THE UNIVERSITY OF NAIROBI

DEPARTMENT OF LINGUISTICS AND LANGUAGES

CENTRE FOR TRANSLATION AND INTERPRETATION

IMPACT OF WORKING REMOTELY ON COOPERATION

BETWEEN

INTERPRETERS WORKING IN THE SAME BOOTH:

A STUDY OF THE ZOOM PLATFORM

BY

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REQUIREMENT FOR THE AWARD OF THE MASTER OF ARTS
DEGREE IN INTERPRETATION

DECLARATION

This dissertation is my original work and has not been presented for examination in any other university.

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This research has been submitted for examination with our approval as university supervisors.

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ABSTRACT

Remote simultaneous interpretation platforms are becoming increasingly popular for professionals working in the interpretation field. However, along with numerous benefits associated with time and costs, this technological innovation brought about challenges for interpreters who are increasingly often working remotely from their booth partners. This study focuses on the impact of remote work on cooperation between interpreters working in the same booth while using the Zoom platform. The objectives of the study were to examine the ways in which interpreters cooperate when working on the Zoom platform, explore the challenges faced by interpreters working on the Zoom platform, and discuss the impact of challenges faced by interpreters working on Zoom on the quality of interpretation. Data was collected from 14 participants, including students from the University of Nairobi's Centre for Translation and freelance interpreters. Data was gathered through questionnaires and observation of interpreters on Zoom. Interpreters reported on cooperation with booth partners, challenges faced, and the impact on rendition quality. Two participants interpreted a 15-minute speech on Zoom and then informed the researcher how they cooperated with their booth partners and what challenges they faced in the process. The researcher used content analysis to assess cooperation, challenges, and rendition accuracy. Two-thirds of the participants reported being satisfied or very satisfied with remote work, reflecting greater acceptance of technological innovations. Forty-one per cent of the respondents reported facing challenges when working on the Zoom platform, and three-quarters of the participants in the study revealed that challenges they encountered working on Zoom significantly affected the quality of interpretation. This resulted in challenges like omissions, delays, and interruptions during interpretation. Despite challenges encountered on the platform, most interpreters reported taking steps such as charging and testing their devices and establishing communication channels with their booth partners to mitigate challenges associated with remote simultaneous interpretation on Zoom. Based on the research findings, the study recommended that future research is conducted into how delegates cope with challenges in remote simultaneous interpretation, given their crucial role as the end-users, as well as in the challenges faced by interpreters providing interpretation services on other popular platforms such as Kudo, Interactio and Teams.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The development of communication technologies has given rise to several forms of real-time, remote communication, as well as different methods of providing interpretation services. On one hand, conference calls that include participants in two or more places are now possible thanks to mobile and internet service providers. On the other hand, videoconferencing has gradually made a name for itself as a technology for real-time verbal and visual communication between two or more places. As a result, in-person interpretation has been replaced and supplemented by the development of remote simultaneous interpreting (RSI) systems like Zoom. In addition to regular onsite conferences, they can be used for internet conferences and webinars, allowing interpreters to connect from the comfort of their homes or other remote working sites (such as conference rooms). In light of how widespread remote interpreting has become, scholars have increasingly focused their studies on the impact of remote work on cooperation between interpreters. This is because the importance of cooperation between interpreters working remotely or in the same booth cannot be overstated. This study sought to assess cooperation and challenges faced by interpreters working in the same booth using the Zoom platform.

1.2 Background of the Study

Interpretation as a field has undergone several changes throughout the centuries, and one of the most radical changes is the advent of simultaneous interpretation. While the first ever simultaneous interpretation course was provided by ILO in 1928 (Seeber, 2021), its use was not widespread until the Nuremberg trials in 1945. Since the invention of simultaneous

interpretation, the most important development in the field was the advent of remote interpretation (Seeber, 2021)

According to Kurz (2003), the first experiment with a remote simultaneous interpretation attempt was conducted at a United Nations Educational, Scientific and Cultural Organization (UNESCO) conference in 1976. Remote simultaneous interpretation was not widely adopted at the time due to technical challenges associated with devices, bandwidth, and high costs. Since then, however, the development of communication technologies such as telephony, videoconferencing, and web conferencing in interpreter-mediated communication has led to the mainstreaming of remote simultaneous interpretation (Braun, 2015).

According to Grieshofer (2022), remote interpreting in the narrow sense often refers to "the use of technology to acquire access to an interpreter in another location." However, Pym (2008) argues that despite having various underlying factors, these interpreting techniques all have aspects of remote working from the interpreter's perspective.

The first technological advancement in the field was the development of the wired network for speech delivery, which prompted simultaneous interpretation to become popular. Following World War II, during the Nuremberg trials, IBM's technology became more widely known and was finally adopted by all international agencies. The introduction of the internet significantly altered how interpreters work and learn. The internet has been key for interpreters to efficiently find translations for technical words and research the topics and themes related to their assignments, as preparation is an essential component of interpreting. The internet today, of course, also enables remote simultaneous interpretation (Archibald et al., 2019).

Similar to other platforms, Zoom enables real-time communication with people who are in different physical locations through a computer, tablet, or mobile device. Zoom, however, has set itself apart from other VoIP service providers by offering users additional features, such as, for example, the capability to record and save sessions without the use of external software. This feature is key for users concerned with issues such as privacy and the need to protect highly sensitive data. Other features that set Zoom apart from its competitors are real-time meeting encryption and the capacity to backup recordings to online remote server networks (the cloud) or local files, which may later be shared securely for the purpose of collaboration (Archibald et al., 2019).

Zoom also provides various features to attract users seeking remote simultaneous interpretation. The fact that Zoom is a popular platform makes the life of event organisers easier, as there is the likelihood that the majority of participants will have used or at least heard of Zoom. Finally, Zoom sets itself apart from its competitors because it's relatively easy to use and reasonably priced (Giaquinto, 2022). Generally, Zoom events do not require a technical set-up, and participants can join the event through a link. However, organisers must take into consideration issues such as bandwidth and the quality of computers and audio equipment of the speakers to ensure that the event is successful.

Although it is not accessible to users with Basic accounts, the Language Interpretation feature is available to Pro, Business and Enterprise accounts. This tool allows organisers to provide remote simultaneous interpretation services (Corpas & Gaber, 2020). The RSI feature allows the host to assign the interpreters to their respective channels and participants to listen to the speaker in their own preferred language. If the event is held in English, French- and Portuguese-speaking participants will be able to listen to the session in French and Portuguese on their

respective channels, with no interference in the English language session. Despite these benefits, Zoom also has its drawbacks. For example, the Zoom interpretation features might pose a challenge to an inexperienced user (Dharma, Asmarani, & Dewi, 2017). Other issues that Zoom users could face include poor internet connections, a noisy background and subpar speakers or microphones (Lowenthal et al., 2020; Ferns et al., 2020).

Remote simultaneous interpretation is viewed by interpreters with mixed feelings (Braun, 2015). In their 2014 survey, researchers from the Interpretation Directorate of the European Parliament concluded that about half the interpreters interviewed in the study expressed misgivings about the remote interpretation model, stating that they "feel less immersed in the conference environment, they feel that their work requires more efforts because they are unable to see everything that goes on in the conference room and generally feel at the mercy of the technology and of distant participants" (Seeber, 2018).

However, the onset of the Covid-19 pandemic forced professionals to come to terms with remote simultaneous interpretation. Like most sectors, the interpretation field felt the impact of the restrictions imposed by most governments to curb the spread of Covid-19, as public gatherings and consequently conferences were restricted. Kalia, Srinivasan, Wilkins and Luker (2020) said that virtual meetings nearly completely replaced in-person meetings in both personal and professional life, as a result of the Covid-19 pandemic.

Rwigema (2020) argued that the Covid-19 pandemic had "seriously curtailed" consumption of meetings, conferences and exhibitions in Rwanda, with virtual events serving as a substitute for recession-hit organisers, making it unavoidable for professionals in the field to adapt to online work modalities.

The Zoom platform does not necessarily address all the concerns raised by the interpreters regarding remote work, as they remain forced to work remotely from their partners and participants. Furthermore, the platform offers no guarantees that the speakers will have high-quality cameras, that the bandwidth will allow for a clear video or that the participants will even switch on their cameras. Finally, the interpreter must choose between listening to his booth partner or remaining on standby to take over from the floor. In the booth, the interpreter would be able to listen to the floor and pick from the speaker as soon as his partner switches off the microphone, which would allow for a smooth handover. Furthermore, online interpretation requires greater concentration and multitasking abilities from the interpreter, who must also continue the event's interpretation without interruption, even if there are technical problems that cause audio or video to lag, cut, or freeze (Corpas & Gaber, 2020).

1.3 Statement of the Problem

The advent of new technological developments has made the lives of interpreters, organisers, technicians and participants easier by allowing them to work remotely. Tudor (2022) argues that the Covid-19 pandemic has led to "excess or abnormal consumer interest" in videoconferencing facilities and that despite the lifting of the restrictions imposed to curb the spread of Covid-19, "excess interest" stabilised at higher levels than before the pandemic, especially interest in the Zoom platform. This makes it clear that remote simultaneous interpretation is here to stay.

Furthermore, remote simultaneous platforms have helped reduce costs associated with travel and accommodation of interpreters for the organisers and helped save the interpreters travel and commute time, as well as "remove interpreters from potentially negative scrutiny" by the participants (Mertens Hoffman 2005).

Today, there are several remote interpretation platforms and media available for event organisers. They include DayInterpreting, Kudo, Interprefy, Voiceboxer, Interactio, Speakus, Verspeak and Zoom. Zoom is an important tool for meeting the demands of remote simultaneous interpreting (RSI) or remote interpreting for conferences, seminars, workshops, and other events of a similar nature. Using a computer, tablet, or mobile device, Zoom enables real-time communication with people who are geographically separated.

While several researchers have listed the benefits of the platform, Zoom has drawbacks. Dharma (et al. 2017) described the platform as difficult to access at first and "less intuitive" in terms of use. The quality of the interpretation on the Zoom platform is also affected by poor internet connectivity and poor sound quality caused by subpar speakers or microphones (Lowenthal et al., 2020). Furthermore, recent surveys have shown that interpreters often rely on their booth partners when processing numbers or searching for supporting documents (Chmiel, 2008).

In comparison to on-site interpreting, remote interpreting places far higher demands on interpreters, as they have to find ways of mitigating the impact of challenges related to internet connectivity, poor quality sound, and lack of a chat and handover function, and simultaneously perform actions that would otherwise be performed by their booth partner (Warnicke & Granberg, 2022). As a result, based on the existing research, it is difficult to grasp how interpreters overcome the challenges facing Zoom interpretation to collaborate when working on the Zoom platform. Therefore, it is important that a study is undertaken to further assess how such platforms impact remote simultaneous interpretation through the Zoom platform.

1.4 Research Objectives and Research Questions

1.4.1 Research Objectives

This study is guided by the following objectives:

(i)   Examine the ways in which interpreters cooperate when working on the Zoom platform.

(ii) Explore the challenges faced by interpreters working on the Zoom platform.

(iii) Discuss the impact of challenges faced by interpreters working on Zoom on the quality of interpretation.

1.4.2 Research Questions

This study aimed to answer the following questions:

(i)   In which ways do interpreters cooperate when using the Zoom platform?

(ii) What are the challenges facing Zoom interpretation?

(iii) How do the challenges facing Zoom interpretation impact the quality of interpretation?

1.5 Rationale of the Study

It is important to study how new technological developments such as Zoom impact cooperation between interpreters working remotely but in the same virtual booth. This is because interpreters need to develop tools and skills to mitigate the challenges associated with working on the Zoom platform, as remote simultaneous interpretation is becoming an increasingly popular model of interpretation.

This study aimed to help interpreters who are new to remote simultaneous interpretation become more aware of the challenges they might be facing while carrying out their duties and develop means to minimise these challenges, which would allow for a better RSI experience for both the interpreter and the participants. This study also aimed to provide useful insights to

trainers of interpreters as they will be better placed to ensure their trainees have the necessary skills to succeed in the field.

Trainee interpreters will gain empirical insights about the impact of working on Zoom on cooperation between interpreters working remotely in the same booth.

Furthermore, the findings of this study could also be useful to researchers conducting further research in the field.

There is a gap in the literature about new technologies such as Zoom in relation to processes of cooperation and coordination between interpreters working remotely. As such, the ways in which interpreters cooperate in the Zoom platform, as well as the challenges facing Zoom interpretation, are hard to understand based on the existing literature. This means that understanding how such challenges affect the quality of interpretation on Zoom also remains a challenge. As a result, studies in these areas rely on inferences from dated literature. As the sector increasingly adopts Zoom interpretation, understanding the challenges interpreters face when working on this platform becomes increasingly important. As such, this current study sought to investigate the impact of working remotely on cooperation between interpreters working in the same booth with reference to the Zoom platform.

1.6 Scope and Limitation

The participants in the study interpreted a 15-minute speech instead of the usual 30-minute speech. The 15-minute speech allowed the researcher to assess how interpreters cooperate while working on Zoom, to understand which challenges the interpreters face while rendering their speeches, and how these challenges affect the quality of interpretation. The study was based on the most recent Zoom version (5.11.6), so the findings might not be applicable to newer versions.

1.7 Literature Review

This section focused on the existing literature in the field on the topic being studied.

This section focused specifically on the following sections: ways in which interpreters cooperate when working on the Zoom platform, the challenges faced by interpreters working on Zoom, and how these challenges impact the quality of interpretation. The final section will be centred on the theoretical review. The chapter ended with a conceptual framework and research gaps.

1.7.1 Ways Interpreters Cooperate on the Zoom Platform

Morrison-Smith and Ruiz (2020) have researched the challenges that interpreters working in virtual settings encounter and the manner in which they use technology to overcome them. They conducted a study into the obstacles to teamwork encountered by virtual teams as well as the existing solutions. In this study, an organised search approach is used to analyse 255 published documents, most of which were centred on the use of technology. The study found that the intellectual, social, and emotional challenges that interpreters encounter are related to components such as distance and isolation. The researchers conducting the study split respondents's concerns into five categories, namely geographic proximity, spatial distance, perceptual distance, the structure of scattered teams, and worker variety.

Researchers studying the impact of remote working on interpretation also focused on topics that should be further investigated, such as reconciling conflicts.

Braun et al. (2013) conducted a study to show the IVY's (Interpreting in Virtual Reality) 3D world the choices that interpreting students and customers of interpreting services have in Europe. According to the evaluation's results, the participants felt extremely positively about the accessibility of new and suitable interpretation training materials as well as their availability. However, it should be emphasised that some users did not feel the need to use the

materials in the Virtual Environment (VE), noting that the monologues and dialogues would be a valuable resource outside of the VE. This highlights the importance of the feeling of being present attained while participating in a virtual environment, and it may be reflective of different learner preferences or levels of autonomy: some users will react favourably to the chance to interact with and immerse themselves in the virtual environment, and they will find training value in the possibilities offered by the virtual world. The study, however, also revealed that the majority of trainee interpreters revealed that they would benefit from tutor and peer support in assessing their performance, which would be easier done in an in-person setting.

Sox, Crews, and Kline (2014) carried out a study on remote and blended meetings for Generation X. The researchers used the Delphi Technique to identify codes of practice, prospects, and barriers for participants aged 36 to 49 in the United States. The study aimed to define practices, possibilities, and barriers to organising virtual and hybrid meetings. A meeting technical panel participated in 4 sets of the modified Delphi process in order to ascertain the level of consensus within the group. The study concluded that the best practices for virtual meetings include collaboration between meeting content designers and planners, interactive experiences, and live expert contact. Best practices for hybrid meetings were found, including using real-world examples, offering user-friendly technology, and collaborating between planners and meeting content designers.

Moser-Mercer (2005) sought to provide evidence of the critical role of multi-sensory integration in simultaneous interpreting. The results demonstrate that one of the key elements influencing inferior performance in remote simultaneous interpreting as compared to live simultaneous interpreting is the absence of virtual presence. As a result of devoting more

cognitive resources to comprehension during simultaneous interpreting and depriving other parts of the process, especially production, of the resources needed to maintain a high level of performance during normal turn times, this deterioration in quality appears to be based on early onset of fatigue. This current study will examine the level to which these findings apply to Zoom interpretation.

Murtiningsih and Ardlillah (2021) looked into the difficulties that students participating in the study encountered when interpreting. Three participants in the Learning Express (LEx) program, which involved English native speakers and Indonesian students connecting with local Javanese utilising descriptive qualitative methods, were interviewed for the study. The study discovered nine methods for overcoming interpreting challenges, including asking for clarification, using a smartphone, asking a friend's assistance, using body language, asking speakers to speak in their second language, asking for repetition, and increasing focus on the source language.

Mirek (2022) conducted a case study of an online course in simultaneous interpreting. Polish MA students in English Studies who were in their second year of study undertook the study from February to June 2021. In this study, the trainer's reflections on using virtual platforms in the context of socio-constructivist principles, such as incorporating situated learning activities, are presented along with the students' user experience and an assessment of the usability of two online conference platforms (Zoom and Microsoft Teams) for simultaneous interpreting training. The results demonstrate that Zoom and MS Teams have both proven to be quite effective tools in SI training, enabling a variety of learning activities. The study concludes that due to the considerable reduction in stress and the opportunity to fully focus on the process of learning rather than other participants, it is reasonable to hypothesise that an online SI course

may be advantageous for trainees, especially at the beginning of the training. Additionally, the students get technological problem-solving skills that will help them when they work as interpreters online.

1.7.2 Common Challenges Faced by Interpreters Using the Zoom Platform

Nehe (2021) conducted a study to look into how students perceived the teaching and learning process while using Google Meet video conferencing in 16 meetings. The study employed qualitative research and targeted 13 English students who were enrolled in the second semester of an English study program. The contact, instructional learning process, psychological factors, and speaking abilities were highlighted in the study's findings about students' perceptions of teachers and learning. The study concluded that there were three types of interactions: interactions between lecturers and students, interactions between lecturers and students, and interactions between students. The use of Google Meet video conferencing in the speaking class received a positive response, and it was concluded from the data that students' perceptions of Google Meet tended to focus more on its benefits than its drawbacks.

A study was done by Castellani et al. (2020) to determine how well virtual meetings would perform in comparison to in-person meetings and whether the idea of "hybrid" meetings would play any future roles. The optimal settings for webinars and virtual meetings were the secondary goal. The survey questions about webinars, in-person meetings, and hybrid meetings were created using the Delphi approach and distributed. The face-to-face meeting, which was followed by a hybrid meeting and a webinar, provided attendees with a better overall experience. Following the Covid-19 pandemic, hybrid meetings become more popular than webinars. Zoom platform on laptops and desktops was the preferred device, and it was thought that a 1-hour webinar in the evening with 3-5 speakers each was best. The study comes to the

conclusion that online webinars are becoming more popular, but they do not replace in-person meetings. The poll reveals a rising preference for hybrid meetings in the near future, which would allow for greater participation and save participants time and money.

Tao et al. (2021) conducted research to determine the efficacy of hybrid and virtual conferences. The results indicate that online-only meetings have a number of benefits, such as increased accessibility by permitting attendance during times of fieldwork or teaching, a lesser carbon footprint, and greater inclusion because participation expenses are lower (e.g., reduced registration fees no travel and accommodation costs). Due to these benefits, it is now much easier for students from underdeveloped nations and those with limited resources to participate.

Raake et al. (2012) examined technological factors influencing Zoom fatigue and videoconferencing (VC). The results demonstrate how these components are organised into factors linked to the use of VC. As a result, the technological components and their sub-dimensions are part of a four-dimensional conceptual framework that is more comprehensive and includes other non-technical factors. The study also mentioned that the precise interaction patterns that make up the flow of human communication may be changed or deteriorated when employing VC technology. VC technology might lead to delays, which can be attributed to the communication partner or, in case of interpretation, the interpreter of the speaker, which can lead to misunderstandings. Such errors may also be brought on by poor audio and video, leading to communication that is not as effective and interfering with social interactions and impression-making.

1.7.3 Impact of Challenges Faced by Interpreters on the Quality of Interpretation

Corpas Pastor (2018) conducted research to analyse linguistic tools used in interpreting, along with the difficulties and benefits interpreters relying on them face. The results demonstrate that, in contrast to translators, interpreters have not interacted as much with linguistic technologies and tools to facilitate their work. With the advent of new technologies, the field is experiencing significant changes with computer-assisted interpreting (CAI).

According to the study, while most participants showed a positive attitude towards technological developments, more than 50 per cent of the participants did not use any technology during interpreting (although they did use online dictionaries and CAT tools) during preparation for the assignment. Simultaneous interpreters quoted by the report cited "lack of time" as one of the reasons they did not use technology while interpreting (which brings us to the question of how they manage to use technology to cooperate with colleagues when interpreting). Cheung (2021) examined the relationship between listeners' perceived dependence on SI and their assessment of the quality of the interpretation.

Two groups of native Cantonese speakers from Hong Kong were formed: one had Russian as the source language (SL) (Russian group), and the other had English as the SL (English group). The identical simultaneous interpretation into Cantonese that was prerecorded and delivered by a non-native interpreter was heard by both groups. The Russian group viewed the non-native-accented interpretation more favourably than the English group did in the on-site context. This shows that in onsite situations, perceptions of SI quality may be correlated with perceptions of SI dependence; the higher the perceived SI quality, the greater the perceived dependence on SI. In the RSI context, no appreciable variations between the two groups were discovered. The same quality perception ratings across the two RSI groups could be caused by a variety of elements, including the backdrop SL that is inaudible, comparable degrees of

perceived reliance, unfavourable attitudes about online learning, and tensions between the state and society.

Tan, Amini, and Lee (2021) aimed to pinpoint the difficulties encountered by amateur church interpreters in Malaysian churches and investigate ways to overcome those difficulties. Six church interpreters were seen and interviewed utilising a modified semi-structured interview and an observation checklist using a qualitative technique. The results indicate that grammatical problems like Subject Object Verb (SVO) reconstruction are a considerable obstacle to church interpreters, followed by issues peculiar to a particular culture and a finite amount of working memory. The main strategy used by these professionals to overcome these obstacles is practice and repetition. Prospects for "natural interpreters" and demographics-specific qualitative criteria for amateur church interpreting could be the subject of future research.

1.8 Theoretical Framework

This study relied on the media richness theory. The theory was developed by Daft and Lengel (1986) to describe how managers choose appropriate media to transmit confusing signals to subordinates. The theory proposes that media may be evaluated along a spectrum of richness and leanness, and it provides criteria such as feedback timeliness, message personalisation, linguistic variety, and the quantity of communication cues and platforms to show the richness and leanness of media. Face-to-face communication, according to Daft and Lengel (1986), is the richest medium since it contains instant feedback and a range of nonverbal communication indicators such as facial features, body posture, and tone of speech. When given a choice, people choose richer media since it contains more cues. In ambiguous situations, richer multimedia would help ensure the message is fully conveyed.

As technologies have advanced, media richness has come to describe them in light of their channel capacity. Current media richness studies concentrate on how users evaluate, choose, and prefer digital and mobile media (Fan-Chen et al., 2019). Users who experience better media richness in online interactions, for example, are more satisfied with their engagement in the conversations (Fan-Chen et al., 2019). Emotional iconography was also found to boost perceived media richness in digital media, according to research (Tang & Hew, 2019). Twitter, for example, has been examined from the standpoint of media richness. Tanupabrungsun and Hemsley (2018) created richness scores by combining media richness and Twitter traits.

The media richness theory explains the continuum, with face-to-face being the richest (Daft & Lengel, 1986). According to the theory's assumptions, video conferencing is the next richest media, allowing users to enjoy many of the same features of face-to-face communication, such as simultaneous verbal and nonverbal communication channels (Ferran & Watts, 2008). When measuring a medium's richness, the following criteria are taken into account: the speed of feedback, message personalisation, language variation, and the quantity of communication cues and pathways. According to Campbell (2006), VC is less convivial than face-to-face encounters since it is less impulsive. Because VC platforms provide text-based instant communications throughout the conference, VC provides increased textual cues that are not permitted during normal face-to-face engagement.

1.9 Research Methodology

The study relied on data collected from students. This includes the respondents, sampling technique, data collection, and data analysis and interpretation. The study relied on data collected from students completing their master's programme in interpretation studies, as well as practicing freelance interpreters working in East Africa. The students selected for data

collection were registered at the University of Nairobi programme for masters in interpretation. This is due to the fact that the University of Nairobi is the only institution offering the course in East Africa. Freelance interpreters working in East Africa were also be included in the study as they have experience working in in-person meetings as well as with RSI platforms. The researcher collected data from 12 participants for this study through questionnaires and through the observation of two interpreters interpreting a speech on Zoom. The interpreters responding to the questionnaire reported on how they cooperate with their booth partner when working Zoom, what challenges they face, and how these challenges affect the quality of their rendition. Two participants were briefed about the interpretation assignment and were requested to prepare themselves as if they were preparing themselves for an interpretation session and plan for how they will communicate, monitor and eventually handover to their booth partner. The participants were then presented with a 30-minute speech and asked to interpret it through the Zoom platform. The interpreters were asked to handover to their booth partner after 15 minutes. Their performance was assessed by the researcher. Thereafter, the participants were presented with data collection forms and asked to highlight the ways in which they cooperated with their partners throughout the session and to enumerate the challenges they encountered. Data was, therefore, collected through practical sessions as well as data collection forms.

1.9.1 Sample, Sampling Technique

The respondents were trainee interpreters from the University of Nairobi, as well as freelance interpreters working in East Africa. The trainee interpreters were pursuing a Master of Arts Degree in Interpretation. The study used the convenience sampling technique, a non-probability type of sampling in which the researcher selected a sample of all the students pursuing the aforementioned course at the University of Nairobi. The researcher used purposive sampling to ensure that the interpreters selected for the study formed a homogeneous group so

as to include novice and experienced interpreters. Furthermore, snowballing sampling was used to identify active freelance interpreters. To this end, those initially recruited for the study were asked to refer colleagues and contacts for the study. The researcher recruited 14 interpreters for the study. Twelve participants filled out a questionnaire detailing how they cooperated on Zoom, what challenges they encountered and how these challenges affected the quality of their work. Two other participants formed a language pair. Each pair was presented with a 30-minute speech and asked to handover to their booth partner after 15 minutes. The participants were asked to interpret into their A language. The researcher observed and took note of the performance of the participants.

Following the session, the researcher conducted semi-structured interviews and asked the participants about the challenges they faced and how they tried to minimise them. The participants were asked to explain to what extent they felt the challenges they faced affected the overall delivery.

1.9.2 Research Instruments and Data Analysis

The research used data collection forms which were used to enter data on the ways in which students cooperated over the Zoom platform, the challenges they faced over the platform and the ways in which such challenges impacted the quality of interpretation. Content analysis was used to examine the ways in which interpreters cooperated, the challenges they faced and how they felt it affected the quality of their delivery. The findings are presented in prose based on the research objectives. The media richness theory (Daft & Lengel, 1986) was used to examine how the challenges faced in remote interpretation using the Zoom Platform could influence the use of new technologies in interpretation. The study also provided recommendations on the

formulation of strategies aimed at enhancing the use of such technologies to enrich interpretation quality.

CHAPTER TWO

WORKING REMOTELY AND COOPERATION BETWEEN INTERPRETERS WORKING IN THE SAME BOOTH

2.1 Introduction

The development of communication technologies has given rise to several opportunities for real-time, remote communication as well as different methods of providing interpreting services. On the one hand, conference calls that include participants in two or more places are now possible thanks to mobile and internet telephones. On the other, videoconferencing has gradually made a name for itself as a technology for real-time verbal and visual communication between two or more places.

When it comes to interpretation, the most common methods are telephone and videoconference. One of these, known as remote interpretation (RI), refers to the use of communication tools to connect to an interpreter located in a different room, building, neighbourhood, city, or country. The participants and the interpreters engaging in RI are connected to the interpreter via a phone line or videoconference link. Nowadays, remote interpreting by phone is frequently referred to as telephone interpreting or over-the-phone interpreting. When referring to remote interpreting remotely via videoconference, the term "remote interpreting" is frequently used. The phrase "video remote interpreting" has also become widely used in sign-language interpretation. Remote interpretation can be used for consecutive and simultaneous interpreting.

A similar approach is necessary for interpreting in a phone call or videoconference between parties located at different locations and speaking a different language, i.e. for interpreter-mediated telephone or videoconference communication. However, in this situation, the interpreter may be co-located with one of the parties or fully remote. When an interpreter is working fully remotely, a three-way phone or videoconference connection is established. Teleconference interpreting, which includes both telephone and videoconference communication, is the term used to describe the type of interpreting that is necessary in this situation. But the terms "telephone interpreting" and "videoconference interpreting" can also be used in this context.

Zoom is perhaps the best-known videoconference service provider in the post-pandemic world. The platform includes a variety of distinctive features that increased its popularity among conference organisers looking to set up online meetings and collaborative groups. The host can designate one of the individuals logged in to the meeting as an interpreter. The interpreter will then be allocated a separate channel to interpret into their assigned language. Those attendees who require interpretation will select the channel to listen to the meeting in their preferred language. This chapter presents the findings of the researcher's effort to "examine the ways in which interpreters cooperate when working on the Zoom platform." Data was collected from primary and secondary data sources. This section presents the findings of the researcher. The first part will focus on the findings from primary data sources.

2.0 Response Rate

The researcher will send questionnaires to 12 interpreters and observe a pair of interpreters conducting an interpretation assignment on the Zoom platform. This *made* a sample of 14. Out of these, 12 interpreters responded to the questionnaire, and two performed an interpretation

assignment on Zoom. This made a response rate of 100 per cent. The findings are presented in Table 2.1

Table 2.1 Response Rate

Sampled	Responded	Response Rate
14	14	100%

2.0 Demographic Characteristics of the Respondents

The survey's education data provides insight into how widespread the use of RSI platforms is across various age and education levels. A significant number of respondents are advanced degree holders, with half, or six participants, having a Master's degree, while two participants, corresponding to 16.7 per cent, held advanced postgraduate degrees. This also highlights the importance of ensuring that communication technologies cater to different groups of interpreters with varying backgrounds and formal training levels. Tan, Amini, and Lee (2021) for example focused on the challenges faced by church interpreters offering in person interpretation services in Malaysia. This subgroup of interpreters often lacks formal training, and with an increasing number of religious denominations offering services online after the Covid 19 pandemic (Bryson, Andres and Davies 2020), it's important that RSI platforms take into account the needs of interpreters of all backgrounds and education levels. The findings regarding the qualifications of the interpreters taking part in the study were presented in Figure 2.1

12 responses
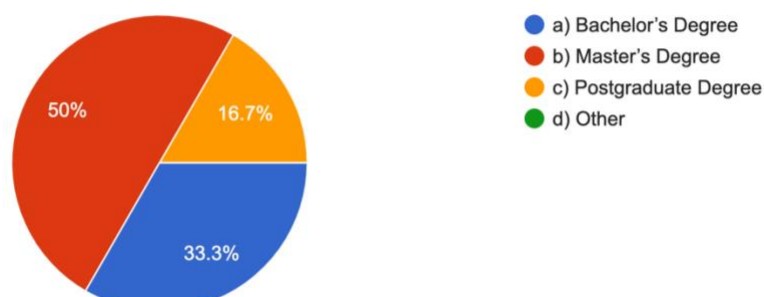
Figure 2.1 Education Qualifications

The data reveals varying levels of experience among interpreters. The majority, at 41.7 per cent, have been working as interpreters for zero to five years, likely representing a newer generation of professionals. An equal 16.7 per cent, corresponding to two participants, comprises highly experienced individuals with over 15 years of experience and trainees, likely beginners or those in formal training. Moderately experienced interpreters with 10 to 15 years of experience represented 16.7 per cent of the respondents in the study.

12 responses
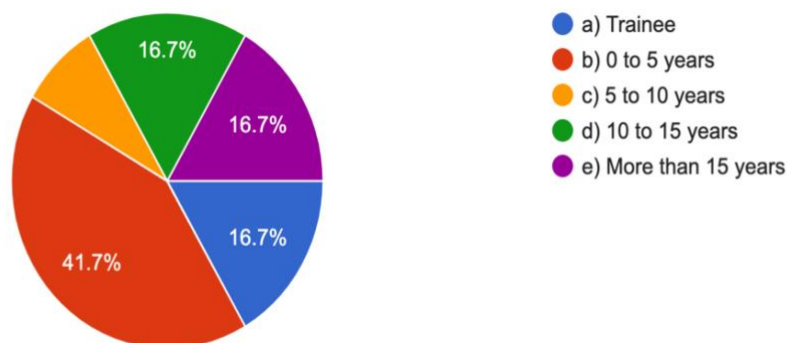
Figure 2.2 Experience Working as an Interpreter

2.2 Ways Interpreters Cooperate in the Zoom Platform According to Primary Data Sources

2.2.1 Familiarity with RSI Systems

In this survey, all the 12 respondents demonstrated a strong familiarity with Remote Simultaneous Interpreting (RSI). This overwhelming consensus suggests that RSI has become a widely recognised and accepted practice among interpreters. This high level of familiarity may indicate the growing importance and adoption of RSI in the field, highlighting its relevance as a subject for further investigation and study in the context of interpretation and technology integration. The findings were presented in Figure 2.3.

12 responses
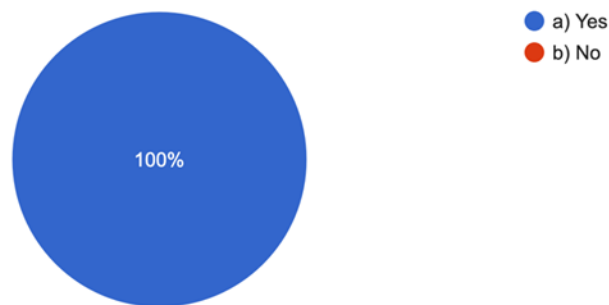
2.2.2 Percentage of Meetings Held Virtually within the last 12 Months

The data on the percentage of virtual meetings provided the researcher with several interesting insights. First, a third of the respondents, corresponding to four participants, reported that 0 to 25 per cent of their meetings occurred virtually, indicating that a significant portion of their work still involves in-person in a presential setting. However, a larger percentage, calculated from the difference, likely falls into the 25 to 50 per cent range of virtual meetings, suggesting a gradual shift toward online collaboration.

The study also found that a quarter of the participants, or three respondents, reported that 50 to 75 per cent of their meetings took place virtually. This indicates a substantial adoption of remote work, possibly due to factors like the Covid-19 pandemic or increased technological capabilities. One-third of the respondents, corresponding to four interpreters, reported that 75 to 100 per cent of their work happens in a virtual setting. These interpreters represent a group fully embracing virtual work environments, possibly due to the nature of their work or the industries they are in. This could also mean interpreters who are in roosters of international organisations (employers) who have gone fully remote, such as some UN agencies, which no longer organise large in-person conferences to save on costs and reduce their environmental footprint.

12 responses

● a) 0 to 25 per cent
● b) 25 to 50 per cent
● c) 50 to 75 per cent
● d) 75 to 100 per cent
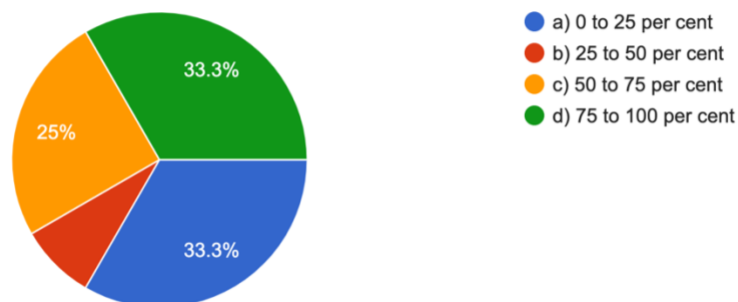
Figure 2.4 Percentage of meetings held virtually in the past 12 months

2.2.3 Satisfaction with Remote Simultaneous Interpreting

The data regarding the satisfaction levels among interpreters with RSI yielded interesting results. While earlier studies have shown that the interpreters were reticent to move from traditional in-person interpretation, data collected by the researcher indicates that 58.3 per cent of the respondents, corresponding to seven participants, were satisfied with RSI, while an additional 8.3 per cent said that they were very satisfied with the move towards RSI. Together, these two groups form 66.6 per cent of the respondents who reported a positive feeling towards RSI. This represents a slight shift from findings by some of the studies cited in this study, such as the one conducted by the Interpretation Directorate of the European Parliament in 2014, which concluded that "about half the interpreters interviewed in the study expressed misgivings about the remote interpretation model, stating that they "feel less immersed in the conference environment, they feel that their work requires more efforts because they are unable to see everything that goes on in the conference room and generally feel at the mercy of the technology and of distant participants" (Seeber, 2018).

Three respondents, corresponding to 25 per cent, reported that they were neither satisfied nor dissatisfied with RSI, while one participant said that they were dissatisfied with remote simultaneous interpretation.

Figure 2.4 presents the findings obtained.

12 responses

- ● a) Very satisfied
- ● b) Satisfied
- ● c) Neither satisfied nor dissatisfied
- ● d) Dissatisfied
- ● e) Very dissatisfied
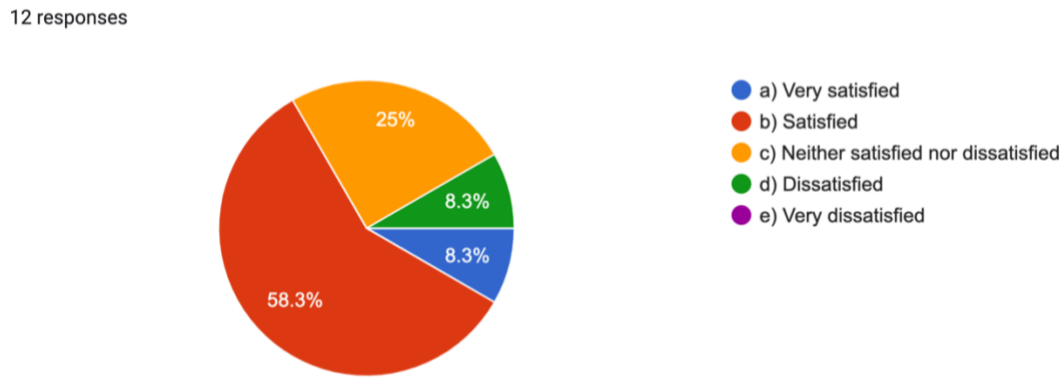
2.2.4 Remote Simultaneous Interpreting Platforms Used by the Respondents

The findings, as presented in Figure 2.5, show that among the respondents, Zoom is the most widely used platform for remote simultaneous interpreting (RSI), with all participants having experience using it. Additionally, around one-third of respondents have worked on Kudo and Interprify for RSI, indicating a moderate level of familiarity with these platforms. In contrast, Interactio has been used by a smaller percentage, approximately 16.7 per cent of respondents. Voiceboxer has not been utilised by any of the participants on RSI assignments. Furthermore, one respondent, corresponding to 8.3 per cent reported using Microsoft Teams, Cisco WebEx, and Congress rental for RSI purposes. This reflects the diversity of RSI tools in the market and may inform decisions on platform selection for future RSI tasks.

12 responses

Zoom	12 (100%)
Kudo	4 (33.3%)
Interprify	4 (33.3%)
Interactio	2 (16.7%)
Voiceboxer	0 (0%)
Microsoft Teams	1 (8.3%)
Cisco WebEx	1 (8.3%)
Congress rental	1 (8.3%)
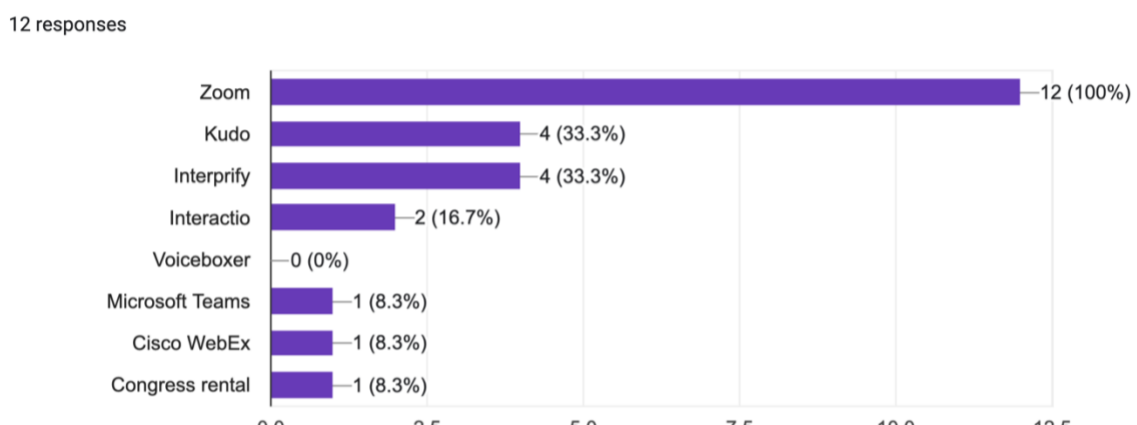
Figure 2.5 Remote Simultaneous Interpreting that Respondents have worked with

2.2.5 Preferences of Interpreters Regarding the Selected Platform's Features

The survey results shed light on the preferences of interpreters regarding the selected platform's features. A majority of respondents, 58.3 per cent find the platform's format to be crucial for their work. This suggests that the visual layout and organisation significantly impact the platform's usability. Similarly, eight participants, corresponding to 66.7 per cent, highlighted the platform's design, indicating that aesthetics play a significant role in user satisfaction.

Language support is also highly valued, with 58.3 per cent of respondents emphasising its importance. This shows that the platform effectively accommodating multiple languages, is a critical feature for interpreters. Thirty-three percent of the interpreters deemed the handover mechanism to be a crucial component.

This feature ensures smooth handover between interpreters, particularly in high-stakes communication scenarios, such as diplomatic meetings where an omission due to handover, could have negative consequences.

Additionally, five participants corresponding to 41.7 per cent value the inclusion of a chat feature, which facilitates internal communication among interpreters, allowing them to coordinate and share information, feedback and relevant documentation and terminology more efficiently. This suggests that direct communication between interpreters remains key component both inside and outside the booth.

The findings underscore the significance of platform design, functionality, and language support to interpreters. A well-structured, visually appealing platform with robust language capabilities and effective handover mechanisms is highly valued. Features like chat functionality further enhance collaboration among interpreters. These insights are valuable for platform developers aiming to optimise user satisfaction and functionality.

12 responses

Feature	Value
a) Interface	12 (100%)
b) Format	7 (58.3%)
c) Language	8 (66.7%)
d) Design	8 (66.7%)
e) Handover mechanism	4 (33.3%)
f) Chat feature	5 (41.7%)
The relay feature, which enable…	1 (8.3%)
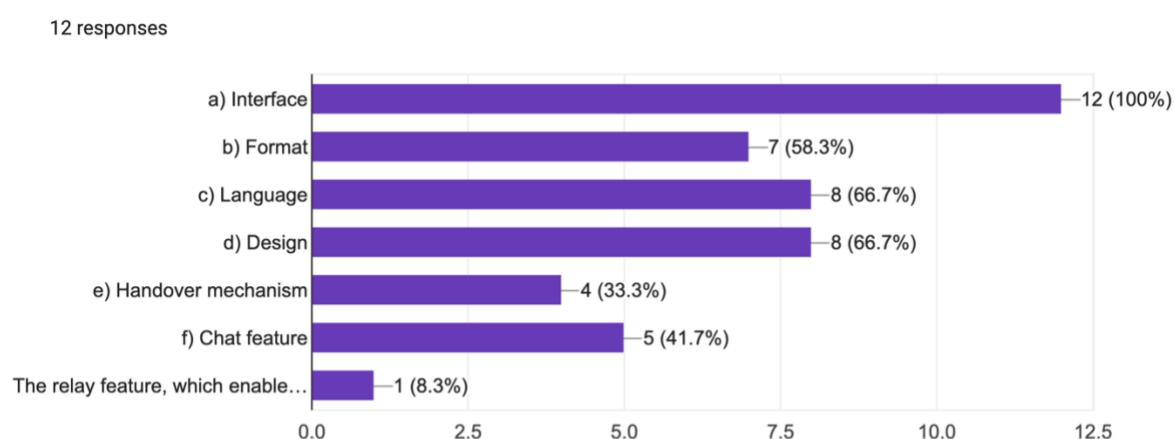
Figure 2.6 Preferences of Interpreters Regarding the Selected Platform's Features

2.2.6 Respondents' Experience with Providing Interpretation Services through the Zoom Platform

The findings presented in Figure 2.7 reveal that 11 participants, corresponding to 91.7 per cent, have experience providing interpretation services through the Zoom platform, indicating its widespread use in the field of interpretation. Its popularity is evidence that Zoom has become a preferred or commonly used tool among interpreters for remote interpretation services.

In contrast, one participant reported not using Zoom for interpretation services. This could be due to various factors, such as their specific work requirements, preferences for other platforms,

28

or limited exposure to remote interpretation technology. These findings reflect the prevalence of Zoom as a platform for interpretation services and its integration into the workflow of many interpreters, likely driven by its user-friendly features and accessibility.

12 responses

- a) Yes
- b) No

91.7%

8.3%
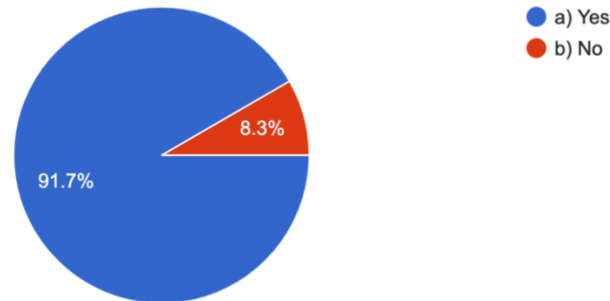
Figure 2.7 Respondents Experience with Providing Interpretation Services through the Zoom Platform

The survey provides insights into the frequency of RSI meetings conducted on the Zoom platform in the past year. Approximately one-third of respondents reported that a small portion, ranging from 0 to 25 per cent, of their RSI meetings occurred on Zoom during this period. A smaller group, around 16.7 per cent, indicated that a moderate share, ranging from 25 to 50 per cent, of their RSI meetings took place on Zoom. In contrast, one participant, corresponding to 8.3 per cent noted that a significant chunk, between 50 and 75, of their RSI meetings were conducted on Zoom. The majority, totalling 41.7 per cent, revealed that a substantial portion, ranging from 75 to 100 per cent, of their RSI meetings were held via Zoom. These findings underscore the platform's increasing prominence in the world of remote simultaneous interpreting, with a significant number of interpreters relying heavily on Zoom for their

29

meetings over the past year. This data highlights the platform's adaptability and widespread acceptance within the interpretation field.

12 responses

- a) 0 to 25 per cent
- b) 25 to 50 per cent
- c) 50 to 75 per cent
- d) 75 to 100 per cent

41.7%
8.3%
16.7%
33.3%
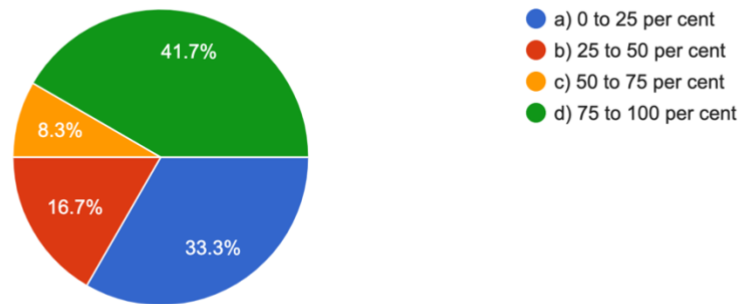
Figure 2.8 Percentage of Respondents' RSI meetings held on Zoom in the Previous 12 Months

2.2.7 Steps Taken By Respondents When Preparing For a Zoom Meeting

The responses regarding preparations for Zoom meetings offer insights into the preparation and planning carried out by interpreters ahead of an assignment. All respondents unanimously prioritize charging their devices to ensure they have sufficient power to conduct the meeting. Additionally, an overwhelming majority, 91.7 per cent, test their devices for functionality and prepare a backup device in case of issues, highlighting the importance of reliable equipment for a successful interpretation assignment.

Ensuring a stable internet connection is another unanimous priority, with all respondents recognising its critical role in virtual meetings. Furthermore, all respondents highlighted the importance of working in a quiet and peaceful environment, emphasising the demand for high-quality services without interruptions.

A significant majority, 83.3 per cent corresponding to 10 respondents, said they reach out to their booth partner to define communication methods and contingency plans in case of disconnection. Additionally, 91.7 reported preparing essential supplies like water on hand to minimise disruptions during extended sessions.

However, only one participant reported considering factors like backup internet options, bathroom needs, and a noise-free workspace as essential preparations for Zoom meetings.

The responses highlight that interpreters are committed to ensuring equipment reliability, internet connectivity, and a quiet working environment when preparing for Zoom meetings. The fact that ten respondents reported establishing communication lines with their booth partner shows the importance placed on cooperating with a booth partner, even in a remote setting. This also shows the importance of being in contact with a booth partner for a successful assignment. While some respondents consider additional measures like backup devices and supplies, others prioritise these aspects to a lesser degree.

13. What steps do you take when preparing for a Zoom meeting (tick as many as possible)?
12 responses

Option	Count
a) Charge my devices	12 (100%)
b) Test my devices	11 (91.7%)
c) Prepare a backup device	11 (91.7%)
d) Ensure I have my chargers a…	9 (75%)
e) Ensure I have a reliable inter…	12 (100%)
f) Ensure I'm in a quiet peacefu…	12 (100%)
g) Reach out to my booth partn…	10 (83.3%)
h) Ensure I have a bottle of wat…	11 (91.7%)
Back up internet options, bathr…	1 (8.3%)
Ensure I have noise free worki…	1 (8.3%)
I ensure I have a backup intern…	1 (8.3%)

Figure 2.9 Steps Taken by Respondents When Preparing For a Zoom Meeting

2.2.8 How Respondents Cooperate with Colleagues When Working in the Booth

The findings of the study show that interpreters in a booth employ various strategies to ensure smooth cooperation with their booth partners. Seventy-five per cent, which corresponds to nine participants, said that they commonly engage in terminology checks. This comes as a part of the feedback provider role played by a booth partner in a physical booth and helps maintain consistency and accuracy in interpretations. Additionally, around 66.7 per cent of respondents reported jotting down numbers for their booth partner to ensure precision.

Providing technical support is another common practice, reported by 66.7 per cent of respondents. This includes tasks like changing channels or troubleshooting equipment issues, and reporting them to the organisers to ensure uninterrupted interpretation.

Monitoring sound quality and equipment functionality is also a priority for 66.7 per cent of interpreters. This ensures that communication remains clear and effective throughout the session.

Furthermore, eight participants reported communicating with event organisers on behalf of their team, streamlining logistical aspects and allowing interpreters on the microphone at the time to focus on their primary task. Feedback exchange was highlighted as key by nine respondents, which corresponds to 75 per cent of the participants. This ongoing communication helps ensure the best possible delivery and improves collaborative efforts in the booth.

Finally, two respondents mentioned employing other methods of cooperation, indicating a level of adaptability based on specific contexts or individual preferences. It is clear that interpreters in a booth employ a range of collaborative strategies, including terminology checks, numerical notation, technical support, sound monitoring, communication with organisers, and feedback exchange. These practices contribute to effective teamwork and high-quality interpretation services.

a) Check terminology	9 (75%)
b) Write down numbers	8 (66.7%)
c) Provide technical support (s…	8 (66.7%)
d) Communicate with organiser…	8 (66.7%)
e) Check the sound (equipment)	8 (66.7%)
f) Provide feedback	9 (75%)
g) Other	2 (16.7%)
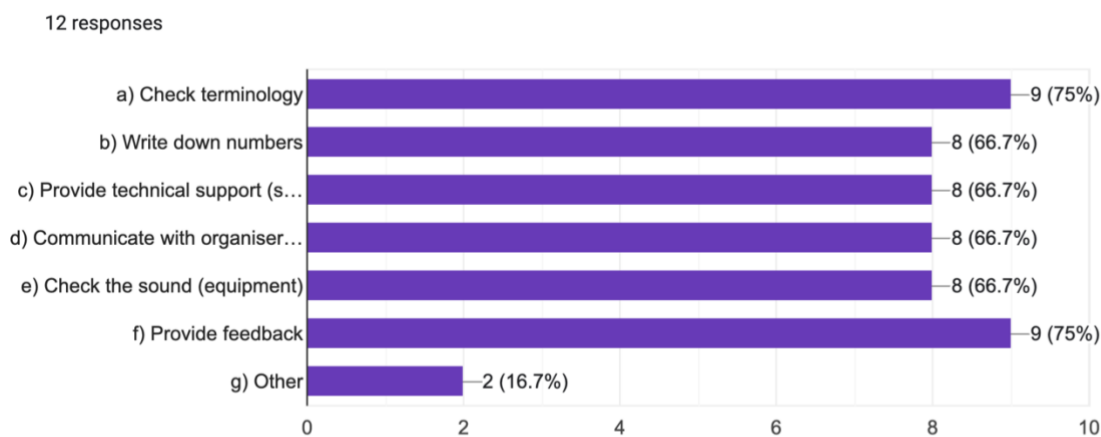
Figure 2.10 How Respondents Cooperate with Colleagues When Working in the Booth

2.2.9 Ways of Communicating with Partners When Working On Zoom

Interpreters working on Zoom utilise various means of communication with their partners. Approximately half or six of the respondents opt for Zoom's in-app messaging feature, allowing them to exchange information within the platform, thus facilitating real-time coordination. Additionally, 41.7 per cent prefer traditional text messages, leveraging the convenience and familiarity of this method. Only two respondents reported relying on phone calls for more in-depth or urgent updates. Notably, WhatsApp is a universally adopted tool employed by all respondents, likely due to its versatility and reliability for communication during remote interpretation sessions. These diverse communication methods reflect interpreters' adaptability and the importance of effective communication with their partners in when working on Zoom.

33

12 responses

Method	Count
a) In-app messaging	6 (50%)
b) Texts	5 (41.7%)
c) Call	2 (16.7%)
d) WhatsApp	12 (100%)
e) Other	0 (0%)
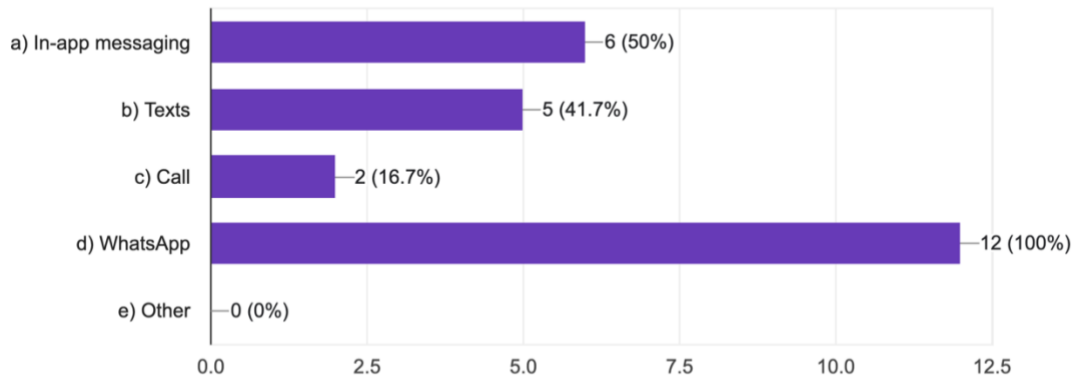
Figure 2.11 Ways of Communicating with Partners When Working in Zoom

2.2.10 Preferred Communication Method When Working on Zoom

Among the provided communication methods, WhatsApp stands out as the unanimous preference, with all 12 respondents favoring it. WhatsApp's popularity likely stems from its versatility and reliability in facilitating effective communication. There is an equal distribution of preferences for in-app messaging, texts, and calls, each at 25 per cent, suggesting that interpreters have varied preferences for these methods, possibly influenced by individual habits or specific situations. However, WhatsApp's universal appeal underscores its significance in interpreter collaboration during Zoom meetings.

12 responses
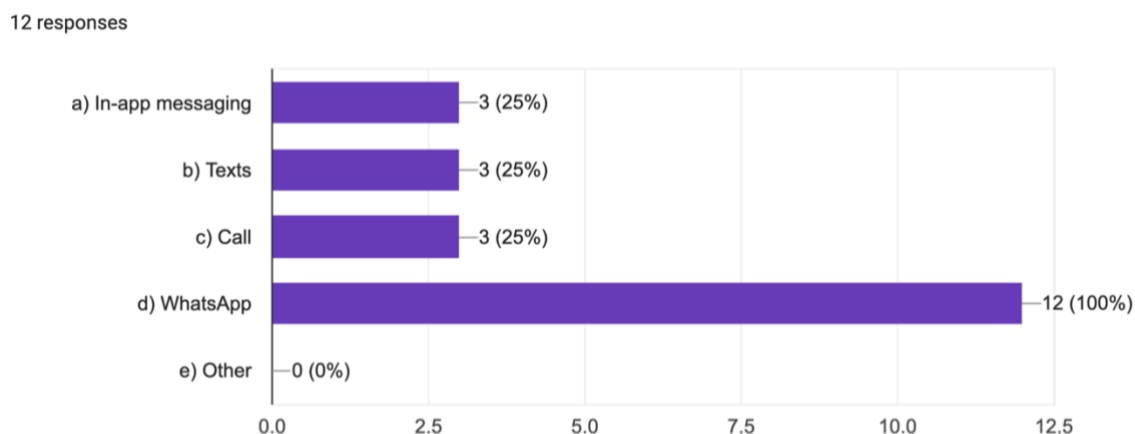
Figure 2.12 Preferred Communication Method when working in Zoom

2.2.11 Observation of a Group of Interpreters

The researcher conducted observations on a pair of interpreters and subsequently posed questions to them following the meeting. The findings provide valuable insights into the preparation steps and the actual execution of the assignment:

Both interpreters confirmed that they interacted with each other before the assignment began, likely to establish rapport and coordinate logistics. WhatsApp was unanimously chosen as the platform for their pre-assignment interaction, likely due to its ease of use and accessibility. Furthermore, both interpreters reported testing their equipment before the meeting, indicating a proactive approach to ensure technical reliability.

In the course of the meeting, the researcher's observations revealed that the sound quality was "good," suggesting that the interpreters had taken measures to ensure clear communication. It's worth noting that there were no reported instances of interference or interruptions during the assignment, indicating a seamless and uninterrupted interpretation process.

Additionally, both the delivery of interpretation and the overall flow of the meeting were rated as "good," reflecting the interpreters' ability to convey messages effectively and maintaining a smooth rendition. Notably, there were no unusual delays in the interpretation, highlighting the interpreters' ability to relay the message effectively.

2.3 Ways Interpreters Cooperate in the Zoom Platform Based on Desk Review of Literature

The Zoom technology enables interpreters to collaborate in order to ensure that the delivery is seamless. This would mean that both the participants and the interpreter can follow the speaker on the screen, as this may help better understand the message. Wadensjö (1998) asserts that interpreters plan the delivery of the message both subtly and overtly and engage in implicit coordination by translating the words and explicit coordination by organising the discourse. However, difficulties do arise occasionally. According to Morrison-Smith and Ruiz (2020), interpreters face challenges working in virtual environments, particularly in the way that technology is applied. In summary, the remote factor has an impact on the interpreter's mental, social, and emotional health.

In person meetings have lower coordination costs. Online meetings, however come with higher coordination costs. How successfully individuals cooperate with one another can be significantly impacted by the temporal distributions of virtual task times. This is due to the fact that interactions between the observer and the environment frequently distort how the world appears. Online interpretation is particularly challenging since it is unclear how much of this distortion is under the observer's control and how much is brought on by the observer's perspective. Some users, according to Ritsos et al. (2012) are not used to the Virtual Environment (VE), and they note that the monologues and dialogues would be an important

resource even if the VE were not used. This highlights the importance of the sense of presence achieved while taking part in a virtual environment, which may be indicative of the users' varied preferences or levels of autonomy. Some users will welcome the opportunity to engage with and immerse themselves in the virtual setting and will find value in the opportunities the virtual world provides.

The best practices for virtual meetings, according to Sox, Crews, and Kline (2014), involve live expert interaction, interactive experiences, and collaboration between meeting content creators and planners. In real-world examples, user-friendly technology and cooperation between planners and meeting content designers are among the best practices for hybrid meetings. Designers and planners of meeting content benefit from incorporating expert comments into their work. The complexity of the task involved and the time of meetings, however, can put a cap on employee engagement. When working alongside knowledgeable coworkers in a shared workspace, this can be a significant challenge.

In her 2005 study, Moser-Mercer set out to highlight the crucial role that multisensory integration plays in simultaneous interpretation. The findings show that the lack of virtual presence is one of the main factors contributing to a deterioration of performance in remote simultaneous interpreting as compared to live simultaneous interpreting. As was already established, the lack of a virtual presence is the main cause behind the poor performance. This absence causes a loss of recognition in simultaneous interpreters as well as consecutive interpreters. Simultaneous interpretation is quite challenging in the absence of a virtual presence, especially for people with limited eyesight and visual impairments. This deterioration in quality appears to be based on early onset of fatigue as a result of devoting more cognitive resources to comprehension during simultaneous interpreting at the cost of other parts of the

process, particularly production, of the resources necessary to maintain a high level performance.

According to Moser-Mercer (2005), the growth of the brain's production-related cognitive processes helped the simultaneous interpreting cognitive processes to emerge. Therefore, production is the process of figuring out the essential components of a text, while simultaneous interpreting is the process of figuring out and extracting these components from the text. When both of these activities are being carried out at once, they are highly integrated and productive.

Even with the Zoom platform functioning effectively, according to Murtiningsih and Ardlillah (2021), interpreters still experience challenges. Murtiningsih and Ardlillah argue that in addition to difficulties associated with the mastery of the source language, trainee interpreters also faced challenges associated with the cadence of the speaker, as well as his inflexion and pronunciation, and suggest several methods to overcome these difficulties. These include asking for clarification, using a smartphone, enlisting the help of a friend, using body language, asking the speaker to speak in their second language, asking for repetition, and focusing more on the source language.

Another frequent challenge faced by interpreters is maintaining the meaning and tone when communicating in a different language. According to Braun (2017), expanding and adding words can be a useful strategy for resolving this issue. This method is used by interpreters to ensure that their message is transmitted as accurately as possible.

Saeed et al. (2022) note that, as opposed to interpreter-machine contact, visual information through interpreter coordination supports the interpreting process better. One possible approach

Zoom developers could implement to assist interpreters' is to streamline information presentation inside the Zoom platform and incorporate automatic speech recognition. On the other hand, Seeber et al. (2019) contend that the availability of visual inputs, such as speakers at the conference, and the presence of a highly qualified team on-site can address the feeling of alienation or lack of full participation that affected the work of interpreters.

Several studies have sought to assess how interpreters cooperate when carrying out phone interpretation. According to Castagnoli and Niemants, (2018) establishing communication typically involves gesture, gaze, head, and body movements. As a result, interactional features relating to telephone interpreting as a type of remote interpreting demonstrate that coordination amongst interpreters is essential for a better user experience. However, a comprehensive approach is required to better grasp the dynamic difficulties of Video Remote Interpreting (VRI) in various contexts, according to a study by Davitti and Braun (2020). To achieve conversation interpreting in corroborative environments like customer service and nurse-patient interaction, VRI interpreters interact and cooperate through spatial management, dyadic sequences, and turn management. As a result, in VRI, the study of verbal behaviour is employed to look at the dynamics of dialogue exchanges.

2.5 Summary

This chapter presented an analysis of primary data as well as theoretical literature on the study variables. The study delves into the ways interpreters cooperate within the Zoom platform, offering comprehensive insights based on primary data sources and a literature review. Notably, all respondents displayed a strong familiarity with Remote Simultaneous Interpreting (RSI), signifying its widespread recognition. The data highlights the increasing adoption of virtual meetings, with three respondents, corresponding to 25 per cent, engaging in 50 to 75 per cent

of their work virtually, likely influenced by factors like the pandemic and technological advancements. Zoom emerged as the primary RSI platform, with strong preferences for format, design, and language support among interpreters. WhatsApp stood out as the preferred communication method. Observations of interpreter collaboration revealed meticulous preparation, excellent sound quality, and effective delivery. Challenges in virtual interpreting, such as maintaining presence, were also identified through the literature review. Overall, the findings provide valuable insights into interpreter practices and technology integration within the Zoom platform, shedding light on key areas of cooperation and challenges faced in the field. Desk review of existent literature shows that remote interpreting refers to the use of communication tools to connect to an interpreter and a participant located in a different room, structure, neighborhood, city, or country. Remote interpreting by phone is frequently referred to as telephone interpreting or over-the-phone interpreting. When referring to spoken-language interpreting remotely via videoconference, the term remote interpreting is frequently used. Zoom technology contains features that allows interpreters to rely on visuals of the speaker, which allows them to better fulfill their duty. The Zoom platforms however, have no features that would allow interpreters to see their booth partner, a factor which would aid coordination between booth partners. How successfully individuals cooperate with one another can be significantly impacted by the distributions of virtual task times. Remote Simultaneous Interpretation can therefore be particularly challenging since the interpreters must rely on hearing both his booth partner and the Speaker, often concurrently to follow the meeting and provide their partner with support in terms of feedback and to step in case of any technical hitches. Meanwhile, researchers have also conducted studies to assess how interpreters respond to challenges when working in the booth. There are nine techniques for overcoming interpreting obstacles in order to get the best results. These include asking for clarification, using a smartphone and enlisting the help of a friend. Video Remote Interpretation allow the

interpreter to engage with other participants through a platform without sharing the same physical location (Davitti 2020). A comprehensive approach is required to better understand the challenges, as well as how interpreters mitigate the challenges associated with the VRI. Zoom fatigue is brought on by both non-technical elements and technological components. Using VC technology may alter or worsen the precise interaction patterns that make up the flow of human communication. Poor audio and video quality can also contribute to such challenges, making communication less effective. Zoom only offers a small number of languages (It serves only ten languages). This restriction severely limits participation. It does not support language interpretation for private meetings or breakout rooms. If there was need for records, organisers would have to record the session in each language separately.

Evidently, the interpretation sector and meeting organisers must address concerns about the use of technology, supply and demand, problems specific to particular jobs, and sustainability. The advantages and concessions based on the experiences of using Zoom include reduced costs, reduced environmental footprint and increased participation. Zoom technology has had a significant impact on how telephone and video link usage affects the caliber of interpreter-mediated communication. Zoom is hence becoming more crucial in many areas of life, including healthcare.

CHAPTER THREE

CHALLENGES FACED BY INTERPRETERS WORKING ON ZOOM PLATFORM

3.1 Introduction

This section presents the challenges encountered by interpreters while working on the Zoom platform. The section explores these challenges in detail, shedding light on the specific obstacles interpreters encounter when navigating the virtual interpretation landscape. Understanding these challenges is crucial for both interpreters and platform developers to enhance the remote interpretation experience and ensure effective communication in an increasingly globalised world.

3.2 Major Challenges Faced by Interpreters Working on the Zoom Platform According to Primary Data Sources

The respondents were presented with selected questions to better assess the challenges interpreters faced when working on the Zoom platform.

3.2.1 Challenges Faced by Interpreters on Zoom

Five out of 12 respondents reported experiencing technical challenges when communicating with their booth partner during assignments on Zoom, as shown in Figure 3.1, indicating the importance of addressing these issues for a smoother RSI experience. According to Ritsos et al. (2012) technical challenges include issues related to the functioning of the digital platform itself. These issues can range from audio and video quality problems to internet connectivity disruptions.
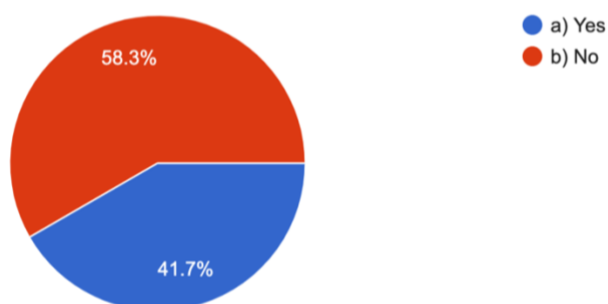
Figure 3.1 Difficulties When Communicating With their Partner While Working on Zoom

These challenges can affect an interpreter's ability to hear and see the speaker clearly, as well as their capacity to communicate with the audience and their booth partner in real-time as shown in Figure 3.3.
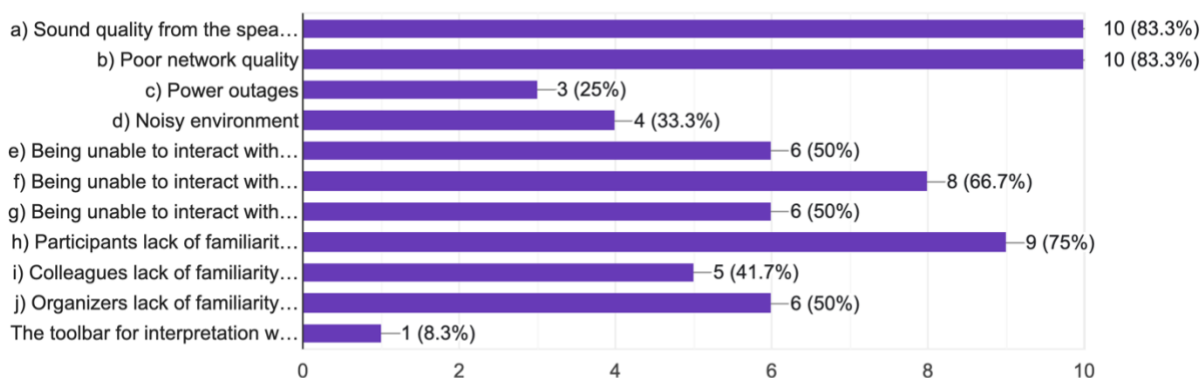
Figure 3.3 Main Challenges Faced When Working on Zoom

3.2.1.1 Technical Challenges

Ten respondents, corresponding to 83.3 per cent, encountered challenges associated with sound quality issues from the speakers, impacting the clarity of audio and, consequently, interpretation. Poor network connectivity was highlighted as a concern by 83.3 per cent of the respondents, leading to potential disruptions and communication delays. Power outages, although less common (25 per cent), can have critical implications for message delivery. These technical challenges highlight the importance of addressing audio and network issues to ensure interpreters can perform their assignments effectively.

One respondent highlighted the movable toolbar obstructing the screen during presentations and live captioning as a challenge. This technical challenge highlights the need to consider the input of interpreters when designing interpretation features for the Zoom platform.

3.2.1.2 Logistical Challenges

Half of the respondents described the inability to interact with booth partners in person as a key challenge when engaging in RSI. Eight respondents, which corresponds to 66.7 per cent, highlighted the inability to interact in person with the technical team, while about half of the respondents highlighted the inability to interact with organisers as an obstacle to performing RSI more effectively. These logistical challenges highlight the importance of enhancing virtual teamwork and communication mechanisms.

Participants' limited familiarity with the Zoom platform, highlighted 75 per cent of the respondents, can lead to difficulties in managing the virtual meeting environment. Organisers' lack of proficiency with the Zoom platform was cited as a challenge by 50 per cent of the respondents. Additional training for all stakeholders in the RSI process, such as organisers,

interpreters, participants and technicians, would go a long way in ensuring a better RSI experience for all.

3.2.1.3 Environmental Challenges

A third of the respondents, corresponding to four interpreters, noted that a noisy environment, which can introduce distractions for both the interpreter and participants, can have a negative impact on the RSI experience. These environmental challenges underscore the need for interpreters to work in quiet and professional settings to minimise disruptions.

3.2.2 Challenges Faced When Communicating with a Partner When Working on Zoom

Interpreters working on Zoom encounter several challenges when communicating with their partners. Network issues, causing delays in texting or calling partners, affect 66.7 per cent of respondents. Additionally, eight respondents noted that partners sometimes do not receive their messages in a timely manner, impacting cooperation within the booth. Six respondents said that they found juggling interpretation and text/call communication concurrently challenging, highlighting the cognitive demands of multitasking. Furthermore, three interpreters, corresponding to 25 per cent of the respondents, said that they struggled to manage two devices simultaneously during interpretation sessions. These challenges underscore the need to address technical and cognitive aspects for more effective partner communication in remote interpretation on the Zoom platform.

12 responses

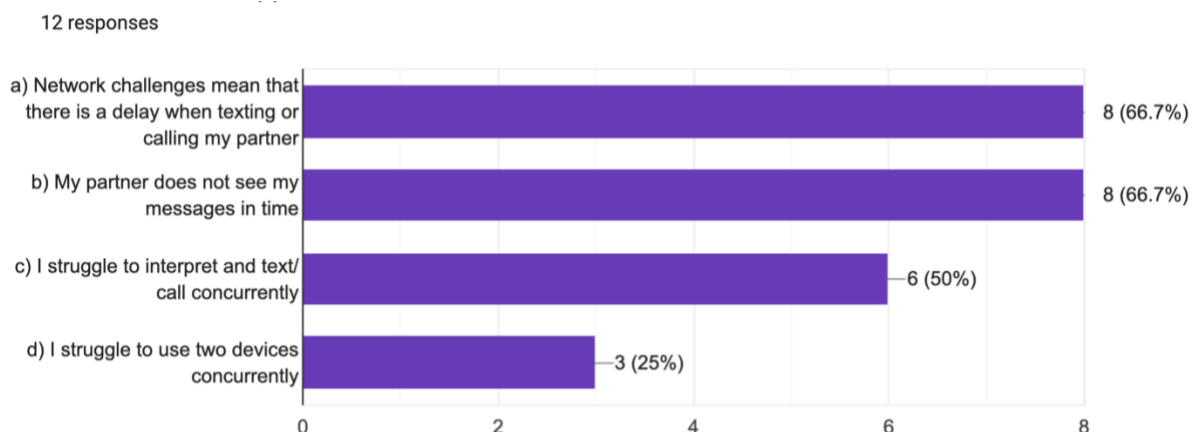| Option	Value
a) Network challenges mean that there is a delay when texting or calling my partner	8 (66.7%)
b) My partner does not see my messages in time	8 (66.7%)
c) I struggle to interpret and text/call concurrently	6 (50%)
d) I struggle to use two devices concurrently	3 (25%)

Figure 3.2 Challenges Faced When Communicating With a Partner When Working On Zoom

3.3 Technical Issues Facing Interpreters

Researchers have increasingly focused their studies on challenges faced by interpreters working in an RSI setting. These challenges include connectivity problems, audio or video quality issues, and difficulties in navigating the platform (Bernardi & Gnani, 2022). The skills required to use remote platforms remain underdeveloped, which contributes to some of the technical challenges faced by interpreters (Bernardi & Gnani, 2022). However, despite these challenges, interpreters have stated their preference for video interpreting over telephone interpreting due to the visual cues interaction, which leads to reduced cognitive demand on the interpreter (Bernardi & Gnani, 2022).

The findings show that interpreters working on the Zoom platform have faced several challenges since the platform introduced the interpretation interface. Some of the main challenges are associated with the technical issues experienced by both interpreters and participants during interpretation sessions. These technical issues can include connectivity problems, audio or video quality issues, and difficulties in navigating the platform (Archibald et al., 2019). Limited published information is available on Zoom's usability, and future studies could explore how computer literacy and platform usability impact the frequency and intensity of technical issues reported (Archibald et al., 2019).

The use of videoconferencing platforms like Zoom has become increasingly prevalent in various professional settings, including interpretation services. However, there are several technical issues that interpreters may encounter while working on the Zoom platform. These issues can significantly impact the quality and effectiveness of interpretation services.

One of the main technical issues faced by interpreters on Zoom is related to internet connectivity. A poor internet connection can lead to audio and video disruptions during interpretation sessions. This could prevent the interpreter from hearing the speaker and participants from hearing the interpreter. This could lead to omissions and even misinterpretation. A poor internet connection could also see, the speaker, interpreter and even participants to drop from the Zoom call, which would lead to a gap in the interpretation. Archibald et al. (2019) highlight the importance of connectivity in videoconferencing platforms and the need for researchers to explore how computer literacy and platform usability impact the frequency and intensity of technical issues reported.

Another technical issue is related to audio quality. Poor audio quality can make it difficult for interpreters to accurately hear and interpret the speaker's words and, therefore, increase the cognitive demand on the interpreter. This can be caused by various factors, such as microphone settings, background noise, or audio compression algorithms used by the platform. Warnica et al. (2020) discuss the impact of Covid-19 on radiology resident training and education workflow and mention that residents reported challenges with technical skills, which could include issues with audio quality.

Furthermore, interpreters may face challenges with the platform's user interface and features. Zoom has a range of features that can enhance the interpretation experience, such as the ability to mute and unmute participants, screen sharing, and chat functions. However, interpreters may encounter difficulties in navigating these features or may experience glitches that affect their ability to effectively use them. Young (2020) discusses the privacy crisis faced by Zoom and

highlights the importance of companies incorporating privacy by design and being transparent about their practices, which can also extend to the usability and functionality of the platform.

To address these technical issues, it is crucial for interpreters and organizations to provide adequate training and support to interpreters using the Zoom platform. This can include training on troubleshooting common technical issues, optimizing audio settings, and utilizing the platform's features effectively.

3.4 The Lack of In-Person Interaction

Another challenge faced by interpreters on the Zoom platform is the lack of in-person interaction, which can affect rapport building and the overall quality of interpretation. Prior to the rise of Zoom, qualitative researchers discussed the benefits and challenges of online video conferencing platforms. Some researchers found that platforms like Skype aided rapport building and offered greater flexibility, while others found that in-person interviews allowed for richer data collection (Oliffe et al., 2021).

In addition to technical issues, interpreters in the medical field have faced difficulties in establishing a relationship of trust with patients through visual contact and onsite presence, which is crucial for effective interpretation in healthcare settings (Bernardi & Gnani, 2022). The lack of in-person interaction and the inability to interact before and during consultations have been identified as disadvantages that can negatively impact the service offered to patients, particularly those with mental health problems (Bernardi & Gnani, 2022).

The literature also highlights the importance of computer literacy and IT skills for interpreters and healthcare workers to effectively navigate the Zoom platform and overcome technical

issues (Bernardi & Gnani, 2022). Poor infrastructure and a lack of IT skills among healthcare workers can contribute to connectivity problems and other technical difficulties (Bernardi & Gnani, 2022).

Despite these challenges, there is an overall positive attitude among interpreters towards the use of distance interpreting technology, including video remote interpreting (Krasnopeyeva & Volchkova, 2022). Interpreters recognize the benefits of remote interpreting, such as increased accessibility and the ability to overcome geographical barriers (Krasnopeyeva & Volchkova, 2022). However, they also acknowledge the psychological discomfort and technical difficulties that can arise, which may require interpreters to take on new responsibilities (Krasnopeyeva & Volchkova, 2022).

To improve the usability of the Zoom platform and remote interpreting in general, there is a desire among interpreters for continuous improvement and the development of better ergonomic solutions (Şengel, 2022). Interpreters recognize the potential of the Zoom platform but also express a need for enhancements and advancements in remote simultaneous interpreting ergonomics (Şengel, 2022).

3.5 Challenges Faced by Interpreters on the Zoom Platform

From the perspective of interpreters, the usability of the Zoom platform is a key factor that impacts the take-up and dissemination of remote interpreting services. Usability refers to how easy a product is to learn and use, and it is an important aspect of designing accessible and user-friendly products (Şengel, 2022). The functionality and simplicity of the Zoom platform has made it popular among users, with a significant increase in usage since the beginning of the pandemic (Alia et al., 2022).

Overall, interpreters working on the Zoom platform have faced challenges related to technical issues, lack of in-person interaction, and the usability of the platform. These challenges can impact the quality of interpretation and the overall experience for both interpreters and participants. Further research is needed to explore the impact of computer literacy, platform usability, and other factors on the frequency and intensity of technical issues reported by interpreters on the Zoom platform.

The usability challenge of the Zoom platform for interpreters has been a topic of interest since the shift to remote work and virtual communication in 2020. Several studies have explored the usability of Zoom from the perspective of different user groups, including researchers, students, clinicians, and individuals with disabilities.

One study conducted by (Archibald et al., 2019) examined the perceptions and experiences of researchers and participants using Zoom for qualitative data collection (Archibald et al., 2019). While the study did not conduct a formal usability analysis, it highlighted the need for future research to explore how computer literacy and platform usability impact the frequency and intensity of technical issues reported (Archibald et al., 2019).

In the context of online learning, a study by Nhu & Dan (2022) investigated the challenges faced by students during online learning using Zoom (Nhu & Dan, 2022). The study found that students encountered difficulties related to technology and connectivity, such as incompatible devices and weak internet coverage (Nhu & Dan, 2022). These challenges can impacted the usability of the Zoom platform for students and hindered their learning experience.

Another study by Şengel (2022) focused specifically on the usability of the Zoom platform for professional conference interpreters (Şengel, 2022). The study applied the USE questionnaire to assess the usability of Zoom and found that the platform received high usability scores from interpreters (Şengel, 2022). However, the study also highlighted the interpreters' desire for improvements in the platform, indicating areas for further development in remote simultaneous interpreting ergonomics (Şengel, 2022).

Usability evaluations have been conducted in various domains to identify and address usability issues in Zoom and similar video conferencing platforms. For example, a study by Agnisarman et al. (2017) conducted a heuristic evaluation of the clinician user interfaces of home-based video telemedicine systems, which included Zoom (Agnisarman et al., 2017). The evaluation aimed to identify usability issues and provide recommendations for improving the usability of the system (Agnisarman et al., 2017).

In the field of accessibility, Leporini et al. (2023) conducted a study to understand the experiences of screen reader users with video conferencing tools, including Zoom (Leporini et al., 2023). The study identified barriers and challenges faced by individuals with visual impairments and proposed inclusive design guidelines to improve the accessibility of video conferencing platforms (Leporini et al., 2023).

3.6 Summary

The chapter discussed the challenges faced by interpreters while working on the Zoom platform. The data, sourced from primary responses, surveys, group observations, and extensive literature reviews, has provided a nuanced understanding of the multifaceted hurdles faced by interpreters in virtual settings.

The section began by introducing the objective of exploring the challenges faced by interpreters on the Zoom platform, setting the stage for the subsequent detailed analyses. The chapter then delved into the major challenges experienced by interpreters, dividing them into distinct categories to offer a comprehensive view. A key finding was that a significant percentage (41.7 per cent) of interpreters reported difficulties in communicating with their partner while working on Zoom. This indicates a substantial challenge that needs to be addressed to enhance collaboration and the overall effectiveness of interpretation services.

The challenges associated with partner communication extended to network issues affecting 66.7 per cent of respondents, highlighting the important role of stable internet connectivity in remote interpretation. Additionally, interpreters' struggles in managing multiple devices during sessions (25 per cent) highlights the cognitive demands of the task.

Technical challenges were a prevalent theme, with issues ranging from sound quality (83.3 per cent) and network stability (83.3 per cent) to power outages (25 per cent) and unfamiliarity with the Zoom platform (75 per cent). These findings emphasize the need for targeted technical support and training to enhance the interpreter's experience and the quality of interpretation. The lack of in-person interaction emerged as a significant challenge, impacting rapport building and overall interpretation quality. This aspect is particularly crucial in healthcare settings, where trust between interpreter and partner are paramount.

Finally, the chapter highlighted the usability challenges of the Zoom platform. Despite its popularity, interpreters expressed the need for continuous improvement to the platform optimize their experience.

The findings highlight the complex nature of interpretation on virtual platforms like Zoom. These challenges include technical, interpersonal, and usability aspects, all of which require targeted interventions and support mechanisms to facilitate effective interpretation services. Addressing these challenges is key in ensuring the seamless delivery of interpretation in remote settings. The chapter provides a valuable foundation for further research and the development of best practices in this evolving landscape.

CHAPTER FOUR

IMPACT OF THE CHALLENGES FACED BY INTERPRETERS WORKING ON ZOOM ON THE QUALITY OF INTERPRETATION

4.1 Introduction

The challenges encountered by interpreters when working on Zoom have a significant impact on the quality of interpretation. Drawing from primary data sources and existing literature, this chapter delves deeper into how these challenges impact the accuracy, flow and overall effectiveness of interpretation in virtual settings.

4.2 Challenges Encountered While Cooperating with a Partner on Zoom

Nine interpreters, corresponding to 75 per cent of the respondents, said that the challenges encountered while cooperating with their partner on Zoom do indeed affect their delivery. This high percentage suggests that the difficulties faced during collaboration in a virtual environment can have a notable impact on the interpreters' ability to convey their message effectively, highlighting the importance of addressing these challenges for improved performance. Figure 4.1 presents these findings.
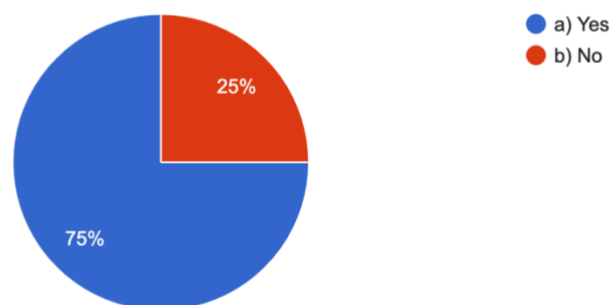
Figure 4.1 Challenges Encountered While Cooperating with a Partner on Zoom

4.3 Effect of Challenges Experienced While Cooperating with a Partner on Zoom on Interpreters' Delivery

The challenges faced by interpreters when cooperating with a partner on Zoom may result in omissions, delays, and disruptions in the delivery flow, ultimately negatively impacting the quality of interpretation services on Zoom, as shown in Figure 4.2.

12 responses

a) Leads to omissions	6 (50%)
b) Leads to misinterpretation	0 (0%)
c) Leads to delays	7 (58.3%)
d) Affects the delivery flow	11 (91.7%)
e) Other	0 (0%)
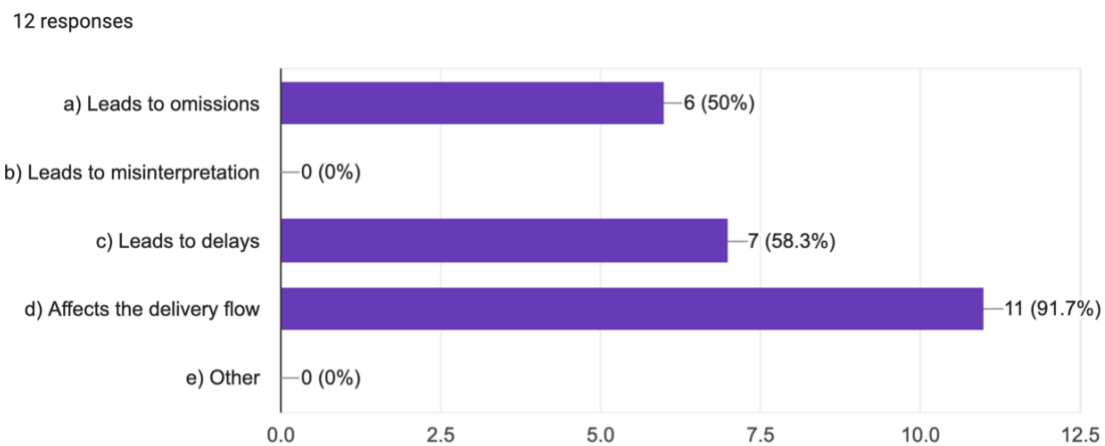
Figure 4.2 Effect of Challenges Experienced While Cooperating with a Partner on Zoom on Interpreters' Delivery

4.3.1 Omissions and Incompleteness

When dealing with technical issues, half of the respondents noted that they might experience omissions in their interpretation. These technical challenges, such as audio or video disruptions, can lead to gaps in the interpretation, resulting in a less comprehensive and accurate delivery. For instance, if the interpreter cannot hear the speaker clearly due to sound quality issues, they might miss certain parts of the message, leading to omissions in the interpretation.

The response provided by the respondents was corroborated by data collected by the researcher while observing the two interpreters which took part in the observation exercise.

When questioned by the researcher, Interpreter 1 (Oti), reported facing challenges related to poor sound quality, a fast speaker, and lack of a written speech. The interpreter also mentioned a link malfunction, which could be a technical issue or the result of the interpreter's lack of familiarity with the system. To make their work easier, the interpreter suggested a more flexible handover from the colleague and recommended sharing the speech in advance while reminding speakers to speak slower.

Interpreter 2 (Amani) encountered challenges which he attributed to the speaker being fast. The interpreter was unable to contact the organiser (researcher) to request the speaker to speak slower. This was attributed to his inability to multitask (text and interpret at the time). Similar to the first interpreter, they suggested a flexible handover process and emphasised the importance of the speaker's pace and articulation. Additionally, the interpreter expressed a need for improved sound quality by Zoom. The researcher noted that the interpreter summarised part of a passage. In the sample speech from Obama being interpreted, the speaker said, "we are gathered here in times when the very foundations of our lives were shaken, the old order has been shaken, the old ideas and institutions have crumbled, and a new generation is called upon," the interpreter summarised the passage and said that "we are gathered here in times when the very foundations of our lives were shaken, an a new generation is called upon,". The omission could have been caused by an internet problem or by the speaker being too fast. The interpreter did not report facing any internet challenges. It seems that he was unaware of the omission, and he had no booth partner to point it out to him as he was working remotely. This once again highlights the critical role played by booth partners in providing feedback to ensure the accuracy of the delivery.

The researcher observed that she could hear the two interpreters clearly during the meeting, indicating that sound quality might not have been a systemic issue during the meeting. Furthermore, there were no reported interference or interruptions during the meeting, suggesting that the interpreters ensured that they had a quiet working environment.

4.3.2 Delays in Interpretation

Technical challenges can also contribute to delays in interpretation, as reported by seven interpreters, corresponding to 58.3 per cent of the respondents. Delays in communication can result in a longer "decalage" between the speaker and interpreter. This extended delay can affect the timeliness and fluidity of communication, potentially impacting participants' overall experience. For example, if there is a lag in video or audio transmission, the interpreter may struggle to provide real-time interpretation, leading to a delay in conveying the message. If the speaker shares a joke or makes a comment aimed at eliciting a reaction, a longer decalage could negatively impact the overall experience of the participant relaying on the interpretation, as he or she may not respond to the speaker in a timely manner.

Interpreter 1 (Oti) noted that the delivery was good, despite some delays. The flow was good despite the delay, and the handover process was smooth at the end of a paragraph.

Interpreter 2 (Amani) reported that the delivery was good, and there were no reported delays. The handover process was also smooth, but it's worth noting that the interpreters were working on relatively short speeches, which allowed for a smooth handover. Longer speeches might present challenges in handover if they exceed the recommended 30-minute working time for interpreters.

The researcher noted that there were no reported instances of interference or interruptions, suggesting a continuous and smooth flow of communication. Delivery and the overall flow of

interpretation were also rated as "good," indicating effective message conveyance and smooth communication between interpreters and participants.

4.3.3 Disruptions in Delivery Flow

The most prevalent impact, as reported by 11 respondents, corresponding to 91 per cent of interpreters that took part in the study, is on the delivery flow.

The researcher observed no disruption in the delivery of the two participants who took part in the experiment. This could have been due to the fact that the speeches were relatively short.

Challenges related to work conditions, such as background noise or interruptions, can disrupt the natural flow of interpretation. This disruption makes the interpretation less seamless and coherent, hindering participants' comprehension and engagement. For instance, if the interpreter's home environment is noisy, background sounds may interfere with the interpretation, negatively affecting the experience of the listener.

4.3.4 Variability in Adaptation

Challenges related to an interpreter's profile, such as their familiarity with remote interpretation technology, can lead to variability in adaptation. This variability may impact an interpreter's ability to navigate the virtual environment effectively. While this challenge doesn't directly result in omissions or delays, it can affect the interpreter's overall performance. For example, an interpreter less experienced with the Zoom platform may take longer to troubleshoot technical issues, leading to delays in communication. A less experienced interpreter might accidentally engage functions that could negatively affect his performance, such as muting the microphone, or switching on his camera.

These findings underscore the critical importance of addressing and mitigating the challenges faced by interpreters when cooperating on the Zoom platform to ensure the delivery of high-quality interpretation

4.4 Impact of Challenges Facing Zoom Interpretation on the Quality of Interpretation

The impact of challenges experienced during Zoom interpretation on the quality of interpretation is multifaceted and spans various categories.

4.4.1 Impact on Quality Assurance

Quality assurance is a paramount concern, particularly in the context of remote interpretation using platforms like Zoom. Establishing robust credentialing, training, and client recognition processes is imperative to ensure the quality of interpretation services. The absence of quality assurance measures can result in misinterpretations or inaccuracies in the delivered message, significantly impacting communication. Maintaining high standards for interpreters and the interpretation process is essential for conveying messages accurately (Eser, 2020). Upholding these standards is of utmost importance.

4.4.2 Impact on Sustainability

Sustainability challenges within the interpreting profession encompass attrition and casualisation, where interpreters may either exit the field or engage in freelance work without job security. High attrition rates and widespread casualisation can result in the loss of experienced interpreters, with detrimental consequences for the overall quality of interpretation services. Ensuring the sustainability of interpreters is indispensable for maintaining the resilience and long-term viability of the profession (Eser, 2020). Retaining experienced interpreters remains of key importance for the sector and for younger interpreters who could benefit from more experienced booth partners.

4.4.3 Impact on the reputation of RSI

Interpreters encounter a range of technological challenges when utilising Zoom for interpretation, including issues like poor sound quality and interruptions in internet connectivity. These technological obstacles have the potential to result in misunderstandings and miscommunication, ultimately diminishing the quality of interpretation services. It is imperative to address technological limitations to ensure the effectiveness of the interpretation process (Impact of Poor Sound Quality - AIIC). Dependable and efficient technology is a fundamental requirement for the provision of effective interpretation services. The challenges faced by interpreters when working on Zoom affect the quality of the interpretation service. If these challenges become recurring, organisers may associate them with RSI and opt for a return to in-person meetings.

4.4.4 Impact on Interpreter Adaptability

Interpreters face the challenge of adapting to diverse environments and addressing technical limitations when conducting interpretations on Zoom. The process of adjusting to different settings and overcoming technical constraints can put an addition cognitive burden on the interpreter and negatively impact the quality of interpretation services. Interpreters must demonstrate their ability to navigate potential communication obstacles that may arise in virtual settings (Eser, 2020). Adaptability is a crucial skill to preserve the integrity of the messages being conveyed.

4.4.5 Impact on Technological Adoption

The gradual uptake of interpreting technologies by interpreters is a significant barrier to the profession's evolution. The resistance to embrace interpreting technologies can hinder

operational efficiency and, in turn, may have repercussions on the quality of interpretation services. It is key to promote and encourage interpreters to take advantage of existing technologies to enhance efficiency (Corpas and Gaber, 2018). Embracing technology can lead to improved interpretation quality.

4.4.6 Impact on Remote Interpretation Transition

The shift towards remote interpretation, notably during the Covid-19 pandemic, ushered in new challenges and technological constraints. These challenges, associated with remote interpretation, have the potential to impact the quality of interpreter-mediated communication, especially concerning disparities in audio-visual streams and interaction dynamics. The adoption of remote platforms has reshaped the landscape of interpretation (Hale et al., 2022). Overcoming these challenges is key to ensuring good quality of interpretation services.

4.4.7 Impact on Public Service Interpreting and Translation

Obstacles encountered in public service interpreting and translation may result in the loss of meaning and ineffective coordination between interpreters and their intended audiences. Such challenges have the potential to significantly impact the quality of interpretation services, particularly in regions characterized by intricate linguistic and cultural dynamics. Addressing these challenges within public service interpreting is imperative for upholding professionalism (Han and Valero-Garcés, 2019).

4.4.8 Impact on Education of Interpreters and Translators:

Technological challenges encountered in the training of interpreters and translators, have the potential to undermine the quality of educational programs. These obstacles could lead to a deficit in professionalism among trainees, subsequently impacting the quality of interpretation services. It is of utmost importance to secure the effectiveness of interpreter and translator

education to uphold the standards of interpretation quality (Han and Valero-Garcés, 2019). Providing high-quality training is imperative for interpreters.

4.5 Ways to Address the Challenges

The respondents provided insights into how to address the challenges associated with the quality of interpretation over Zoom. These actions can be categorised into the following key areas:

4.5.1 Preparedness

About 83.3 per cent of the respondents pointed out that to prevent disruptions during the interpretation process, interpreters and organisers should ensure that their devices are fully charged and have chargers readily available. This approach aligns with the principle of maintaining reliable equipment and preparedness, as highlighted by Eser (2020).

Testing devices (75 per cent) before the meeting is another valuable step in the preparation for an assignment as it helps identify and resolve potential technical issues in advance, contributing to quality assurance and technical readiness, in accordance with Hale et al. (2022).

Moreover, having backup devices on hand, as highlighted by ten respondents in the study which corresponds to 83.3 per cent, provides a safety net in case of technical problems, reflecting the importance of preparedness for contingencies, as suggested by Eser (2020).

Regular updates to the Zoom app and devices are essential for ensuring optimal performance and embracing technological advancements, an idea espoused by Corpas and Gaber (2018). This step was also highlighted as key by 91.7 per cent of the interpreters who took part in the study.

High-quality microphones and headsets have been highlighted as being crucial for achieving clear audio transmission by all 12 respondents, which aligns with the focus on technological solutions and addressing sound quality issues, as discussed in the impact of poor sound quality by AIIC.

A stable internet connection, complemented by a backup data source, has been highlighted as being key, by all 12 respondents to avoid interruptions during interpretation sessions. This practice is in line with the need to address technological challenges, as emphasised in the impact of poor sound quality by AIIC.

4.5.2 Communication

To ensure seamless collaboration among organisers, interpreters, technicians, and partners, effective communication is crucial. It is essential that all parties involved agree on a method of communication. This practice promotes clarity, coordination, and teamwork, as suggested by Eser (2020). Ensuring all stakeholders are on the same page it enhances the overall efficiency of the interpretation process.

Taking a proactive approach to technical challenges involves pre-planning for potential disconnections. This strategy anticipates technical issues and ensures that measures are in place to address them in advance. By doing so, interpreters and organisers minimize the impact of technical disruptions on the interpretation process, in line with the principle of preparedness emphasized by Eser (2020).

4.5.3 Collaboration

All respondents agreed that effective collaboration is essential for successful interpretation over Zoom. Organisers, interpreters, technicians, and partners must work together harmoniously to

address challenges and ensure a smooth interpretation process (Eser, 2020) as shown Figure 4.2.

12 responses
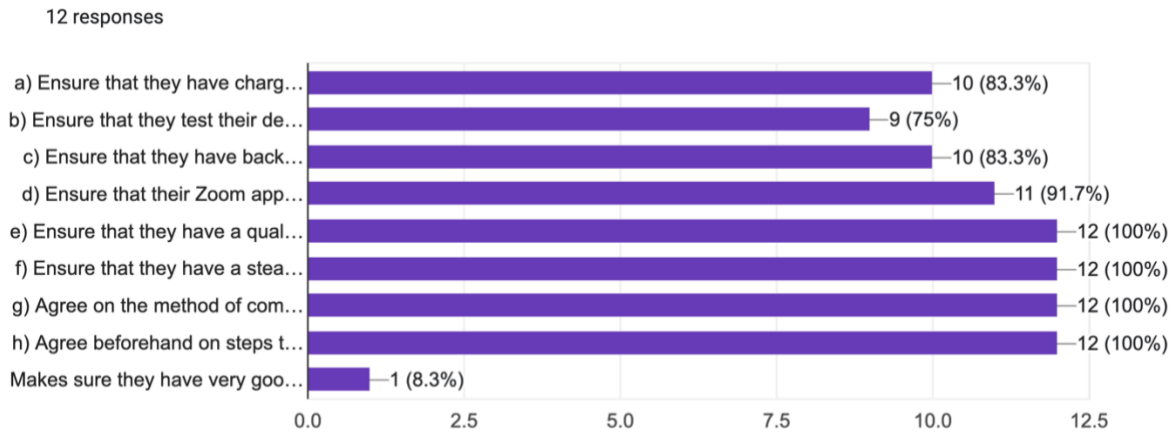
Figure 4.2 Ways to Address the Challenges

4.7 Having Physical Contact with an Interpretation Partner

The respondents were asked if they wwouldconsider it helpful if they had physical contact with their partner. All respondents agreed that having physical contact with their partner was helpful. Physical contact can facilitate smoother communication, enhance non-verbal cues, and improve overall cooperation during an interpretation assignment on platforms like Zoom. This finding highlights the significance of in-person collaboration for interpreters working in remote settings.

12 responses

Figure 4.3 Having Physical Contact with an Interpretation Partner

4.8 Ways Interpreters Can Make Their Work on Zoom Easier
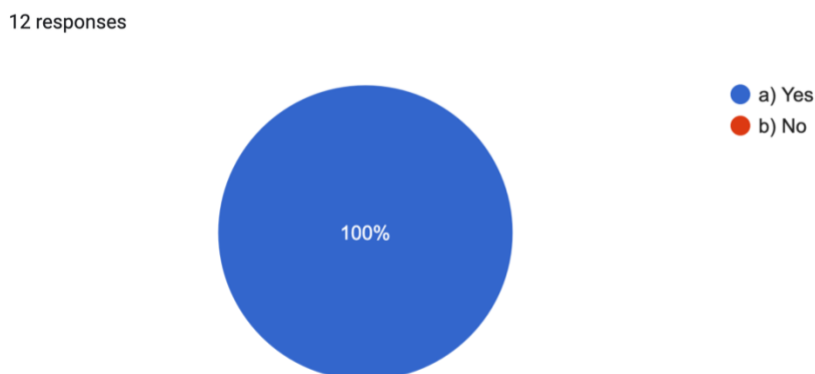
The survey findings reveal key strategies that can facilitate the work of interpreters on Zoom, as indicated by the respondents. Firstly, a considerable portion, or nine respondents out of 12, suggested that providing participants with brief training sessions on Zoom's interpretation features would greatly aid the process. This training would help participants grasp what are the key interpretation functions on the platform, thus improving their interaction with the platform. Secondly, there's a call from 41.7 per cent of the respondents, which corresponds to five interpreters, for organisers to offer training tailored specifically for inexperienced interpreters. This specialised training could prove invaluable for those new to remote interpretation, helping them navigate Zoom's features effectively. Furthermore, an overwhelming 83.3 per cent, or 10 participants, highlighted the importance of furnishing interpreters with contact numbers of the organisers or technical support. This would ensure that interpreters could promptly resolve any technical glitches that may occur during a session.

Moreover, three quarters of the respondents recommended issuing reminders to participants regarding the need for proper equipment, such as headsets, microphones, and a stable internet connection, prior to the meeting. This precaution can prevent disruptions stemming from inadequate equipment. All 12 respondents unanimously stressed the importance of reminding participants to adhere to good practices, such as muting their microphones when not actively speaking, to maintain a clear audio environment for interpretation.

Another noteworthy point made by three quarters of the respondents, or nine interpreters, is that organisers should take into account interpreters' comfort levels and attempt to speak at a more measured pace. This consideration recognises that interpreters may be working under challenging conditions, and clear, deliberate speech can significantly contribute to a better rendition.

Finally, all 12 respondents emphasized the importance of sharing all necessary materials with interpreters well in advance of the meeting. This ensures that interpreters have access to the required content, facilitating accurate interpretation. The suggestions above underscore the need for effective communication, training, and support for interpreters and participants to elevate the quality of interpretation on the Zoom platform. Clear guidelines, technical assistance, and consideration for interpreter's well-being can collectively enhance the remote interpretation experience.
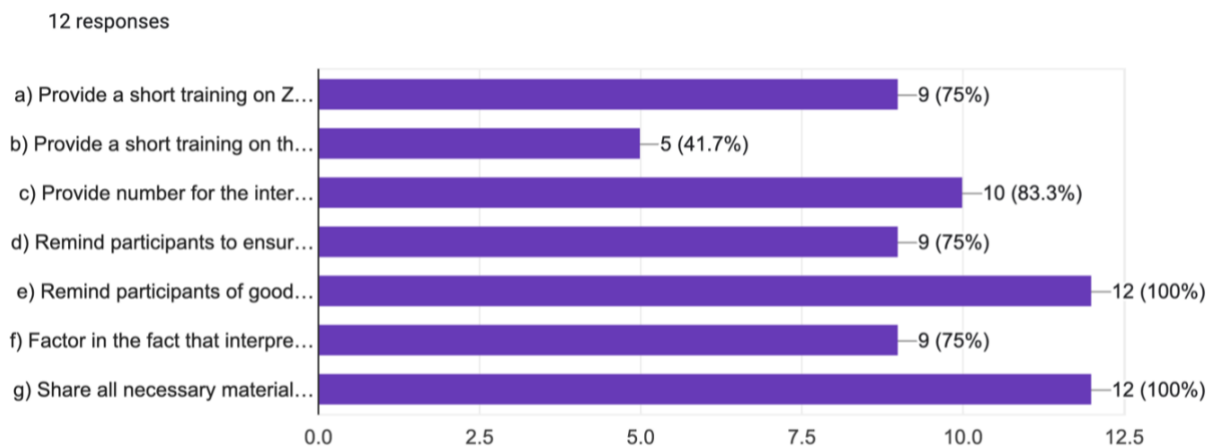
12 responses

Figure 4.4 Ways Interpreters Can Make their Work on Zoom Easier

4.9 Conclusion

In conclusion, the challenges encountered in Zoom interpretation have a profound impact on the quality of interpretation services provided in virtual settings. This chapter has drawn insights from primary data sources and existing literature to shed light on the multifaceted nature of these challenges and their implications for interpreters and the interpretation process as a whole.

Cooperating with a partner on Zoom is a fundamental aspect of interpretation in virtual environments. Nine out of 12 respondents acknowledged that the challenges experienced during this cooperation significantly affect their delivery. This finding highlights the critical role that effective cooperation plays in the interpretation process and the importance of addressing these challenges for improved performance.

The impact of these challenges on interpreters' delivery is substantial. Omissions, delays, and disruptions to the delivery flow were identified as key outcomes. Half of the respondents noted that these challenges could lead to omissions, potentially diminishing the comprehensiveness and accuracy of interpretation. Delays in interpretation, reported by seven respondents, corresponding to 58.3 per cent of participants in the study, can have a negative impact on the rendition and the overall experience of the meeting participants. However, the most prevalent impact, as reported by 11 out of 12 participants, is on the delivery flow. Disruptions in cooperation can disrupt the natural flow of interpretation, making it less smooth and coherent, as it can lead to clumsy handovers, interruptions and accidental overlapping between interpreters. This disruption can hinder participants' comprehension and engagement, ultimately diminishing the quality of interpretation on Zoom.

Furthermore, the observations from the researcher highlight that despite these challenges, interpreters often deliver sound interpretations in a virtual booth setting. Sound quality, lack of interference or interruptions, and smooth delivery and flow were noted. The absence of noticeable delays or omissions underscores the professionalism and dedication of interpreters.

Eser (2020) emphasises that the interpreting sector must address pressing concerns, including technology adoption, supply and demand dynamics, job-specific challenges, quality assurance, and sustainability. Addressing these challenges effectively is essential to ensure that the profession adapts to an increasingly virtual world. The supply and demand difficulties, exacerbated by language diversity and isolated populations, underscore the need for a robust pool of interpreters across various languages. Quality challenges are intimately linked to credentialing, training, and client recognition, demanding rigorous standards in a virtual landscape. Sustainability challenges, encompassing attrition and casualisation, must be addressed to ensure the longevity of the interpreting profession.

Oliffe et al. (2021) provide valuable insights into the advantages and drawbacks of Zoom interpretation. While reduced costs and rich data generation stand as advantages, challenges related to technology adoption and potential communication barriers should not be overlooked. Technological limitations and the need for special interviewer skills highlight the importance of training and preparation.

Corpas and Gaber (2018) highlight the slow adoption of technologies in the interpretation compared to the translation field. However, the potential for virtualisation and automation presents opportunities for interpreters to enhance their work. The advent of technology,

particularly Zoom, has reshaped interpreting practices, emphasising the need for technological proficiency among interpreters.

Hale et al. (2022) emphasise the impact of Zoom on work during the pandemic and the shift to remote interpretation. While offering flexibility, challenges in audio remote interpreting can affect performance. The varying quality of interpreter-mediated communication on Zoom calls for robust technological solutions.

Ahrens, Beaton-Thome, and Rütten (2021) underscore the role of Zoom in remote online instruction and its affordability and accessibility. Wang and Li (2022) acknowledge Zoom's success but emphasise the need for continuous improvement through collaboration.

Han and Valero-Garcés (2019) shed light on difficulties in interpreter and translator education for the public sector. Herdiansyah and Fajriah (2022) highlight the challenges of using Zoom as an online learning tool, necessitating innovative pedagogical approaches.

The study findings further reveal strategies to address challenges in Zoom interpretation, including training, communication, equipment preparation, and adherence to good practices. Physical contact with a partner was considered helpful by all respondents.

As shown above, addressing the challenges facing Zoom interpretation requires a multi-faceted approach. This includes technological proficiency, robust training, effective communication, and consideration for the interpreter's well-being. As the interpreting profession adapts to technological advancements, it is crucial to ensure that interpreters are equipped to provide high-quality interpretation services in virtual settings. Collaboration among stakeholders,

ongoing professional development, and a commitment to addressing these challenges will be essential in elevating the quality of interpretation on platforms like Zoom. The ability to overcome these hurdles will ultimately determine the continued effectiveness and relevance of interpretation services in an increasingly digital world.

CHAPTER FIVE

Conclusions, Summary, Recommendations

5.1 Introduction

This chapter explores the research on interpreter collaboration on the Zoom platform, focusing on encountered difficulties and their impact on interpretation quality. The digital era has transformed interpretation, necessitating a comprehensive understanding of dynamics and challenges. The study examines interpreters' virtual collaboration practices, examining technological and usability issues. The impact of these challenges on interpretation quality is also analysed in this chapter. The chapter connects objectives, presents results, and provides ideas for improving interpreters' work on Zoom. It serves as a guiding principle for interpreters and policymakers to enhance practices in the dynamic realm of digital technology.

5.2 Summary of the Main Findings

5.2.1 Working Remotely and Cooperation between Interpreters Working in the Same Booth

The rapid advancement of communication technologies has revolutionised the field of interpreting, introducing new opportunities for remote communication and collaboration. This chapter explores how interpreters cooperate while working on the Zoom platform, focusing on

findings from primary data sources and a desk review of relevant literature. The study relied on a diverse group of interpreters, including students and freelance professionals. Demographically, the interpreters exhibited varying levels of experience, with a notable presence of Master's and postgraduate degree holders, reflecting the specialisation required in this field.

The data indicated a strong familiarity with Remote Simultaneous Interpreting (RSI) among all respondents, highlighting the widespread recognition and acceptance of this practice. Furthermore, the majority of interpreters had experienced a significant shift towards virtual meetings in the past year, with varying degrees of satisfaction with Remote Simultaneous Interpreting (RSI). This suggests a growing adaptation to remote work, potentially accelerated by factors like the Covid-19 pandemic.

Zoom emerged as the most widely used platform for RSI, with nearly all participants having experience with it. Participants also showed some familiarity with platforms like Kudo and Interprify, highlighting the diversity of RSI tools available. Preferences among interpreters regarding platform features emphasised the importance of platform design, language support, and efficient handover mechanisms.

Notably, WhatsApp was the universally preferred method of communication when working on Zoom, showcasing its versatility and reliability. Interpreters exhibited meticulous preparations for Zoom meetings, prioritising device charging, technical tests, internet stability, and ensuring a quiet work environment. When collaborating in a booth, interpreters engaged in various strategies such as terminology checks, numerical notation, technical support, and feedback exchange, all contributing to effective teamwork. In contrast, Zoom-based cooperation

involved means like Zoom's in-app messaging, traditional text messages, phone calls, and WhatsApp, with WhatsApp being the unanimous favourite.

Observations of a group of interpreters during a Zoom meeting revealed proactive measures in terms of equipment testing, sound quality maintenance, and overall interpretation quality. The absence of technical disruptions indicated the interpreters' ability to ensure a seamless interpretation process.

The desk review of the literature highlighted the significance of virtual presence in RSI, with its absence contributing to the deterioration in performance. The studies also emphasised the need for effective communication and coordination among interpreters, especially in virtual environments. Additionally, the importance of multisensory integration, language proficiency, and adaptation to virtual settings were discussed.

5.2.2 Challenges Faced by Interpreters Working on Zoom Platform

Interpreters working on the Zoom platform face a myriad of challenges, as revealed through primary data, surveys, group observations, and extensive literature reviews. These challenges encompass various aspects, highlighting the complexities of remote interpretation. One significant challenge centres around communication with partners while working on Zoom. Approximately 41.7 per cent of interpreters reported difficulties in partner communication, emphasising the need for improved coordination and technical support to enhance collaboration. Network issues, affecting 66.7 per cent of respondents, further underscore the critical role of stable connectivity in remote interpretation. Additionally, 66.7 per cent noted delays in partner communication, highlighting the importance of timely messages for effective interpretation. Juggling interpretation and text/call communication concurrently proved

challenging for 50 per cent of interpreters, illustrating the cognitive demands of multitasking. A quarter of interpreters struggled to manage two devices simultaneously during sessions, emphasising the need for ergonomic solutions.

Technical challenges emerged as a prevalent theme. Sound quality issues (83.3 per cent) and network instability (83.3 per cent) can significantly disrupt interpretation sessions. Power outages, while less common at 25 per cent, have critical implications for interpretation continuity. A noisy environment, mentioned by 33.3 per cent of interpreters, introduces distractions and affects interpretation quality. The absence of in-person interaction with booth partners (50 per cent), technical teams (66.7 per cent), and organisers (50 per cent) hampers effective communication and collaborative problem-solving. Furthermore, interpreters' limited familiarity with the Zoom platform (75 per cent) and organisers' lack of proficiency (50 per cent) contribute to difficulties in managing the virtual meeting environment. The movable toolbar obstructing the screen during presentations and live captioning was highlighted as disrupting the interpretation process by 8.3 per cent of the respondents.

The lack of in-person interaction emerged as a significant challenge, particularly in healthcare settings where trust between interpreters and partners is crucial. Establishing rapport and effective communication became more challenging without visual contact and onsite presence. The usability challenges of the Zoom platform were also highlighted. While popular among users, interpreters expressed the need for continuous improvement and ergonomic enhancements to optimise their experience.

In a nutshell, interpreters working on the Zoom platform face a multitude of challenges. These encompass technical issues, difficulties in partner communication, the absence of in-person

interaction, and usability challenges. Addressing these challenges through targeted interventions, technical support, and training is essential to enhance the quality and effectiveness of interpretation services in remote settings. This research provides a valuable foundation for further studies and the development of best practices in the evolving landscape of remote interpretation.

5.2.3 Challenges Facing Zoom Interpretation Impact the Quality of Interpretation

Providing interpretation services on the Zoom platform comes with various challenges that significantly affect the quality of service delivery. This chapter explores the impact of these hurdles on interpretation quality in virtual settings, drawing from primary data and existing literature. Cooperating with a partner on Zoom is a common challenge, with 75 per cent of interpreters confirming its impact on their delivery. Collaboration difficulties in a virtual environment hinder interpreters' effectiveness. These challenges lead to omissions (50 per cent), delays (58.3 per cent), and disruptions in delivery flow (91.7 per cent).

Observations show that within the same Zoom booth, sound quality, delivery, and overall flow of interpretation were good, with no notable delays or omissions. This suggests that with the right conditions and preparation, quality interpretation on Zoom is achievable.

The interpreting sector is undergoing transformation due to technology innovation, raising concerns like supply and demand, quality assurance, and sustainability. Ensuring an adequate supply of interpreters for diverse languages is challenging. Quality assurance in remote interpretation is crucial, emphasising the need for rigorous standards and client confidence. Sustainability concerns include attrition and casualisation, impacting interpreter longevity.

Using Zoom for interpretation offers cost advantages but also poses challenges, such as technological adaptation, audio-visual inconsistencies, and potential loss of meaning.

Interpreters must possess the skills to navigate these issues. The adoption of technology in interpretation lags behind translation. Awareness and adoption of available tools can enhance interpreting quality, with automation and virtualisation promising efficiency.

The Covid-19 pandemic accelerated the shift to remote interpretation, affecting various industries. The quality of interpreter-mediated communication on Zoom varies due to technological issues and communication dynamics, emphasising the need for effective solutions. Zoom's role in education, particularly remote online instruction, offers accessibility and affordability benefits. Customisable features support high-quality conference interpretation, improving the learning experience.

Collaboration among stakeholders is key to further improving Zoom interpretation. Continuous updates and adaptation are necessary to meet evolving needs. Technology's broader impact on society influences work paradigms and communication patterns, affecting the interpreting profession. Diversification and specialisation in response to technological advancements are expected.

Challenges in interpreter and translator education in the public sector, like meaning loss and technological difficulties, require attention and creative pedagogical approaches. Using Zoom as an online learning tool presents challenges, including student engagement and connectivity issues, requiring innovative solutions.

To address challenges in Zoom interpretation, organisers can take measures like ensuring device readiness, updating software, using quality equipment, establishing effective communication, and offering training sessions. Reminders about proper equipment and practices, consideration for interpreters' comfort, and sharing necessary materials in advance

also improve interpretation quality. Having physical contact with a partner is considered helpful by interpreters, emphasising the value of in-person collaboration, particularly in remote settings.

5.3 Conclusions

In conclusion, this study provides valuable insights into the challenges faced by interpreters in the field of Zoom interpretation and the profound impact of these challenges on the quality of interpretation services delivered in virtual settings. It is evident that the shift towards Remote Simultaneous Interpreting (RSI) has become increasingly prevalent, driven by factors like the Covid-19 pandemic and technological advancements and environmental considerations. Zoom has emerged as the predominant platform for RSI, offering interpreters a familiar and versatile environment for their work.

However, the journey of interpreters on Zoom is not without its obstacles. The challenges encountered encompass a wide spectrum, ranging from technical issues such as sound quality and network stability to the intricacies of partner communication and the absence of physical presence. These challenges can have a tangible and detrimental effect on the delivery of interpretation services. They can lead to disruptions in the interpretation flow, potential omissions, and delays, highlighting the critical importance of addressing these hurdles to enhance the overall quality of interpretation.

Furthermore, the study underscores the broader transformations taking place in the interpreting sector, driven by technology adoption, shifting supply and demand dynamics, quality assurance imperatives, and sustainability concerns. The need for a diverse pool of interpreters who can bridge language gaps remains a central challenge. Adequate preparation and previously

established communication channels are paramount to ensure that interpretation services meet high standards, especially in virtual environments like Zoom.

While Zoom offers advantages such as reduced costs and increased accessibility, it also poses drawbacks related to technological challenges and potential communication barriers. Adaptation to technology and the cultivation of specialized skills are essential for interpreters to thrive in this changing landscape.

To address these challenges effectively, a multi-faceted approach is required. This includes providing interpreters with robust technical support and training, fostering effective communication among interpreters and partners, and acknowledging the importance of interpreter well-being. Collaboration among stakeholders in the interpreting field is crucial, as is ongoing professional development to equip interpreters with the tools and knowledge needed for success in virtual settings.

In essence, the ability to overcome the challenges associated with Zoom interpretation will help determine the continued relevance and effectiveness of interpretation services in an increasingly digital world. Interpreters and the interpreting sector as a whole must adapt, innovate, and collaborate to ensure that language barriers do not hinder effective communication and understanding in our interconnected global society.

5.4 Recommendations

i. Future research could be conducted into how conference participants cope with challenges arising from Remote Simultaneous Interpretation. The participants are the final consumers of Remote Simultaneous Interpretation, and understanding their experience is key to ensuring that interpreters have the insights and tools to continuously improve their performance.

ii. Additional research could be conducted into the challenges experienced by interpreters engaging in Remote Simultaneous Interpretation in other popular platforms, such as Interaction, Kudo, and Teams. Studies could also be carried out into how interpreters mitigate and overcome these challenges. This study would help software developers ensure that they take into consideration the needs of interpreters when creating and updating RSI platforms.

iii. Researchers could explore the integration of machine-assisted interpretation into the different platforms offering Remote Simultaneous Interpretation. This study could allow researchers to provide recommendations to help promote the use of machine-assisted interpretation among interpreters.

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