicator echoing the easy operation of the platform as mentioned by the majority of the respondents in the open-ended section of the questionnaire. Highest concentration of undecided responses is in the questions on More (N=64); Breakout Rooms (N=61); Security (N=57); Share Screen

(N=43); Chat (N=23). The remaining 64 were distributed as follows: Interpretation (N=18); Language Bar (N=13); Reactions (N=11); Participants (N=9); Mute (N=7); Stop Video (N=6). Table 4 lays bare the mean, median, mode and standard deviation of this section.

Table 4

Mean, median, mode and standard deviation values of Ease of Use

	Mean	Median	Mode	Standard Deviation
Mute	6	7	7	1
Stop Video	7	7	7	1
Security	5	6	4	1
Participants	6	7	7	1
Chat	6	6	6	1
Share Screen	6	6	7	1
Reactions	6	6	6	1
Interpretation	6	6	7	1
Breakout Rooms	6	6	4	1
More	6	6	4	1
Language Bar	6	7	7	1

The third section, Satisfaction, contained a total of 1232 responses, out of which 325 were undecided. 860 responses are concentrated around the Agree scale (≥ 5) as opposed to 47 on a Disagree scale (≤ 3). Almost the same group of icons had the highest number of undecided responses; More (N=53); Breakout Rooms (N=53); Security (N=65); Share Screen (N=33). The remaining undecided responses appeared as follows; Interpretation (N=24); Stop Video (N=24); Reactions (N=19); Language Bar (N=17); Mute (N=12); Participants (N=11). Mean, median, mode and standard deviation of this section is demonstrated in Table 5.

Table 5

Mean, median, mode and standard deviation values of Satisfaction

	Mean	Median	Mode	Standard Deviation
Mute	6	7	7	1
Stop Video	7	7	7	1
Security	5	6	4	1
Participants	6	7	7	1
Chat	6	6	6	1
Share Screen	6	6	7	1
Reactions	6	6	6	1
Interpretation	6	6	7	1
Breakout Rooms	6	6	4	1
More	6	6	4	1
Language Bar	6	7	7	1

There were two open-ended questions in the questionnaire: Q35. List the most positive aspects and Q36. List the most negative aspects. As for the positive aspects listed, 7 out of 16 respondents agree that this is an easy-to-use platform. They claim that the platform necessitated no instructions or training before use. Moreover, they were able to navigate through the platform intuitively. 5 respondents stated that the Mute icon is a positive design feature enabling straightforward use. 3 respondents considered the Stop Video icon to come in handy however the same icon appeared as one of the design mishaps as it was very close to the Mute Icon and "with the heat of the moment, the wrong icon might be clicked" (R16). 3 respondents were extremely pleased with the Relay Option. 3 respondents commented that Chat was a positive feature. Breakdown of these answers is shown in Figure 1. On top of these answers, 2 respondents marked the Share Screen icon as a positive feature. Chat icons can be used both by interpreters and the audience, allowing a two-way communication. Share screen, on the other hand, is not a feature primarily targeting interpreter use, so the reason this feature is viewed positively by the interpreters might be due to the fact that it allows visual aid for the interpreters while performing. 2 respondents agreed that the platform allowed quick switching between languages. Another positive aspect of the platform was cited as being open access (N=2) with a good layout (N=2).

Figure 1

Responses to Q 35: List the Most Positive Aspects
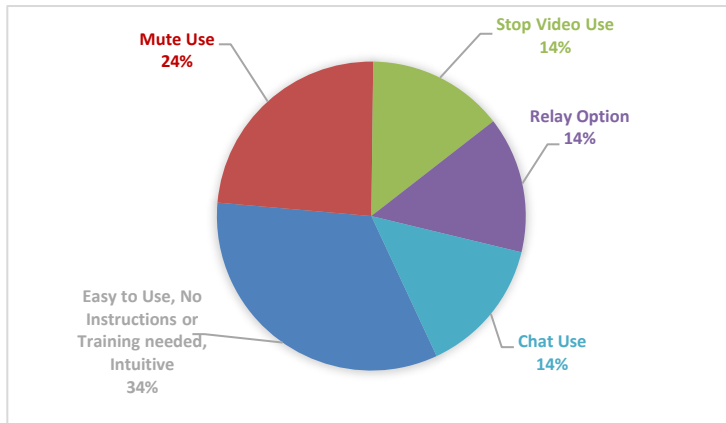
One of the respondents (R7) specifically mentioned the absence of misleading pictograms together leading to clear functional layout. Moreover, the platform enabled interpreters to see the name and number of participants(N=2); to act as a host and have the authority to use some functions such as mute(N=2). One respondent listed speaker view option to be one of the positive aspects, while others cited the possibility of Krisp integration (N=1); functionality (N=1) and the ability to assign interpreters (N=1) as positive aspects.

As for listing negative aspects of the platform from the interpreters' perspective, the top three answers were about chat box layout and function; lack of dual listening function (the floor and the interpretation) and sound quality. 3 respondents stated that the language bar sometimes blocked the screen, blocking the visual of participants, their names and/or presentation on the screen. 2 respondents stated the relay design as a negative feature. There was another comment on the same feature suggesting red and green colour coding than black and white "for better visual of the channel" (R2). 2 other answers were about the lack of a handover function. Other negative aspects were cited as not being free of charge; sound disruptions that occur in meetings with a high number of participants; lack of interpreting feature in the breakout rooms and reactions obscuring the screen. A general breakdown of the most popular negative answers is presented in Figure 2.

Figure 2

Responses to Q 36: List the Most Negative Aspects
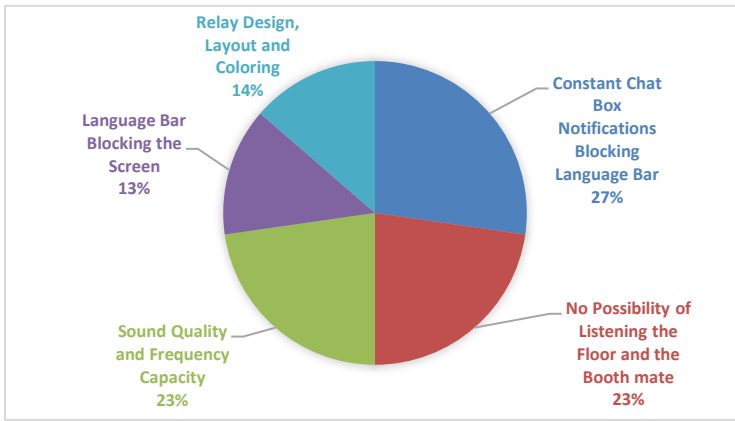
4. Discussion

The aim of the study was of course not to testify in favour or against any platform, be it an SIDP or not. As can be inferred from the previous studies in the field, which are mentioned in the Section 1.4 of this paper, there has been a certain level of reluctance and/or reaction among conference interpreters towards RSI until the Covid-19. These previous studies reported decreased concentration and motivation and increased fatigue by interpreters (Moser-Mercer, 2005) and less satisfaction from their own performance (Roziner & Schlesinger, 2010) among others. The AIIC press release dated June 29, 2022 on the strike of the European Parliament interpreters add on top of these and makes a call to the European Parliament to address the issue (AIIC News, Press Release - EU Negotiating Delegation, 2022). It is noteworthy to mention here that the EU institutions have been using SIDPs. Against this backdrop, Zoom's high usability rate for conference interpreters in Turkey is a finding that must be interpreted with caution.

First and foremost, literature suggests that interpreters tend to adapt to new working conditions easily (although sometimes reluctantly) (Braun, 2007). Adaptation together with flexibility are among the coping mechanisms of conference interpreters and as Inghilleri (2005) amongst others expressed, it is a part of their habitus. So given the RSI context, understanding the reasons behind this quick adaptation can help us elaborate on high usability scores in this research. Responses to open-ended questions advocate for the platform being functional and intuitive with no need for prior training or written instruction. This is indeed the basic parameter of usability; an easy-to-learn and efficient-to-use design (Nielsen et al, 2000).

Moreover, one needs to make a distinction between certain concepts that comprise User Experience. Nielsen Norman Group defines user experience at four levels: utility; usability; desirability and brand experience (Nielsen, 2008). Utility is to what

extent a design can address a need and solve a problem. Usability is the bare minimum which translates into simple use with no training to fulfill that need whereas desirability is how a design can turn something usable into something desired by the user. With this in mind, it must be noted that this study only explored the usability factor, therefore these findings do not confute the findings recently emerging about fatigue and stress, particularly technostress, in RSI.

Coming back to the high scores of usability corroborated with this study, the next question to be raised would be its implications. For instance, we know from the literature that the most usable tool is not always the most convenient, as usability is about the state of being usable whereas convenience is about the quality of being usable or to what extent this usability is burden-free or advantageous. The act of walking would be a case in point. When we consider the usability parameters such as satisfaction, ease-of-use and usefulness (Lund, 2001) or others such as learnability, accessibility and user experience (Zaharias and Poylymenakou, 2009), walking would be considered as a usable action. On the other hand, walking to your job everyday might not necessarily be convenient for you if your workplace is too far, if the walkway is too busy, not secure or the weather conditions are simply not appropriate.

Yet, the possible inconveniences of a product, or a design, does not refute it's high usability. High usability can lead to more take-up and wider use, and this might undermine attempts to better the design. This study is also a humble step to put forward the necessary improvements that might be introduced to cater for the needs of the target audience. Q36 asked participants to list the negative aspects of the platform during interpreting, and apart from the criticisms, several respondents came up with improvement ideas such as:

(1) "Listening from and Speaking into bars can be green and red rather than black and white"

(2) "To prevent chat box popping up regularly, direct messaging could be the only available mode"

(3) "Stop Video icons can be a little apart from one another"

(4) "Interpretation function can be added to breakout rooms"

(5) "Treble and bass adjustments can be introduced"

(6) "Language bar could be moving to prevent it from blocking important parts of the screen"

These show that there is an appetite for the betterment of the platform by interpreters and end users rather than simply for bringing harsh criticisms.

In the end, ergonomics is about ensuring that systems and devices are well suited to the user's physical needs. Ergonomics, by the International Ergonomics Association in 2000 was defined as:

"Ergonomics (or human factors) is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, it is also the profession that applies theory, principles, data and methods to design to optimize human well-being and overall system performance" (https://iea.cc/what-is-ergonomics/).

In the aftermath of the pandemic, new working modes emerged across professions, some of which are temporary and some permanent. If remote interpreting is to be accepted as one of these new working modes, then ergonomics studies would be a must as it is the field that deals with the problem of "adapting the work to the man" (Wiener, 2019; see also Christensen, 1987). As a result of this, any improvement will then lead to improvement in the health and safety of any occupational setting (Sluchak, 1992). Echoing the design principle devised by Sullivan where "form follows function and function follows form" (1986), it is imperative that such improvement input derived from user experience is considered, which in turn drives ergonomics.

5. Conclusion

It could be safe to say that the interpreting community has never been too keen on welcoming remote interpreting although there have been numerous efforts to test it. In contrast to this historical tendency, there has been a rather speedy take-up towards remote interpreting practices during the pandemic. The reason one may suggest could be that everyone was in the same boat back then. In other words, during the Covid-19 pandemic, everyone had to be remotely connected to the meeting be it the speakers, the organizers, the participants, or the interpreters. So, it was much more of a rescue scenario for everyone. Against this reality, the pandemic expedited and expanded the practice in a way that drove interpreters into a corner amid all historical resistance to the concept. RSI started as a saving grace and throughout the time, professional interpreters started acknowledging that there might even be some upsides of RSI. For instance, ESIT Research Project on Remote Simultaneous Interpreting by Dr. Collard and Dr. Bujan revealed %64 of the respondents (N: 825) said yes to keep working on RSI assignments (Bujan & Collard, 2021).

Nevertheless, RSI is a rather new phenomenon that created divergences in response and reaction among the interpreters themselves as well. It is also a relatively new area for research necessitating an interdisciplinary approach. It is important to note that the current conditions resulting in and accommodating RSI are very different than those when the first discussions emerged about remote interpreting nearly forty years ago. This study once again reveals the multifaceted aspect of the issue, and thus how complicated it is to value and interpret intertwined concepts such as usability. Usability resonates with other concepts such as usefulness, utility, ease of use, human experience, ease of learning while depending on various factors such as personal background, attitudes, skills, interests etc. The USE Questionnaire drafted by Lund applied to 16 professional conference interpreters in Turkey demonstrated that interpreters consider Zoom highly usable. This data is only preliminary for deeper and more comprehensive research in the field.

In conclusion, interdisciplinary research needs, although not necessarily limited to, can be summarized as follows:

(1) Research with ergonomics experts to dwell on physical, cognitive and organizational aspects of RSI working environments,

(2) Research with audio technicians and software developers,

(3) Research with communication experts to divulge variations of verbal and non-verbal communication patterns in this new setting,

(4) Research with occupational health and safety experts,

(5) Research with psychologists shedding light upon relevant parameters that might arise due to remoteness and alienation of the interpreter,

(6) Research with physicians and scientists to investigate indicators of stress, fatigue, memory, concentration etc.,

(7) Research on norms as this new modus operandi might have possible implications on professional norms,

(8) Research on sociological aspects of interpreting such as agencies and identity construction.

Only by seeing the big picture, one can make sound and to-the-point inferences and strive for enabling ideal ergonomics for interpreters working in remote settings, where only then form can follow function and function can follow form.

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