University of Witwatersrand
Faculty of Humanities
School of Literature, Language and Media
Translation Department

Perception *vs* Reality:
How first-hand experience during the Covid-19 pandemic has influenced spoken-language conference interpreters' attitudes towards Remote Simultaneous Interpreting in Africa

By
Leonor da Conceição van Niekerk
Student no. 568176

Supervisor
Professor Alice Leal

A Research Report submitted
to the Faculty of Humanities, University of Witwatersrand
in Partial Fulfilment for the Award of the
Masters in Translation (Interpreting)
February 2023

DECLARATION

I, **Leonor da Conceição van Niekerk (Student number no. 568176)**, am a student registered for Master in Translation (Interpreting) in the year **2022**. I hereby declare the following:

- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.

- I confirm that the work submitted for assessment for the above course is my own unaided work except where I have explicitly indicated otherwise.
- I have also followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of Witwatersrand may take disciplinary action against me if it is believed that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.
- The necessary Ethics Clearance course was done through the University of Witwatersrand and the Ethics Clearance Certificate obtained, with protocol number SLLM-TRA-1.

Signature:

Date: 15 February 2023

ACKNOWLEDGEMENTS

My deepest appreciation and humble praise go to the Lord Jesus Christ, for His faithful support, unfailing love, and tender mercies throughout my life, especially during Covid-19 and this master's research.

I am profoundly grateful to my supervisor, Professor Alice Leal, for her continuous guidance and saintly patience throughout this long and arduous process. Under her mentorship, I took gradual steps in my academic development, which eventually culminated in a research report that I hope will make her proud. Her professionalism, generosity of spirit, passion for linguistics and inspirational teaching have left an indelible mark on my life, and I will always think of her with utmost respect and fondness.

I am sincerely grateful to all the interpreters who dedicated time and energy to complete the questionnaire and participate in the interviews that have informed this research. This research study would not have been possible without their trust, collaboration and goodwill.

I am also deeply thankful to my loving family – Servaas, Gizelle, and Chloe – for their encouragement, untiring support and copious cups of coffee. I could not have done this without them. I am also very grateful to my mom, Delia, for always being there for my family. Finally, I would like to thank my late Dad, for making me promise that I would never stop learning nor achieving my dreams.

ABSTRACT

This study investigates how spoken-language conference interpreters across the five regions of Africa experienced Remote Simultaneous Interpreting (RSI) during the Covid-19 pandemic, how their experiences influenced their previous perceptions of RSI, as well as their perceptions of RSI's future viability on the African continent. The study found that the online meeting platform mostly used in Africa (Zoom) functioned adequately for interpreting, but that additional functions could significantly aid interpreting. Furthermore, it was found that the effectiveness of Simultaneous Interpreting Delivery Platforms (SIDPs) and Zoom depended largely on external factors such as internet connection, bandwidth, power supply, and the behaviour of speakers and participants during meetings. Despite the challenges, the majority of the 140 questionnaire respondents believed that RSI would continue to be used after the Covid-19 pandemic. From the respondents' perspective, RSI's greatest advantage was that interpreters could work from the comfort of home, thereby eliminating difficulties and stress associated with travel across the African continent. RSI's greatest disadvantage was found to be poor sound quality that is common as a result of the use of inadequate sound equipment and the inappropriate behaviour of participants in virtual meetings. Before the pandemic, most (80%) of the interpreters who participated in this study had had no first-hand RSI experience; and over half (63%) were either ambivalent or had negative perceptions about RSI. By November 2022, only 0.7% of the interpreters who participated in this research study were completely averse to the idea of providing RSI; 77% indicated that they would be happy providing a combination of in-person interpreting and RSI; 53.6% indicated that they were very happy providing home-based RSI, and 9.3%, stated that they would be happy to provide home-based RSI exclusively. Regarding interpretation hubs, only 24.3% indicated that they would prefer to provide RSI from a hub with technician support. This study concludes that the first-hand experiences of most surveyed interpreters using RSI in Africa during the Covid-19 pandemic positively influenced their perceptions of and attitudes toward RSI despite the negative aspects of technostress, disconnectedness from booth partners and clients, and poor sound quality.

Keywords: Remote Simultaneous Interpreting; RSI; in-person; on-site; virtual; technostress; sound; disconnectedness; behaviour.

Contents

DECLARATION ..... **i**

ACKNOWLEDGEMENTS ..... **ii**

ABSTRACT ..... **iii**

ACRONYMS AND ABBREVIATIONS ..... **ix**

1 INTRODUCTION **1**

1.1 Background and context 1
1.1.1 The pandemic's effect on on-site simultaneous conference interpreting 1
1.1.2 The scramble for online solutions 2
1.1.3 Remote Simultaneous Interpreting (RSI) 2
1.2 Aim and rationale of this research 3
1.3 Research objectives 5
1.4 Research question and sub-questions 5
1.5 Theoretical framework 5

2 LITERATURE REVIEW **7**

2.1 The beginnings of RSI 7
2.2 Technical, physiological, and psychological considerations 7
2.2.1 A sense of alienation, higher cognitive load and earlier fatigue 8
2.2.2 Empirical findings: Cortisol and heartrate as stress indicators 8
2.2.3 Distinguishing between objective and subjective factors 9
2.3 Trends in Remote Interpreting 10
2.3.1 Telephone liaison and community interpreting 10
2.3.2 Remote Medical Interpreting 11
2.3.3 Interpreter preference for on-site interpreting 12
2.3.4 Patient preference for remote simultaneous interpreting 12
2.3.5 Remote simultaneous medical interpreting is faster and more accurate 13
2.3.6 Remote interpreting in legal and court settings 13
2.3.7 Remote Simultaneous Interpreting in conference settings 14
2.4 The Covid-19 pandemic and the unprecedented uptake of RSI 15
2.4.1 The ISO/PAS 24019 15
2.4.2 AIIC Guidelines on Distance Interpreting 16
2.4.3 Guidelines for working from home *"in extremis"* 17
2.4.4 Physical and psychological effects of working from home 18
2.4.5 Experiences with RSI 19

3 RESEARCH METHOD **21**

3.1 Introduction 21
3.2 Population 22
3.3 Sampling 23
3.3.1 The questionnaire sample 23
3.3.2 The interview sample 23
3.4 Data collection instruments 24
3.4.1 Questionnaire 24

3.4.2 Interviews....26
3.5 Data analysis methods....26
3.5.1 Statistical analysis....27
3.5.2 Content and context analysis....27
3.6 Ethical considerations....27
3.6.1 Ethical considerations related to the questionnaire....28
3.6.2 Ethical considerations related to the interviews....28
3.6.3 Researcher bias....28
4 INTERPRETER DEMOGRAPHICS AND THE PRACTICE OF RSI IN AFRICA DURING THE PANDEMIC....30
4.1 Introduction....30
4.2 Demographic data for the respondents....30
4.2.1 Gender....30
4.2.2 Age, qualifications and experience....31
4.2.3 Work location....32
4.2.4 Living arrangements and environment....33
4.2.5 Computer and IT skills....35
4.3 Knowledge of, and experience with, RSI before the Covid-19 pandemic....36
4.4 First experience with RSI....38
4.5 RSI during the Covid-19 pandemic....40
4.5.1 The home-based RSI set-up....40
4.5.2 Online meeting platforms and SIDPs....41
4.5.3 Internet connection....42
4.5.4 Visual streaming quality....43
4.5.5 Sound quality....47
4.5.6 Length of sessions, team strength and remuneration....48
4.5.7 RSI hubs....50
4.5.8 A home-based RSI hub....51
5 RSI ADVANTAGES AND DISADVANTAGES AND ATTITUDES TOWARDS THE VIABILITY OF RSI IN AFRICA....53
5.1 Introduction....53
5.2 Advantages of RSI....54
5.2.1 Eliminate stresses of travel....54
5.2.2 Work-life balance....60
5.2.3 Familiarity and comfort of working from home....62
5.2.4 More preparation and focus time....63
5.2.5 Borderless exposure to clients all over the world....63
5.2.6 A plethora of meetings....64
5.3 Disadvantages of RSI....64
5.3.1 Sound quality....64
5.3.2 Technostress....68
5.3.3 Interpreter disconnectedness from colleagues, technicians, and speakers....73
5.3.4 Physical effects of RSI....75
5.4 Psychological effects of RSI....77
5.5 Preferred interpreting modalities....78

5.6 Viability of RSI in the African context 79
6 CONCLUSIONS AND RECOMMENDATIONS 82
6.1 Introduction 82
6.2 Conclusions 82
6.2.1 What were interpreters' perceptions about RSI before the pandemic? 82
6.2.2 How was RSI practiced in Africa during the height of the pandemic (2020 to 2022)? 83
6.2.3 How did interpreters experience RSI in Africa during the pandemic? 84
6.2.4 What advantages and disadvantages of RSI did interpreters experience in the African context? 84
6.2.5 According to interpreters, how did RSI affect their physiological and psychological well-being? 86
6.2.6 Do interpreters prefer RSI or on-site meetings in the African context? 86
6.2.7 Do interpreters consider RSI viable in the African context after the pandemic? 86
6.3 Recommendations 87
6.3.1 Recommendations for interpreters 87
6.3.2 Recommendations for clients 88
6.3.3 Recommendations for Zoom 90
6.4 Limitations of the study 90
6.5 Concluding remarks 92
REFERENCES 94
APPENDICES 101
Appendix 1: Visual Model for Mixed-Methods Sequential Explanatory Design Procedures 101
Appendix 2: Interview guide 102
Appendix 3: Additional graphs and charts for questionnaire responses 104
Appendix 4: Questionnaire 106

LIST OF FIGURES

Figure 1: Key studies informing the theoretical framework of this research 6
Figure 2: Gender of RSI questionnaire respondents 30
Figure 3: Qualifications of respondents 31
Figure 4: Years of experience of respondents 32
Figure 5: African region where respondents worked primarily before Covid-19 32
Figure 6: Domicile of respondents during the Covid-19 pandemic 33
Figure 7: Living arrangements of respondents during the pandemic 34
Figure 8: Environment surrounding respondents' homes 34
Figure 9: Respondents' rating of their technological skills 35
Figure 10: Respondents' level of RSI experience in Africa before the Covid-19 pandemic ...37
Figure 11: Respondents' perceptions of RSI before the Covid-19 pandemic 37
Figure 12: Respondents' familiarity with AIIC's recommendations on Remote Interpreting .38
Figure 13: Month in which respondents provided RSI for the first time 38
Figure 14: Respondents' reactions to their first RSI experience 39
Figure 15: Respondents' sources of knowledge to learn about RSI 39
Figure 16: Acquisition of equipment and extra bandwidth during the Covid-19 pandemic 40
Figure 17: Financial costs of RSI home-based set-up 41
Figure 18: Online meeting platform most often used by respondents for RSI in Africa 42
Figure 19: Frequency of respondents' internet connection drops during meetings 42
Figure 20: Clients' reactions to dropped connection 43
Figure 21: Importance of speaker visual cues 44
Figure 22: Quality of visual streaming in Africa 44
Figure 23: Availability of visual cues on platforms used in Africa 45
Figure 24: Importance of delegates' visual input for interpreters 46
Figure 25: Visibility on the most used virtual meeting platform in Africa 46
Figure 26: Sound quality on the RSI platform most used in Africa 47
Figure 27: Frequency of sessions that exceed 3 hours with no overtime pay 48
Figure 28: Remuneration for RSI 49
Figure 29: Respondents' perceptions of air travel for work 55
Figure 30: Use of economy class or business class by interpreters 57
Figure 31: Main contributors to poor sound quality, according to respondents 65
Figure 32: Importance of seeing a booth partner 72
Figure 33: Seeing booth partners would facilitate handover 72
Figure 34: Physical effects experienced by respondents since beginning to use RSI 76
Figure 35: Psychological effects experienced by respondents since beginning to use RSI 77
Figure 36: Interpreting mode preferred by respondents 78
Figure 37: Perceptions of RSI in the African context 80

LIST OF TABLES

Table 1 Questionnaire sections.....24
Table 2 Team strength in Africa according to questionnaire responses.....50

ACRONYMS AND ABBREVIATIONS

CI	Consecutive Interpreting
DI	Distance Interpreting
EP	European Parliament
ESIT	École Supérieure d'Interprètes et de Traducteurs
EU	European Union
ICT	Information, Communication and Technology
ISDN	Integrated Services Digital Network
ISO	International Organization for Standardization
IT	Information Technology
ITU/ETI	International Telecommunications Union / École de Traduction et d'Interpretation
RI	Remote Interpreting
RSI	Remote Simultaneous Interpreting
RSMI	Remote Simultaneous Medical Interpreting
SIDP	Simultaneous Interpreting Delivery Platform
VRCI	Video Remote Conference Interpretation

1 INTRODUCTION

On 11 March 2020, as countries grappled with an alarming number of novel coronavirus-related infections and deaths, the World Health Organization declared Covid-19 a highly infectious global pandemic (WHO, 2020). In response, organisations and corporations around the world cancelled or indefinitely postponed all on-site meetings (AT Editor, 2020; Cher, 2020; Getachew, 2020). Conference interpreting came to an abrupt halt. Freelance conference interpreters faced a completely unforeseen suspension of their main professional activity and subsequent loss of income. The ensuing adoption of Remote Simultaneous Interpreting (RSI) provided a somewhat viable solution, which is discussed in Chapters 4 and 5, but also caused uncertainty as conference organizers, RSI platform developers, and interpreters navigated relatively unknown waters. Although some research into RSI had been done in Europe, it was a new practice in Africa, prompting the need for research.

1.1 Background and context

1.1.1 The pandemic's effect on on-site simultaneous conference interpreting

The Covid-19 pandemic's lockdowns and travel restrictions had a devastating effect on the on-site conference interpreting community of practice. In the United States, conference interpreting agencies reported an overnight revenue loss of 70%. By the second quarter of 2020, revenue losses had risen to 78% (Fedorenkova, 2021). Freelance conference interpreters were the most severely affected as they were not employees of organisations that continued to pay salaries. In CSA Research[1]'s survey carried out in August 2020, 779 respondents reported a 72% decrease in conference interpreting activities at the height of the pandemic (TCworld, 2020). In Europe, 68% of surveyed interpreters worked fewer days and 46% had fewer clients in the first year of the pandemic (ESIT, 2021). In Japan, interpreters who had been working more than 20 days per month in preparation for the Tokyo Olympic Games, suffered a tremendous loss of income as demand for their services decreased to just one day per month (Matsushita, 2020).

[1] Formerly known as the Common Sense Advisory research company, now simply CSA Research.

1.1.2 **The scramble for online solutions**

With in-person conferencing no longer possible, organisations and corporations scrambled to find solutions for online multilingual meetings. Online meeting platforms, which had hitherto been difficult to sell to clients because they were imperfect, expensive, or lacked multilingual simultaneous interpretation integration, rapidly became sought-after solutions (Fedorenkova, 2021). Standalone, dedicated Simultaneous Interpreting Delivery Platforms (SIDPs) like Kudo (2017), Interactio (2014), Interprefy (2015), and Voiceboxer (2014) experienced an unprecedented uptake of their services. Since the beginning of the pandemic until the end of 2022, Interprefy had serviced approximately 50,000 multilingual events (Interprefy, 2022), Interactio had provided services to over 976,000 multilingual listeners in 111 countries (Interactio, 2022), and Voiceboxer had reached over 120,000 delegates at more than 24,000 multilingual events (Voiceboxer, 2022). New SIDPs, such as InterpretCloud and RsiX, also emerged during the first year of the pandemic in response to a growing demand for even more interpreter-friendly solutions (Fedorenkova, 2021; JCS, 2022). Many clients found dedicated SIDPs expensive and resorted to regular online meeting platforms like Zoom. Zoom's multiple audio channels were used for simultaneous interpretation, despite the fact that Zoom lacked many interpreter-friendly features, such as relay or handover functions (Breima & Steiert, 2021). Whilst SIDPs have developed add-on interfaces to allow for interoperability with Zoom, Microsoft Teams, WebEx and other online meeting platforms, many clients choose to forego them, so interpreters often still work without dedicated interpreter-friendly interfaces (Breima & Steiert, 2021).

1.1.3 **Remote Simultaneous Interpreting (RSI)**

Due to clients' scramble for online solutions because of travel restrictions and lockdowns, many spoken-language conference interpreters found themselves, willingly or unwillingly, transitioning to Remote Simultaneous Interpreting (RSI) mode, as this became the most feasible interpretation mode during the height of the pandemic (Przepiórkowska, 2021). Although there seems to be no commonly accepted definition for RSI (Przepiórkowska, 2021), researchers generally agree that RSI is a sub-sub-modality of Distance Interpreting (DI).

AIIC (2020a) defines Distance Interpreting as interpretation provided by interpreters on-site, sharing the same venue as the majority of speakers and meeting participants, with a direct view of these, but where some speakers are online, which implies that interpreters have a distant or indirect view of the latter, and interpret them via telephone, audio-streaming or video-

streaming technologies. DI has existed for decades, and was historically provided via telephone lines and satellite connection (Mouzourakis, 2006). Technological advances over the last decade allowed DI to be used in medical, legal, and educational settings in consecutive and dialogue mode, and to a lesser degree in simultaneous mode (Wang, 2018). Over time, technological developments have allowed interpreters to interpret off-site as well, and so Remote Interpreting (RI) emerged. In RI, interpreters provide interpretation off-site, via telephone, video and audio streaming, or the internet, to presenters and meeting participants who can either be physically together in one venue, or connected online from their respective locations (AIIC, 2020). RI can be delivered consecutively, simultaneously or in dialogue mode. RI allows clients to have immediate access to qualified off-site interpreters; since it does not require the interpreters to travel to the meeting venue, it saves time and money and reduces the carbon footprint of interpretation. RSI refers specifically to simultaneous interpretation that is provided off-site – either in a separate room at the meeting venue or at a completely different location – and is facilitated through ICT-enabled audio and video-streaming technologies (Moser-Mercer, 2003; Roziner & Shlesinger, 2010; Seeber, Keller, Amos, and Hengl, 2019).

At the peak of the Covid-19 pandemic, most conference interpreters were required to provide home-based RSI (Przepiórkowska, 2021); once infection rates dropped and lockdown restrictions eased, some organisations provided off-site sanitised interpretation hubs (Fedorenkova, 2021). Interpretation hubs mimic on-site conference interpreting conditions, and offer technician support, sound-proof booths, and the possibility of working in the same physical space as booth partners (Fantinuoli, 2019). As demonstrated by Seeber et al. (2019), hubs allow conference organizers to hold the meeting in one location whilst having interpreters working from different locations to cut travel costs, while still ensuring adequate bandwidth, sound and technical support.

1.2 Aim and rationale of this research

To date, no studies have been published on the practice of RSI in Africa. The aim of this study is to understand how spoken-language conference interpreters'[2] RSI experience in Africa during the Covid-19 pandemic (2020-2022) influenced their perceptions about RSI, and

[2] Henceforth in this study, for the purposes of brevity, spoken-language conference interpreters will be referred to as 'interpreters'.

consequently their attitudes towards the viability of RSI in the African context during and after the pandemic.

According to Anushree (2022), cognitive psychology defines perceptions as mental judgements formed based on internal and external stimuli. Internal stimuli include temperament, background, previous experiences, emotions and memories. External stimuli are received through the senses; they include what people see, hear, touch, smell, and taste. Together, internal and external stimuli inform a person's perception about a reality – such as a person, object, situation or experience that exists outside of the person forming the perception. Reality exists outside of any single person's perception, in that it has its own nature. Consequently, many people can form divergent perceptions about the same reality (CogniFit Research, 2021). According to Pickens (2018), perceptions influence a person's attitude towards the reality that is being perceived. Attitude is an evaluative judgement that includes cognitive and affective reactions. It is a mind-set or a tendency to act in a particular way due to a person's perceptions, previous experiences, and temperament. Perceptions and attitude influence behaviour.

In marketing, consumer perception is considered extremely important because perceptions about a product, service or modality will determine consumers' attitudes towards it, and consequently their acceptance or rejection of it (Duggal, 2018). Since RSI is a modality that was recently 'forced' onto the conference interpreting market by the Covid-19 pandemic, this research considered it useful to analyse RSI from the perspective of one of its primary groups of consumers: spoken-language conference interpreters in Africa. At least three of an interpreter's senses are involved in the forming of perceptions about RSI: sight, hearing and touch. In addition to their perceptions about RSI, interpreters' professional backgrounds, and their RSI experiences prior to and during the pandemic, can be expected to inform their attitudes towards RSI's viability in Africa during and after the Covid-19 pandemic, as well as their subsequent acceptance or rejection of RSI.

Given the paucity of African research on RSI, this research represents an initial analysis of spoken-language conference interpreters' perceptions about a modality of interpreting that is increasingly becoming part of their professional lives in Africa.

1.3 Research objectives

The objectives of the study were to:

a) determine what the perceptions of interpreters working in Africa were regarding RSI before the pandemic (in late 2019);
b) analyse interpreters' first-hand RSI experience in the African context, between 2020 and 2022;
c) Determine whether interpreters believed that RSI was viable in the African context during and after the pandemic, based on their first-hand experience.

1.4 Research question and sub-questions

The research question that drove this study was: 'How has first-hand experience during the Covid-19 pandemic influenced spoken-language conference interpreters' attitudes towards Remote Simultaneous Interpreting in Africa?'

This research question was broken down into the following sub-questions, as follows:

a) What were interpreters' perceptions about RSI before the pandemic?
b) How was RSI practised in Africa during the height of the pandemic (2020 to 2022)?
c) How did interpreters in Africa experience RSI during the pandemic?
d) What advantages and disadvantages of RSI did interpreters experience in the African context?
e) According to interpreters, how did RSI affect their physiological and psychological well-being?
g) Do interpreters prefer RSI or on-site meetings in the African context?
h) Do interpreters believe RSI will be a viable modality in the African context after the pandemic?

1.5 Theoretical framework

This study uses the theory of triangulation as its theoretical framework. The conclusions of Seeber et al. (2019), Matsushita (2020) and Przepiórkowska (2021) , as discussed in the Literature Review, were triangulated and used as the theoretical lens through which to analyse and understand this study´s results (illustrated in Figure 1). It is true that the earlier findings of Moser-Mercer (2003), Roziner and Shlesinger (2010), the recent ISO/PAS 24019, AIIC's

position papers and reports, as well as other studies discussed in the literature review (Chapter 2) were relevant not only to the design of this research study, but also to the contextualization and understanding of its findings. However, the aim of this study was to determine and understand RSI perceptions of interpreters working in Africa during and after the Covid-19 pandemic (2020-2022). Since Seeber et al. (2019), Matsushita (2020), and Przepiórkowska (2021) carried out similar peer-reviewed academic research in other parts of the world just prior to or during the Covid-19 pandemic, their research method, study design and surveys were selected to inform the conceptualization and design of this study and for comparison of findings.

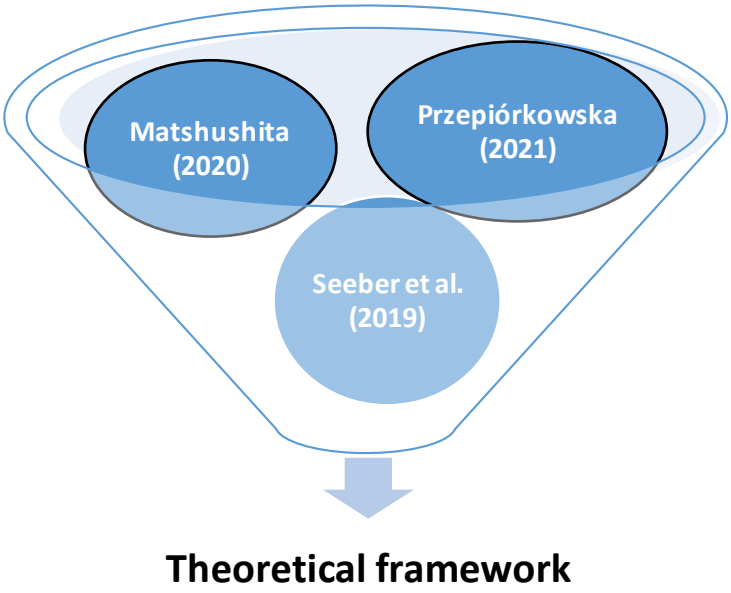


Figure 1: Key studies informing the theoretical framework of this research

2 LITERATURE REVIEW

2.1 The beginnings of RSI

While RSI has received significant attention since the start of the Covid-19 pandemic (Ayala et al., 2020), it is not an entirely new concept. Experiments with RSI conducted by UNESCO in 1976 and the United Nations in 1978 revealed that RSI was unviable due to poor sound and image quality (Moser-Mercer, 2003). Despite the advent of the Integrated Services Digital Network (ISDN) in the 1990s, neither ISDN (with or without standard encoding) (Braun, 2015), nor fibre-optic connections (Mouzourakis, 2006) yielded sufficient sound and image quality to enable effective use of RSI.

2.2 Technical, physiological, and psychological considerations

Following further technological advances, the International Telecommunication Union/École de Traduction et d'Interpretation (ITU/ETI) experimented with RSI at a live ITU conference in 1999, comparing off-site and on-site interpreter performance by means of surveys and interpreting error-rate (Moser-Mercer, 2005a). The experiment yielded numerous results. One important result was that inadequate RSI video and sound quality negatively impacted interpreters' psychological and physiological state, and by extension, their perception of the feasibility of RSI. However, the factor that most strongly influenced interpreters' preference for on-site interpretation as opposed to RSI was not sound nor image quality, but rather the sense of alienation that they experienced during RSI. During the RSI part of the experiment, interpreters reported that their lack of "presence" prevented them from grasping the "essence" of the live meeting (Moser-Mercer, 2005a).

Simultaneous interpreting is a multi-sensory activity (Moser-Mercer, 2005b). In order to infer a segment of meaning, interpreters rely on their five senses and make split-second subconscious decisions regarding meaning based not only on what they hear, but on their observations of speakers' and delegates' body language and cues (Moser-Mercer, 2005b). In RSI, that feeling of 'presence' is lost unless the interpreter has access to a panoramic, close-up view of the speakers and delegates. In the ITU/ETI experiment, the cameraman chose where to point his camera and what images to live-stream from the venue, so interpreters had no control over their

choice of visual cues. In addition, delegates were off-screen, and 66% of interpreters perceived the action off-screen as important for them to gain a better understanding of happenings in the room (Moser-Mercer, 2005a).

2.2.1 **A sense of alienation, higher cognitive load and earlier fatigue**

Wang (2018:101) explains that "communication consists of language (verbal information), paralanguage (vocal non-verbal information, e.g. prosody, hesitation, inflection, tone of voice, vocal volume) and kinesics (visual non-verbal information, e.g. gesture, eye gaze, facial expression, other body language)". The absence of visual cues can cause confusion, ambiguity, difficulty with handover and other interpreting challenges. Thus, in the RSI component of the ITU/ETI experiment, interpreters' lack of presence and control over visual input choices was found to increase their cognitive load (Moser-Mercer, 2005a).

Gile (1995) proposes that interpreters have a *total available processing capacity* which is drawn on for different efforts of interpreting: the listening and analysis effort, the processing effort and the memory effort. Gile (1999) later added the Coordination Effort, which is the cognitive task of coordinating the other three kinds of effort. These efforts produce cognitive load as none occurs automatically in an interpreter's brain. If one effort consumes a large portion of the total available processing capacity, there is less available for the remaining three efforts, leading to the possibility of fatigue. Gile states that if cognitive overload is reached, the resulting interpretation will have errors and omissions (Gile, 1999).

This was corroborated by the Moser-Mercer, Künzli and Korac (1998) on-site interpreting experiment in which interpreters' error rates increased after 30 minutes, indicating the onset of fatigue. However, in Moser-Mercer's (2005a) RSI experiment, interpreters started to make errors at 15-18 minutes, indicating a much earlier onset of fatigue in RSI. Consequently, Moser-Mercer (2005a) recommended that, even if all technological factors were resolved in the future, for RSI to be successful, interpreters should work for only 15 to 20 minutes per turn. Moser-Mercer´s recommendation is still considered industry best practice today (AIIC, 2020), despite Seeber's different results in 2011.

2.2.2 **Empirical findings: Cortisol and heartrate as stress indicators**

Roziner and Shlesinger's comprehensive study of RSI carried out at the European Parliament (EP) in 2004 corroborated many of the ITU/ETI study findings (Braun, 2015) and confirmed

that interpreters did experience an acceleration of fatigue in the RSI mode (Roziner & Shlesinger, 2010). However, although interpreters perceived RSI as significantly more stressful than on-site interpreting, no statistically significant increase in blood cortisol levels (a stress indicator) was found during RSI. Also, while the interpreters reported that their performance was poorer during RSI, when the interpretations were evaluated by an objective panel of judges, differences in the quality of interpretation between RSI and on-site modes were found to be statistically insignificant (Roziner & Shlesinger, 2010).

However, a recent study that used an interpreter's speech rhythm and heart rate as stress indicators found empirical evidence of a significant increase in heart rate during interpreting in circumstances similar to RSI (Rojo López et al., 2021).The study also found a direct correlation between high stress levels and poor performance results for interpreters. The study involved medical interpreter students under end-year practical examination. The exam conditions were similar to RSI conditions in that interpreters were off-site and had no control over their visual or sound input; they were asked to interpret recordings (which RSI interpreters are often required to do), and they were recorded as they interpreted (as has become frequent practice in RSI settings). Students were examined in a university interpreting lab where they had access to sound-proof booths, which is the case with RSI hubs but not with home-based RSI. Home-based RSI interpreters are exposed to environmental noise caused by household members, pets, unexpected construction activities, traffic and so forth (Breima & Steiert, 2021). Although the fact that students were being examined may have increased the stress they experienced (Rojo López et al., 2021) they had access to technician support, whereas home-based RSI interpreters may experience the additional stress of having to solve technical problems themselves while they are interpreting (Przepiórkowska, 2021). Thus, these research results are useful to an exploration of the physiological and psychological effects of RSI.

2.2.3 **Distinguishing between objective and subjective factors**

Roziner & Shlesinger's (2010) study determined that it was necessary to distinguish between objective factors (such as environmental stressors) and subjective factors (such as anxiousness over new technologies—'technostress') and human resistance to change. Despite similar technical and environmental conditions during the RSI and on-site components of the European Parliament's experiment, interpreters still experienced RSI as more stressful, leading Roziner & Shlesinger (2010) to believe that the greater 'cost' experienced by interpreters using RSI was psychological. To reduce this cost, researchers recommended that the use of RSI be

restricted to settings with appropriate technological set-up (adequate sound and panoramic visuals), suitable environmental conditions (appropriate lighting, prevention of glare), reasonable working conditions (shorter shifts and longer breaks than in on-site interpreting) and higher remuneration than for in-person meetings. These recommendations aimed to minimise interpreters' experience of burnout and alienation, thereby reducing their psychological resistance to the unfamiliar practicalities of RSI (Roziner & Shlesinger, 2010).

However even if all the above recommendations are observed, in a remote setting, sensory input from the interpreter's real surroundings (visual cues from a remote hub booth, or a dog barking in the background) may distract the interpreter. Such distractions add to the interpreter's feeling of alienation and cognitive load, thereby accelerating the onset of fatigue that was identified by Moser-Mercer (2005a). While the seminal studies conducted by Moser-Mercer (2005a&b) and Roziner and Shlesinger (2010) were conducted over a decade ago, their results are still valid today and continue to be quoted in RSI research and AIIC documents.

2.3 Trends in Remote Interpreting

As most SIDPs used in RSI were only developed after 2014, most studies prior to Covid-19 focussed on the use of DI and later RI in medical and legal contexts, delivered through telephone, video or audio streaming technologies. There were few studies conducted on RSI in conference settings before the Covid-19 pandemic.

2.3.1 Telephone liaison and community interpreting

Wang (2018) surveyed 465 interpreters in Australia who provide remote liaison and community consecutive interpreting via telephone. His survey focussed on the demographics and experience of interpreters, their role when interpreting by telephone, and their perceptions about the quality of telephone interpreting. The study revealed that 58% of respondents preferred on-site interpreting; 15% preferred telephone interpreting; 22% indicated that their preference depended on many variables; and 5% didn't have a preference.

Variables that influence preference. The variables that influenced interpreters' preference included: sound quality; client background noise; remuneration (in terms of recognition of travel time and costs and other considerations); the nature of the assignment; the degree of interpreter accuracy; convenience of the assignment time (e.g. inconvenient late night assignments); and clients' attitudes towards interpreters (Wang, 2018).

Accuracy. Wang (2018) found that 41% of respondents believed their accuracy rate during telephone interpreting was equal to or higher than their accuracy rate during on-site interpreting, while 37% believed their accuracy rate was higher for on-site interpreting. Twenty-two percent indicated that the accuracy of telephone interpreting depended on variables such as the speaker's speed, accent and volume; the quality of the speaker's sound equipment; background noise; the technicality of the topic; the time allowed for preparation; and the interpreter's qualification and training, experience, familiarity with the topic and listening skills.

Appropriateness. In Wang's (2018) study, most respondents indicated that they considered telephone interpreting inappropriate in certain settings; for example, for court trials, emotionally charged conversations, group discussions and where quoted documents were unavailable to interpreters.

The importance of visual cues. In situations where on-site interpreting was impossible, most of Wang's (2018) respondents preferred videoconference interpreting to telephone interpreting because they had access to visual cues.

Recommendations. The respondents in Wang's (2018) study made several recommendations for improving telephone interpreting. They recommended that clients use equipment that would ensure excellent sound quality; that best practice and protocols be developed jointly between the clients, interpreters and interpreting agencies after joint training sessions; that interpreters be paid a higher rate of remuneration than for in-person interpreting and be treated with respect (many had complained that some speakers treated them rudely during telephone interpretation); that interpreters be allowed to intervene with clients when needed instead of having to work through the contracting agent, especially if speakers did not speak clearly, sound quality was poor, or speakers did not stop talking to allow interpreters to interpret consecutively; that interpreters be provided with documents and glossaries beforehand for adequate preparation; and that telephone interpreting be replaced with videoconference interpreting so that interpreters could receive visual input.

2.3.2 **Remote Medical Interpreting**

Studies carried out in medical settings before the Covid-19 pandemic revealed that medical practitioners preferred videoconference interpreting by qualified medical interpreters over on-

site interpreting by health workers, in order to ensure greater accuracy. Furthermore, as on-site interpreting was provided consecutively, medical and emergency staff found it time-consuming (Gany et al., 2007b). However, qualified, medical interpreters preferred on-site consecutive interpreting over videoconferencing.

2.3.3 **Interpreter preference for on-site interpreting**

A 2011 survey of 52 interpreters in the United States found that interpreters considered in-person consecutive interpreting to be more accurate than telephone interpreting (Leemann Price, Pérez-Stable, Nickleach, López, & Karliner, 2011). While the respondents indicated that telephone interpreting was satisfactory for exchanging administrative information and non-technical follow-up clinical visits, in scenarios where technical or emotionally charged information needed to be exchanged between medical professionals and patients, on-site consecutive or remote videoconference interpreting was preferred, as it allowed the interpreter to observe non-verbal cues.

2.3.4 **Patient preference for remote simultaneous interpreting**

In medical settings, the patient's experience is of paramount importance. Gany et al. (2007a) found that patients who were treated via Remote Simultaneous Medical Interpreting (RSMI) were more satisfied with their physician's care and rated the interpreter's performance higher than those patients treated via on-site consecutive interpreting. Patients indicated that they felt their privacy was better protected with RSMI. Gany et al. (2007a) concluded that in certain contexts–such as those dealing with sexual and reproductive health, mental health, or other sensitive issues–RSMI was preferred. Leemann Price et al. (2011) found that in contexts such as physiotherapy, occupational therapy, or end-of-life and palliative care, on-site interpreting was the preferred modality.

In Germany, a similar study was conducted among physicians and migrant populations between September 2018 and February 2019, just before the outbreak of the Covid-19 pandemic (Fiedler, Pruskil, Wiessner, Zimmermann, & Scherer, 2022, p. 2). Results corroborated the findings of Gany et al.'s (2007a). Experiments with telephone and videoconference interpreting were done during doctor-patient consultations. The results were compared to those of a doctor–patient control group that used unqualified, *ad hoc* on-site consecutive interpreters. Videoconference interpreting received the highest scores in terms of patient satisfaction. Over

90% of the patients and doctors in the study affirmed that they would benefit from remote interpreting in the future, with preference for videoconference interpreting.

2.3.5 **Remote simultaneous medical interpreting is faster and more accurate**

In a separate study on the impact of interpretation method on time and errors, Gany et al. (2007b) found that RSMI was faster and more accurate that other interpreting modes used in medical settings. Four scripted interactions between clinical staff and patients were used to compare time-efficiency and error-rate across four modes of interpreting: remote simultaneous (RSMI), remote consecutive, on-site consecutive, and on-site *ad hoc* consecutive provided by medical staff who were not professional interpreters (Gany et al., 2007b). RSMI was found to be 5.52 minutes faster per turn than on-site *ad hoc* consecutive interpreting by medical staff.[3] Obviously, both consecutive modes were slower than RSMI. Regarding accuracy, there were 12 times more errors of moderate or important significance with the non-RSMI modalities than with RSMI. Although the study did not investigate why the accuracy rate was higher for RSMI, Gany et al. (2007b) suggest that as there is minimal time lag in RSMI mode, interpreters do not need to recall as large amounts of clinical information as with consecutive modalities, which could contribute to error. Furthermore, because RSIM allows for faster, closer engagement between physicians and patients, there is greater interaction, immediate feedback, and clearer communication. Interpreters thus gain a better understanding of the issues discussed, enabling them to interpret more accurately.

2.3.6 **Remote interpreting in legal and court settings**

In a 2018 study, Braun found that more negative perceptions of videoconference interpreting persisted among interpreters working in legal settings in England than among their counterparts in Europe who had been introduced to it much later. As there has been a long history of videoconference interpreting in legal settings in England, the aspect of 'novelty' raised by Roziner and Shlesinger (2010) could not account for interpreters' negative perceptions. Braun (2018) attributes their reservations to technical, physiological and psychological factors.

Braun (2018) reported that the disparities in remote interpretation equipment suppliers, equipment and technical configurations resulting from the complexity and fragmentation of

[3] RSMI 12.72 minutes *vs ad hoc* consecutive by medical staff 18.24 minutes

England's procurement system negatively affected equipment uniformity and sound quality. Almost 40% of respondents considered the sound quality to be inadequate.

Regarding physiological and environmental factors, respondents complained that they needed to share consoles and microphones in videoconference interpreting hubs. (Braun, 2018). Furthermore, interpreting booths were too small to accommodate a lawyer and an interpreter, leading to turn-taking challenges.

Interpreters reported that they were rarely consulted by clients on the use of videoconference interpreting and its adequacy in specific legal settings, leading to feelings of frustration and exclusion (Braun, 2018). These psychological factors negatively affected their perceptions of videoconference interpreting.

2.3.7 **Remote Simultaneous Interpreting in conference settings**

The number of studies conducted on RSI is limited. Working on the theory that with the increased use of personal computers, VoIP, Google, Facebook, and other social media since the early 2000s interpreters may have become more receptive to using RSI, in 2014 Seeber et al. (2019) conducted an in-depth hub-based study to investigate how freelance conference interpreters' experience during the 2014 FIFA World Cup in Brazil had affected their attitudes towards RSI. Due to the distance between the events and the timetable it was impossible for interpreters to travel to events; instead, Video Remote Conference Interpretation (VRCI) services were provided via an RSI hub. Seeber et al.'s (2019) study, the most in-depth RSI study since that of Rosiner and Shlesinger (2004), comprised a pre- and post-event questionnaire and mid-event interviews. Interpreters' perceptions of RSI before the event, as well as their perceptions of using RSI after the event, were analysed. The survey also included questions on the physiological and psychological impacts of RSI on their well-being.

A positive shift towards RSI. The study found that the VRCI technologies used at the 2014 FIFA World Cup generally met interpreters' expectations—and sometimes exceeded them (Seeber et al., 2019). They considered the sound and image quality to be excellent. Some indicated that they could see speakers and people better than if they had been in the conference room. Half of the interpreters considered the experience less stressful and felt less exposed than in on-site interpreting. They expressed overall satisfaction with their booth, work environment and interpreters' lounge. Overall, 73% of interpreters expressed the opinion that interpreters

should accept RSI as part of their profession. Most, however, indicated that they would prefer to work from an RSI hub where they could access technical support and interact with colleagues, rather than from home (Seeber et al., 2019).

Technical support and visual input still essential. Seeber et al. (2019) concluded that the quality of the service provided by the technical team, offering a panoramic view of the conference room, with close-up visuals of all speakers taking the floor, were essential for offsetting interpreters' sense of alienation and lack of immersion. The researchers concluded that the 2014 FIFA World Cup RSI event was exceptional with regard to meeting duration, number of assignments, interpreter manning strength and number of breaks, when compared to interpreters' previous RSI experiences. The use of an RSI hub at the 2014 FIFA World Cup thus serves as an example of good RSI practice.

2.4 The Covid-19 pandemic and the unprecedented uptake of RSI

As discussed in the Introduction, the onslaught of the Covid-19 pandemic in March 2020 paralysed the in-person conference world, leading organizations and companies to seek virtual meeting solutions. By mid-2020 many organizations had turned to WebEx, Zoom and MS Teams to hold their meetings. The challenges of holding multilingual meetings were overcome by using SIDPs or virtual platforms like Zoom that offered multiple channels, which interpreters could use for interpretation. While most clients and interpreters navigated the mostly uncharted waters of remote meetings, standard-setting bodies and many international organizations tried to establish norms and the basis for good practice.

2.4.1 The ISO/PAS 24019

The International Organization for Standardization (ISO) is a global federation of national standard-setting bodies that produce standards for many area of industry. The ISO's International Standards are prepared by technical committees comprising international organisations, governments, non-governmental organisations and subject matter experts. AIIC members have long integrated the technical committees on interpreting. The standards are exhaustive (Technical Committee ISO/TC 37, 2020). The ISO/PAS 24019 was published in January 2020 to provide standards for SIDP developers, virtual meeting organisers, RSI interpreters, and their clients. The ISO/PAS 24019 informed the *Distance Interpreting Guidelines* produced by AIIC in 2020.

2.4.2 **AIIC Guidelines on Distance Interpreting**

Based on the ISO standards and the vast experience of its community of practice, AIIC published its Guidelines on Distance Interpreting (which includes Remote Interpreting) and its AIIC Covid-19 Distance Interpreting Recommendations for Institutions and DI Hubs in 2020 (AIIC, 2020a). The following ISO/PAS 24019 standards and AIIC recommendations are of particular interest to this research (AIIC, 2020a):

a) RSI hubs are preferable to home-based workspaces, as they provide sound-proof, private working conditions where interpreters can work confidentially in the same physical space as booth partners, thus facilitating collaboration and handover, and reducing cognitive load.

b) To ensure quality sound, speaker and interpreter headsets (earphones with embedded microphone, regardless of brand) should reproduce all audio frequencies within the range of 125HZ and 15 000 HZ. Headsets should have a USB connection for use with a computer. Furthermore, measures must be put in place to avoid acoustic shock. Echoes must be avoided.

c) To ensure visual input quality and minimise interpreters' feelings of alienation, screens should be large enough for interpreters to clearly see images and read displayed presentations or texts. Images must be clear and crisp.

d) Speakers should be displayed on 65% of the screen, with the remaining meeting participants taking up the remaining 35%. If audio-visual presentations are made, these should appear on a separate screen.

e) Sound and image must be synchronised, avoiding sound-image leads greater than 125 milliseconds and sound-image lags greater than 45 milliseconds.

f) To reduce technical problems, technicians must be present.

g) Since the lack of direct visual input of speakers' cues adds to interpreters' cognitive load, team manning strength should be increased to counter fatigue and stress.

h) In terms of physiological requirements, interpreters should have adjustable, ergonomic chairs to reduce physical discomfort and fatigue. Adequate, low-heat, adjustable lighting must be provided.

i) In order to reduce psychological stress due to 'novelty', interpreters should receive a technical briefing prior to the event to ensure that they are familiarised with the equipment. Clients and interpreters should have a 'dry run' of working together, so that they can be reminded of speaker requirements, and so that interpreters have an opportunity to familiarise themselves with speakers' voices and accents prior to the RSI event.

j) In cases where the event is recorded or live-streamed, a disclaimer should be streamed stating that interpretation is provided for the purposes of facilitating communication and does not constitute an authentic record of the event in order to protect the interpreter from liability issues.

2.4.3 **Guidelines for working from home *"in extremis"***

With the arrival of the Covid-19 pandemic, it became virtually impossible for interpreters to work from RSI hubs. Most interpreters were confined to their homes due to government restrictions on contact and travel. In response to this, on 18 March 2020, AIIC published a guidance document titled 'Advice on performing interpreting from home *in extremis'* (AIIC, 2020b). The document affirmed that all previous guidelines for Distance Interpreting remained in effect but, in view of the exceptional circumstances of the pandemic, additional measures should be implemented by interpreters. Interpreters working from home were advised to ensure that they were not held liable by clients for lost connections, service interruption and even loss of confidential data through hacking. Interpreters were warned of the potential hazards of high earphone volume, acoustic shock and in-ear headphones. The document also recommended that interpreters ensure that they be allowed to suspend interpretation if RSI video and audio quality was poor.

While providing best practice for the protection of clients and interpreters alike, AIIC guidelines are not binding for interpreters and clients that are not signatories to an AIIC Agreement. However, the ISO/PAS 24019 published in 2020 can be invoked in all countries whose governments and national standards bodies participate in the ISO technical committees and that wish to uphold a reputation for providing quality services.

2.4.4 **Physical and psychological effects of working from home**

At the time of this study, very few surveys (as discussed below) had been conducted targeting the physical and psychological effects of home-based RSI during the Covid-19 pandemic. In lieu of this, studies investigating the physical and psychological effects reported by teleworkers working from home during the Covid-19 pandemic were reviewed. 'Teleworker' refers to anyone who works remotely, using the internet or telephone for tasks and to communicate with colleagues and clients.

In the United Kingdom, a Public Health (RSPH, 2021) survey found that 45% of teleworkers perceived working from home during the Covid-19 pandemic as a positive change for their health and well-being. However, 29% perceived doing telework from home as detrimental to their health and well-being, mainly because they lived in multi-member households. Women perceived doing telework as more stressful, because they were expected by family members to take on more household responsibilities than if they were at the office, thus adding to their workload and fatigue. The most common psychological effect was a feeling of being disconnected from colleagues (67%). Physical effects included musculoskeletal problems (39%) because of poor sitting posture. Women experienced more feelings of isolation (58%) than men (39%) (RSPH, 2021).

In a document study involving research carried out in 10 countries (Australia, Belgium, Brazil, Germany, Japan, the Netherlands, New Zealand, South Africa, the UK, and the USA), workers who were less used to information technology found telework extremely stressful (Oakman, 2020). Technostress was caused by the complexity of computer hardware and software, the rapid pace of transitioning to online work, the constant contact with electronic devices for work, and the invasion of their private homes by telework. Reduced social support from colleagues also contributed significantly to emotional exhaustion and cognitive stress. However, many welcomed the opportunity to work from home during the pandemic as opposed to being unemployed, expressing feelings of gratitude, enthusiasm, and happiness. After the pandemic, the majority of teleworkers reported wanting a balance between office work and home-based work (Oakman, 2020).

2.4.5 **Experiences with RSI**

A few noteworthy studies were conducted on RSI during the Covid-19 pandemic.

2.4.5.1 RSI in Japan

Matsushita (2020) conducted a survey on conference interpreters' experiences and attitudes towards RSI during the pandemic. The results revealed that although only 18.8% of survey respondents had used RSI before the pandemic, by July 2020 44.5% had used RSI and 91.7% were convinced that the use of RSI would increase after the pandemic. Eighty percent stated that they would be willing to work via RSI after the pandemic; of these, 88% cited not having to travel as a key advantage of RSI. It is important to note, however, that Japanese interpreters have access to state-of-the-art RSI technologies. Already in 2019, a major Japanese interpreting agency had signed an exclusive distribution contract with Interprefy, a leading RSI platform. In May 2020, the Japanese InterpreteX platform was launched. Matsushita (2020) found that Japanese interpreters' primary concerns with RSI were not technical, but were related to market conditions such as rates, team strength, and length of turns.

2.4.5.2 RSI in Poland

In Poland, Przepiórkowska (2021) conducted a survey on the severity of the impact of the transition to RSI in response to the pandemic on interpreters' professional practice. Results revealed that 78% of survey respondents considered the impact 'very severe' or 'stressful'; 76% reported having incurred significant financial costs to purchase equipment; 73% reported that they had been required to learn a new skill; 39% had modified their homes to accommodate RSI; and 24% had needed to negotiate with neighbours and household members to minimize distractions from noise while they were interpreting. Nonetheless, 88% believed that RSI would become a permanent feature. Around half (52%) were open to working exclusively with RSI, while 27% preferred to work with both RSI and on-site interpreting, and 22% completely rejected RSI (Przepiórkowska, 2021).

2.4.5.3 RSI across Europe

In 2020, the École Supérieure d'Interprètes et de Traducteurs (ESIT) launched a survey focussed on the technical set-up, working conditions, teamwork, and market developments related to RSI across Europe (2021). The survey also gathered interpreters' views on the advantages and disadvantages of RSI. At the time of writing this report, only preliminary

results were available and final results were yet to be published; these results showed that AIIC's 2020 recommendations for modifying working conditions had generally been followed. In fact, 75% of the respondents reported working shorter sessions, and 65% had adopted Moser-Mercer's (2003) original recommendation and AIIC´s subsequent recommendation on limiting RSI turns to 20 minutes, instead of the 30-minute turns used in on-site interpreting. However, while 75% of respondents reported working from home, only 26% preferred home-based RSI. Regarding teamwork, 74% of respondents reported using makeshift solutions (WhatsApp; Facetime; other devices) to listen to their colleague, assist booth partners and ensure smooth handover at the end of turns. Regarding interpreter performance, 50% perceived their performance as poorer during RSI than during on-site interpreting; 83% perceived RSI as more difficult than on-site interpreting. In addition, 67% of respondents believed that working conditions had worsened during the pandemic, and 77% reported that remuneration for RSI was lower or equal to remuneration for on-site interpreting, despite its added technostress and inadequate sound (ESIT, 2021).

2.4.5.4 RSI in Africa

In May and October 2022, AIIC Africa offered online training on RSI to members and non-members to sensitise interpreters to the AIIC 'Guidelines on Distance Interpreting', and to the potential physiological and psychological effects of RSI and possible mitigation strategies (AIIC, 2022).

With regard to academic peer-reviewed RSI research, no study had been published in Africa by the time this research study was carried out. Research in Africa focussed primarily on on-site interpreting in the contexts of court (Pienaar & Cornelius, 2015; Lebese, 2015), education (Bothma & Verhoef, 2008; Brewis, 2014), liaising (Feinauer & Lesch, 2013) and sign-language (Olufemi, 2019). Exploring how to develop an interpreting research methodology for Africa, Lesch (2011) states that interpreting in Africa is still in its formative years, both as a profession and as a research discipline. The same can be said for RSI in Africa. Of particular relevance to this research is Lesch's (2011) conclusion that "instead of reinventing the wheel, it is important that research on the continent should be linked to existing knowledge" (p. 371). As observed by Gambier et al. (1997), "One should not lose sight of the small, the simple, the practical and the replicable… so that we may consolidate what we have already discovered" (p. 91) elsewhere.

3 RESEARCH METHOD

3.1 Introduction

To answer the research questions presented in Chapter 1, this study adopted Creswell's (2003) Mixed-Methods Sequential Explanatory research method. Results were compared to Seeber (2019), Matshushita (2020) and Przepiórkowska (2021), which together constituted the triangulated theoretical framework. As RSI is a new phenomenon in Africa, this study first used Creswell's quantitative approach to establish prevalence and trends; this was followed by Creswell's exploratory, qualitative approach to understand those trends. Creswell's (2003) research method was found to be well-suited to the objectives and the specific questions of this research study as explained below.

Creswell's (2003) Mixed-Methods Sequential Explanatory research method consists of two phases: a quantitative survey which allows the researcher to ask questions that elicit quantitative responses, thus facilitating a descriptive statistical analysis and the identification of trends, followed by a qualitative survey that allows the researcher to ask questions that elicit qualitative responses, facilitating a deeper exploration of the answers provided in the quantitative survey. In the case of this study, a quantitative and qualitative questionnaire was first administered to spoken language conference interpreters in the five regions of Africa. The closed question section of the questionnaire allowed for quantitative data gathering. The qualitative part of the questionnaire was administered through the use of a Love letter/Break-up letter, inspired by Przepiórkowska' (2021). It is an exploratory data collection method developed by Hanington and Martin (2012) for research on user experiences. This method was used to collect respondents' perceptions about RSI, including its advantages and disadvantages and its future viability. The questionnaire was followed by another explorative qualitative survey in the form of interviews, which allowed the researcher to delve into the underlying reasoning and motives behind respondents' answers in the questionnaire. See Appendix 1 for a graphic illustration of the Mixed-Methods Sequential Explanatory research design adopted in this study.

The quantitative data collected through the questionnaire allowed the researcher to quantify the prevalence of RSI in Africa, interpreters' receptivity to RSI, costs incurred by the interpreters,

RSI remuneration, length of sessions, team manning strength, and most-used SIDPs. Moreover, the quantitative data allowed the researcher to identify and quantify trends with regard to the backgrounds of the interpreters and their experiences during the pandemic, as well as the most prevalent physiological and psychological effects they experienced while using RSI.

The qualitative data collected through the questionnaire allowed the researcher to analyse and interpret the phenomenon of RSI in Africa according to the significance interpreters attributed to it. The technological requirements of RSI and the sudden, unprecedented transition to RSI on a global scale are complex phenomena, and only qualitative data collection methodologies would allow for a comprehensive and in-depth analysis and interpretation of how this transition affected interpreters working in Africa. Moreover, a qualitative data analysis was required to establish causal relationships between interpreters' perceptions, experiences and preferences with regard to RSI, and their opinions about the viability of RSI during and after the pandemic.

The quantification and interpretation of questionnaire responses produced findings that were then tested through more in-depth interviews. Questionnaire responses informed the design of the semi-structured interview guide used during the interview phase. Interview responses corroborated and further elucidated questionnaire results.

The advantages of Creswell's (2003) Mixed-Methods Sequential Explanatory research method include its straightforwardness and the opportunities it creates to explore questionnaire results in more detail during interviews, especially if unexpected quantitative results emerge. The disadvantages are that it can be time- and resource-intensive (Ivankova et al, 2006). Despite these drawbacks, Creswell's approach was applied successfully, not only in this study but also in similar RSI studies (Seeber et al., 2019).

3.2 Population

This research focused on spoken-language conference interpreters working in Africa at international, continental, and regional conferences. Clients expect conference interpreters in Africa to provide the same interpretation quality that they have become used to in more technologically-advanced settings, such as Geneva, New York, Tokyo, Vienna, and Washington. It was therefore surmised that the experiences of spoken-language conference interpreters working in Africa with regard to RSI would be comparable with the experiences

of interpreters with RSI in other parts of the world. In the African context, most interpreters work with English on an A, B or C language level[4], in addition to other languages.

3.3 Sampling

3.3.1 The questionnaire sample

The questionnaire sample was a non-probabilistic, voluntary sample. The questionnaire was sent out by email to 327 interpreters in the five regions of Africa (East, Central, North, Southern and West Africa). It was also disseminated voluntarily by interested organisations and interpreters to other interpreters in Africa; snowball sampling thus contributed to the sample methodology. A total of 140 anonymous, voluntary responses were received, representing a large convenience sample of interpreters working in Africa.

3.3.2 The interview sample

The interview sample was a stratified, probabilistic sample of 20 interpreters, chosen to represent different strata of the spoken language conference interpreter population working in Africa. The population was first divided into regional strata. Interviewees were then selected from each stratum. Strata were weighted according to regional response rate. Four interviewees were chosen from each of the three most responsive regions in Africa (Eastern, Southern and Western Africa); three interviewees were chosen from each of the two remaining regions (Northern and Central Africa) and two interviewees were chosen who lived abroad but worked in Africa. Once interviewees had been identified to represent the regional strata, they were categorised into strata by gender, age group (under 45/over 45), years of experience (under 20 years/over 20 years), and qualifications (post-graduate linguistic/graduate linguistic/other degree or diploma), since questionnaire responses had indicated a difference in perception on the basis of gender, age, years of experience and qualifications. The intention was to ensure that diverging perceptions were captured.

[4] AIIC defines A as educated mother-tongue level, B as perfectly fluent but not mother-tongue level, and C as perfectly understood but does not actively speak the language.

3.4 Data collection instruments

As mentioned above, data was collected first through an anonymous, voluntary questionnaire and then through confidential, individual interviews.

3.4.1 Questionnaire

3.4.1.1 Questionnaire content

The anonymous questionnaire was based on the AIIC 'Guidelines for Distance Interpreting' (2020a), the AIIC 'Interpreter Checklist for Performing Remote Interpreting Assignments from Home *in extremis* during the Covid-19 Pandemic' (2020b), the physical and psychological effects of online work reported by teleworkers during the pandemic (RSPH, 2021), and the RSI questionnaires used by Seeber et al. (2019), Matsushita (2020), and Przepiórkowska (2021). The questionnaire[5] contained 8 sections, as presented in Table 1.

Table 1 Questionnaire sections

Section	Description
1	Informed consent for anonymous, voluntary responses to be used
2	Respondents' demographics, e.g. age, gender, domicile, qualifications, experience, IT skills, work-related travel, in-pandemic living arrangements
3	Pre-pandemic RSI knowledge and experience
4	First RSI experience
5	RSI experience during the Covid-19 pandemic, e.g. equipment purchased, costs incurred, SIDP used, training, technical features of most used SIDP, preferred SIDP, teamwork, handover protocol, sound challenges and underlying reasons, bandwidth and connections challenges, session duration, remuneration, team manning strength, normative issues, preferences
6	The RSI interpreter's body and mind experience, e.g. the onset of any physiological and psychological discomfort related to providing RSI
7	Optional RSI Love Letter/Break-up Letter focussed on interpreters' perceptions about RSI's viability, their RSI likes and dislikes

[5] Please see Appendix4 for the Questionnaire.

A trial run determined that Sections 1 to 6 took 15 minutes to complete. The questionnaire contained closed questions, where respondents were required to select 'yes' or 'no', make a single choice, choose from multiple choices, provide one-word answers, or select from a Likert-type 5-point grading scale.

Section 7 was optional. It was inspired by Przepiórkowska's (2021) use of the 'Love Letter/Break-up Letter', an exploratory data collection method that elicits responses on users' experiences. This method was used to collect respondents' perceptions about RSI, including their views on its advantages and disadvantages and its future viability. Questions 2 and 3 of Section 7 were designed to be open-ended to provide respondents with the opportunity to freely express themselves. The trial run determined that Section 7 could be answered in 5 to 10 minutes. A total of 138 out of 140 respondents answered Section 7, generating a wealth of qualitative data.

3.4.1.2 Questionnaire process and timing

The questionnaire was developed in English and formatted on Google Forms. It was sent electronically via Google Forms to 327 interpreters[6] on the researcher's emailing list and to interpreters whose email addresses were openly available on the websites of professional associations, such as the South African Translators and Interpreters Institute (SATI), and the International Association of Conference Interpreters (AIIC). The questionnaire generated significant interest. It was also blind copied by UNECA, the WHO Regional Office in Brazzaville, the AIIC Africa Regional Office, the AIIC North Africa and Arab Region, and PAMCIT to other interpreters in Africa, encouraging them to participate. The questionnaire was sent out on a Friday afternoon to allow interpreters time to reflect and complete the 20-minute questionnaire over the weekend. The researcher also sent out a blind copy reminder one week later, via Gmail, with a link to the questionnaire. A second reminder was sent out via a WhatsApp broadcast, to protect the identity of recipients, with information about the research study and a link to the questionnaire. Initially, it was planned that the questionnaire would only be open for a fortnight, but due to a lower response rate in North Africa, it was kept open for three weeks. The questionnaire was closed after receiving 140 responses due to time

[6] Freelance AIIC and non-AIIC spoken-language conference interpreters working in Africa.

constraints. Respondents answered the questionnaire anonymously and voluntarily, and provided consent for their responses to be used anonymously in this research.

3.4.2 **Interviews**

3.4.2.1 Semi-structured interview guide

A semi-structured interview guide was developed, based on quantitative and qualitative questionnaire results, and used to guide interviews.[7] The purpose of the interviews was to obtain qualitative data on interpreters' experience during RSI, perceived advantages and disadvantages, and how these influence interpreters' attitudes towards the use of RSI after the pandemic. Moreover, questionnaire responses elicited further questions about interpreters' first RSI experience; their home-based RSI office; sound and internet connection challenges faced in meetings; meeting participant behaviour; physiological and psychological challenges; and future RSI viability. These questions were discussed at length during the interviews.

3.4.2.2 Interview process and timing

The semi-structured interview guide was sent to interpreters before the interview so that they could reflect on the questions and prepare for the interview. The interview guide was accompanied by an information brief explaining the aim of the research, the purpose of the interviews and the role of the interviewee. An informed consent form was sent to interviewees, which they had to sign and return to the researcher before the interview was conducted.

The interviews were conducted over seven days on Zoom. Each interview lasted approximately 40 minutes, although two lasted 80 minutes as interviewees had many issues to discuss. The interviews were recorded and then transcribed using the Word Automatic Transcription function in Windows 10. Only those statements that were relevant were corrected manually while listening to the recordings.

3.5 Data analysis methods

As new academic research on RSI emerged during the pandemic, it was read and included in the literature review so that it could be compared with this research's results later. Creswell's

[7] The semi-structured interview guide can be found in Appendix2.

(2003) Mixed-Methods Sequential Explanatory approach informed the methodology used for data analysis.

3.5.1 **Statistical analysis**

A quantitative statistical analysis of questionnaire responses was first conducted to determine, for example, the percentages of respondents who travelled; gender, age and experience distribution; percentage with prior RSI experience; percentage of those who liked or disliked RSI; percentage of those who reported physical or psychological effects; and the percentage of those who considered RSI viable. In short, descriptive statistics allowed for the identification of RSI trends in Africa.

3.5.2 **Content and context analysis**

A quantitative content analysis was conducted on the RSI Love Letter/Break-up letter as well as on interview transcripts. Key words and phrases were counted to determine the frequency with which themes and issues were raised, helping to identify the most important issues and trends. A qualitative context analysis was conducted on the RSI Love Letter/Break-up letter and interview responses to identify phrases and words that revealed emotions, perceptions, convictions, likes, dislikes, and concerns.

To allow for more in-depth analysis, interview data was classified into different categories by manually searching for specific words and phrases, e.g. ‘sound quality’, ‘speaker’, ‘internet connection’, ‘noise’, ‘advantage’, and ‘disadvantage’. These words were colour-coded to ensure that comments would be taken into consideration and analysed. Finally, the questionnaire and interview findings were compared with the findings of Seeber et al. (2019), Matsushita (2020), and Przepiórkowska (2021) to understand how interpreters’ attitudes towards RSI in Africa converged with or diverged from those of their peers globally.

3.6 Ethical considerations

This research was conducted in accordance with the University of Witwatersrand’s ethics principles and HREC ethical clearance was obtained for non-medical survey and interview purposes.

3.6.1 **Ethical considerations related to the questionnaire**

The email message that accompanied the questionnaire contained the University of Witwatersrand's required information sheet explaining the aims and objectives of the research, the contribution respondents would make to the first study on RSI in Africa, and highlighting that participation was voluntary and anonymous. Question 1 of the questionnaire required respondents to click 'Yes' to indicate that they were aware that they were completing the questionnaire anonymously and voluntarily, and that they were granting permission for their responses to be used anonymously in the research. Only after clicking 'Yes' and submitting could respondents continue to the following section. Those who did not click 'Yes' were unable to continue. All data were treated confidentially.

3.6.2 **Ethical considerations related to the interviews**

Interviewees were invited to participate via email and were required to complete an informed consent form declaring that they were informed about the research purpose, their contribution, the confidentiality of data, and their right to withdraw at any stage. The semi-structured interview guide was sent to interviewees beforehand and they were requested to indicate if there was any question they preferred not to answer. In such cases, those questions would not be asked. Alphanumeric codes were assigned to interviewees to avoid identity detection. The code was composed of the letters INT, and numbers were used to identify region, gender, and age group. On entering the Zoom platform, the researcher renamed interviewees with their alphanumeric code. When discussing surveyed interpreters' data in the report, all precautions were taken to prevent identity-data matching by readers. Questionnaire respondents and interviewee data will be kept for a maximum of five years on a password-protected device.

3.6.3 **Researcher bias**

Researcher bias was eliminated by aligning the questionnaire with the AIIC 'Guidelines for Distance Interpreting' (2020a), the AIIC 'Interpreter Checklist for Performing Remote Interpreting Assignments from Home *in extremis* during the Covid-19 Pandemic' (2020), and the questionnaires used by Seeber et al. (2019), Matsushita (2020), and Przepiórkowska (2021) in their studies. An interview guide was used to avoid researcher bias during semi-structured interviews. Leading questions and language revealing researcher opinion were avoided. Since cognitive bias informs perceptions (Galowich, 2018), and this research focussed on

perceptions, surveyed interpreters' biases were not a risk to be avoided but rather a factor to be included. There was minimal risk for questionnaire respondents and interviewees.

4 INTERPRETER DEMOGRAPHICS AND THE PRACTICE OF RSI IN AFRICA DURING THE PANDEMIC

Findings and discussion

4.1 Introduction

Chapter Four discusses questionnaire respondents' demographics, their perceptions of RSI before the Covid-19 pandemic, their first RSI experience, and how RSI was practised in Africa during the Covid-19 pandemic. Interviewees' responses are included to provide a more in-depth understanding of questionnaire respondents' responses.

4.2 Demographic data for the respondents

Demographic data collected on the respondents included gender; age; qualifications and experience; work location; living arrangements and environment; and computer and IT skills.

4.2.1 Gender

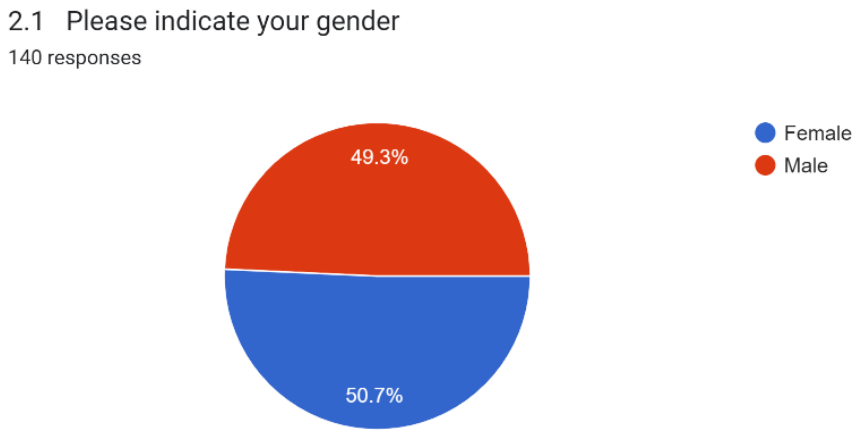


Figure 2: Gender of RSI questionnaire respondents

There were slightly more female respondents than male respondents in this study. These results align with a new trend and reality in Africa in terms of the gender profile of interpreters. For decades, the interpreting profession in Africa was largely dominated by men. Of the 176 interpreters on the website of the AIIC Africa Region, only 79 are women. It is only in the last decade, with the creation of the Pan-African Masters Consortium on Interpretation and

Translation (PAMCIT) programme in 2010 that the number of female interpreters has increased. There is now a large pool of young female interpreters working as freelancers for the African Union, the African Development Bank, the WHO Regional Office, the African Court of Human and People's Rights, and various UN agencies in Africa (European Commission: Knowledge Centre on Interpretation, s.d.). The gender profile of respondents in this study contrasts with those in the studies by Seeber et al. (2019), Matsushita (2020), and Przepiórkowska (2021), in which more than 70% of respondents were female, in line with Gentile's (2018) findings that globally "women make up most of the professionals working in the translational professions (p. 19).

4.2.2 **Age, qualifications and experience**

Most respondents (75.7 %) were above the age of 40.

A total of 17.1% had a university degree in languages or linguistics, while 50.7% had a post-graduate degree in languages or linguistics—meaning that 61.4% of respondents were conversant with the theories of interpreting practice.

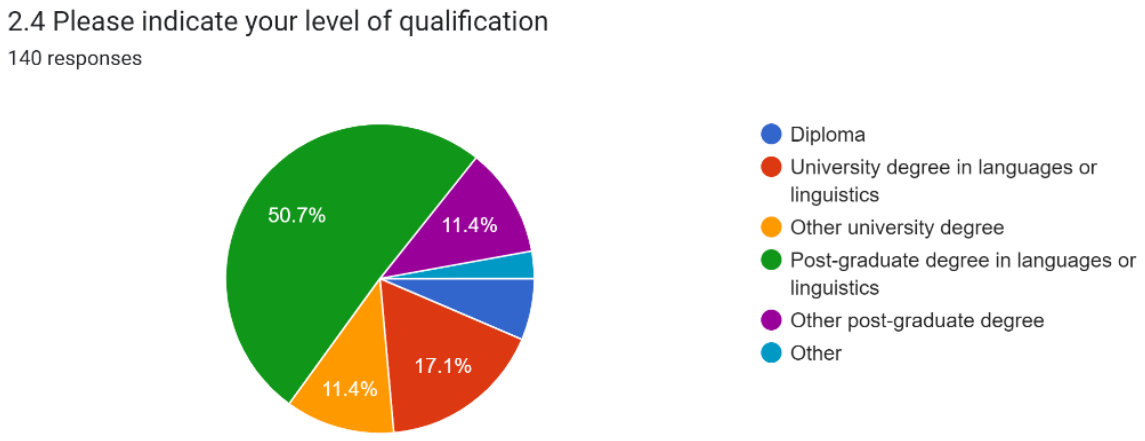


Figure 3: Qualifications of respondents

Respondents had an average of 19 years and 8 months of experience with conference interpreting. This implies that respondents not only had an established freelance professional career but possessed a well-developed set of conference interpreting practices.

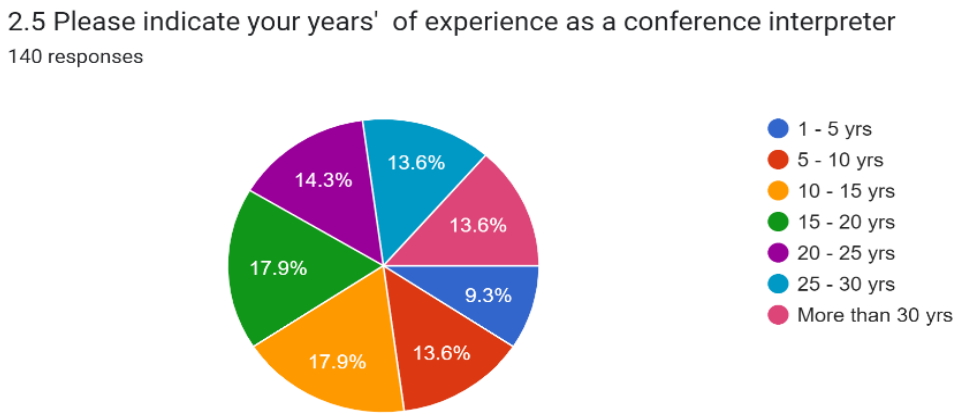


Figure 4: Years of experience of respondents

4.2.3 **Work location**

The survey question 'Before the Covid-19 pandemic, you worked mainly in East/Central/North/Southern/West Africa?' was designed as a multiple choice question. Since most continental organisations have adopted human resources policies based on the principle of regional representation, interpreters work in multiple African regions. UN agencies and other organisations recruit locally-based interpreters, and when these are insufficient or unavailable, they recruit throughout the continent. Regional organisations tend to recruit within the respective region.

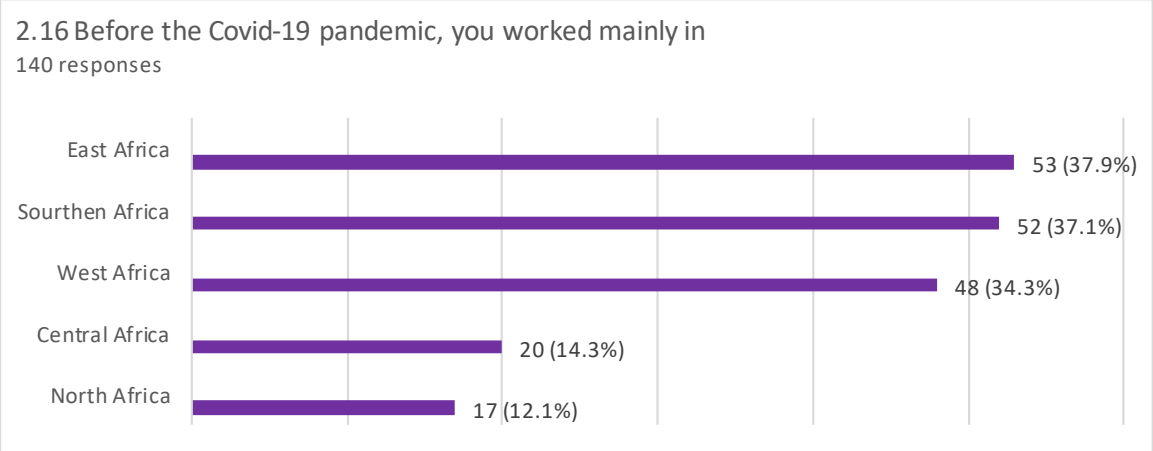


Figure 5: African region where respondents worked primarily before Covid-19

Respondents indicated that before Covid-19 they worked mainly in East, Southern, and West Africa. Fewer respondents worked in Central and North Africa. Questionnaire responses match the map found in Jacob's map (2018), which indicates that the continent's wealth is

agglomerating in the south, east and west of Africa, with some wealthy cities—such as Cairo, Luanda, Lusaka, Marrakesh, and Windhoek—dispersed throughout the rest of the continent. These urbanised, developed cities serve as economic engines, attracting international and continental organisations, investors, business and philanthropists due to their airports, infrastructure and reliable internet connectivity and resources. Thus, they also serve as conference hubs (Jacobs, 2018). It therefore makes sense that interpreters gravitate towards these hubs, either taking up professional domicile there or travelling to these hubs when required.

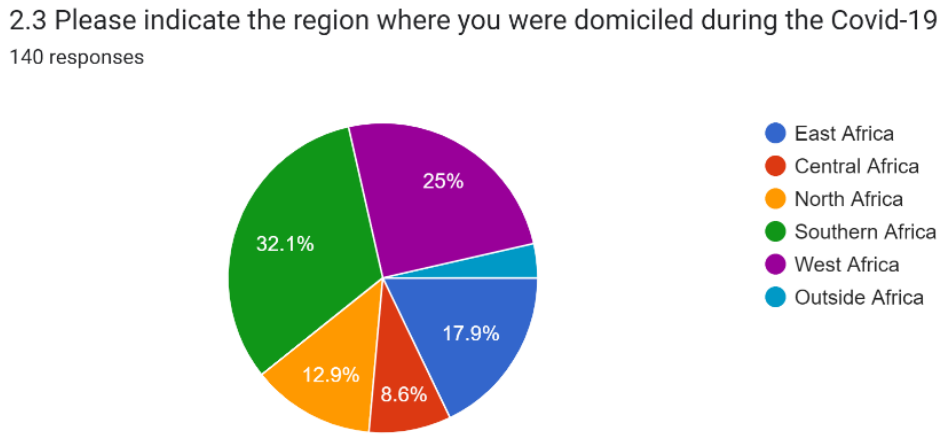


Figure 6: Domicile of respondents during the Covid-19 pandemic

Regarding interpreter's domicile during the Covid-19 pandemic, this question was asked primarily for the purposes of establishing strata for the interviews. It was also asked to ensure that the entire continent was covered in the data. Just over a third of respondents lived in Southern Africa, whereas a quarter lived in West Africa, a fifth in East Africa and less than a tenth in Central Africa and North Africa.

4.2.4 **Living arrangements and environment**

The questionnaire contained questions about living arrangements and environment because interpreters provided home-based RSI during the peaks of the pandemic. It was important to determine to what extent living arrangements affected respondent receptivity to RSI. As illustrated in Figure 7, a large majority of respondents lived with other household members and pets, and only 18.6% lived alone.

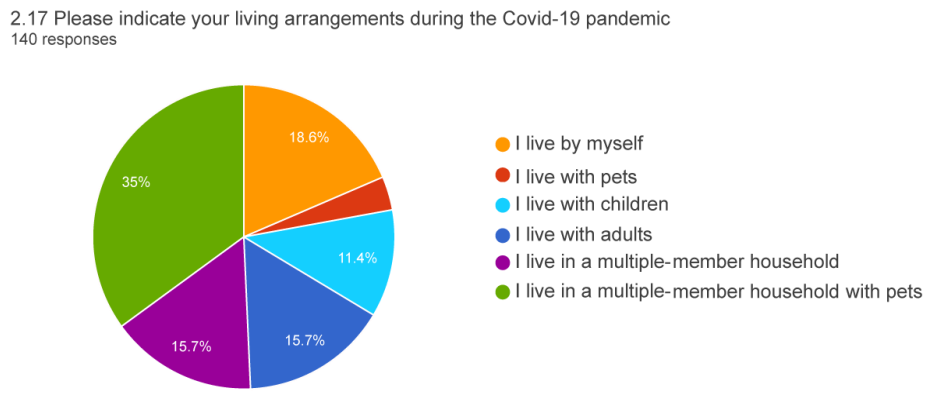


Figure 7: Living arrangements of respondents during the pandemic

During the interviews, interviewee INT631[8] stated that little children do not understand why they cannot disturb parents while they interpret. Interviewee INT652 stated that sometimes it was difficult to interpret from home because small spaces needed to be shared with a spouse who was also attending meetings online. With regard to living environment, 75.7% lived in an urban, quiet setting and 15.7% lived in an urban, noisy setting, as shown in Figure 8. For Question 5.7, 35% of respondents indicated that they needed to negotiate quiet with household members, and 10% with neighbours. This corroborates Przepiórkowska's (2021) findings that 24% of respondents in Poland had to negotiate quiet with families and neighbours. In this study, interviewee INT851 stated that one of the advantages of RSI hubs was the avoidance of noisy neighbourhoods.

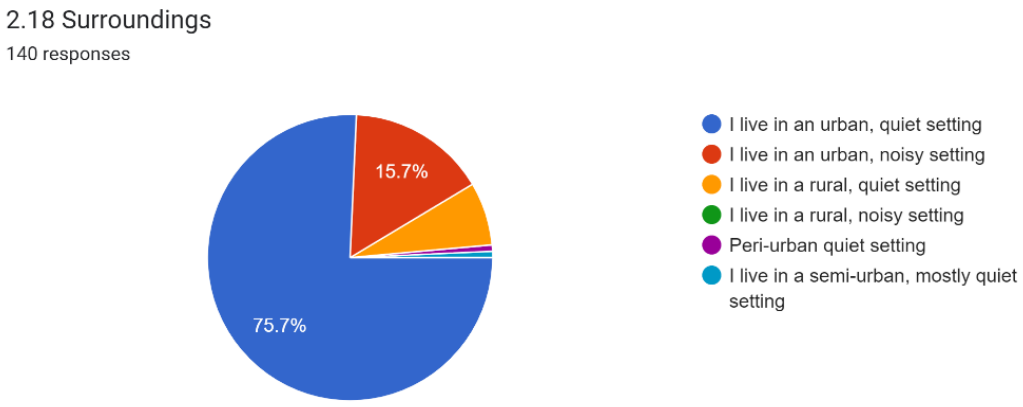


Figure 8: Environment surrounding respondents' homes

[8] Alphanumeric code assigned to one of the interviewees. All interviewees were assigned a different alphanumeric code.

4.2.5 **Computer and IT skills**

Until the beginning of the Covid-19 pandemic, RSI was provided mainly from hubs, where technicians provided IT support to interpreters. Even the most recent RSI experiments at the 2014 FIFA World Cup in Brazil (Seeber et al., 2019), the Council of Europe (Bailey, 2019), the UN and SCIC (Brady, 2019), and UNOG (Brady, 2020) were carried out at hubs, pointing to an underlying assumption that interpreters would always be able to rely on technicians to assist with technical issues.

During the early months of the Covid-19 pandemic, interpreters could not work from hubs. Working from home, many interpreters were forced to deal with technical and technological challenges beyond their level of expertise (Breima & Steiert, 2021). As a result, in Przepiórkowska's (2021) survey, respondents in Poland rated their transition to home-based RSI as "very stressful" and its impact on them "very serious" (2021, p. 11). In Matsushita's (2020) study, the impact was less stressful because many of the respondents had been exposed to home-based RSI already in 2019. Therefore, in this study on RSI in Africa, it was important to determine to what extent interpreters felt at ease with IT technologies and computers before the pandemic, as this could directly influence their perceptions about, and receptivity towards, home-based RSI. For this purpose, three questions were asked.

To the question, 'Please rate your computer and IT skills', 97.2% of respondents indicated that they felt at ease with technology. Interestingly, when responses were analysed in terms of the gender variable, it was discovered that 62% of those who rated their skills as 'very good' were women.

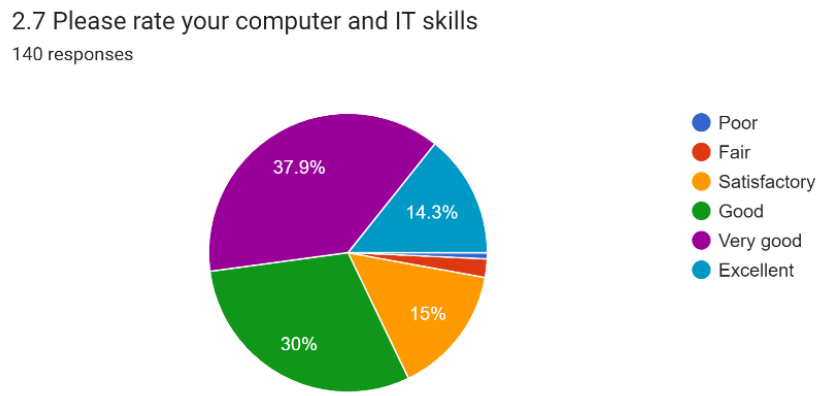


Figure 9: Respondents' rating of their technological skills

Regarding the question, 'Before the Covid-19 pandemic, how often did you use a personal computer, laptop or tablet to prepare for your meetings, without printing documents?' 55% of respondents indicated 'always' and 39.2% indicated "often". To the question, 'Before the Covid-19 pandemic, how often did you use your laptop or tablet in the booth to consult documents, glossaries, dictionaries etc.?' 54% indicated 'always' and 31.4% indicated "often". The responses to these two questions confirmed that respondents were already at ease with using technology in the booth prior to the pandemic. Responses also corroborate Seeber et al.'s (2019) assumption that interpreters' exposure to the widespread use of personal computers, tablets, smartphones, and social media could make them more receptive to RSI.

When IT and computer skills were compared to the age variable, technological skills appeared to diminish among respondents over the age of 65. Only 13% of respondents over 65 years of age reported their skills to be 'very good'; none for this age group considered their IT and computer skills to be 'excellent'. Considering that 15% of respondents in this survey were over the age of 65, it would be important for them to strengthen their IT and computer skills if RSI becomes a permanent part of their interpreting practice. On the positive side, no respondent over the age of 65 rated their skills as 'poor'.

4.3 Knowledge of, and experience with, RSI before the Covid-19 pandemic

One of the objectives of this research was to determine to what extent interpreters working in Africa were familiar with RSI prior to the beginning of the Covid-19 pandemic, and then to analyse how their experiences with RSI during the pandemic influenced their attitudes towards its use after the pandemic. Roziner and Shlesinger (2010) found that the more familiar interpreters are with interpreting practices and technologies, the lower their level of burnout and alienation when using them, and the lower their psychological resistance to using them.

Figure 10 shows respondents' level of experience with RSI before the Covid-19 pandemic.

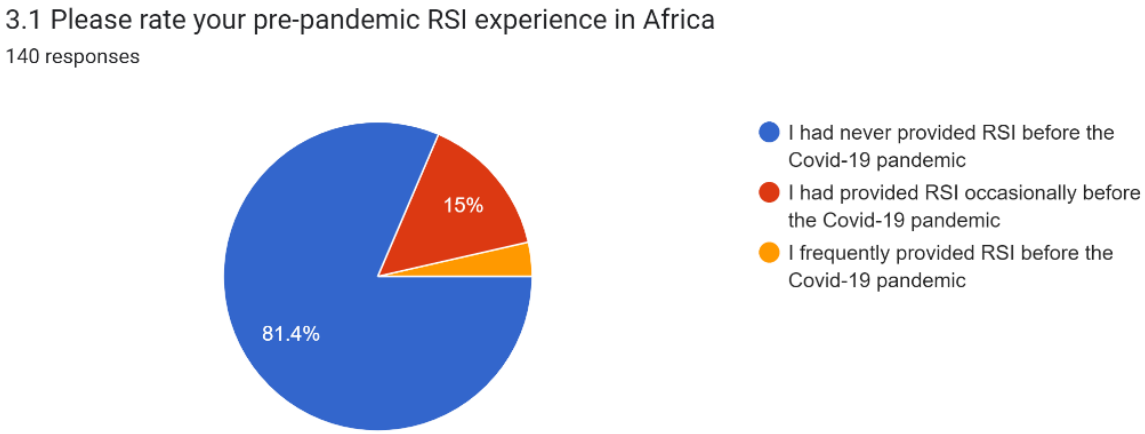


Figure 10: Respondents' level of RSI experience in Africa before the Covid-19 pandemic

Figure 11 indicates that there was a stronger uptake of RSI in other parts of the world before the pandemic than in Africa, as 81.4% of respondents in this study had never provided RSI before the pandemic. In contrast, at the 2014 FIFA World Cup in Brazil, Seeber et al. (2019) found that 80% of respondents, most of whom were based in Geneva, had previous experience with RSI. In Japan, Matsushita (2020) reported that 82.5 % of respondents had experience with RSI prior to the pandemic, while in Poland, Przepiórkowska (2021) found that 30.5% of respondents had experience with RSI prior to the pandemic.

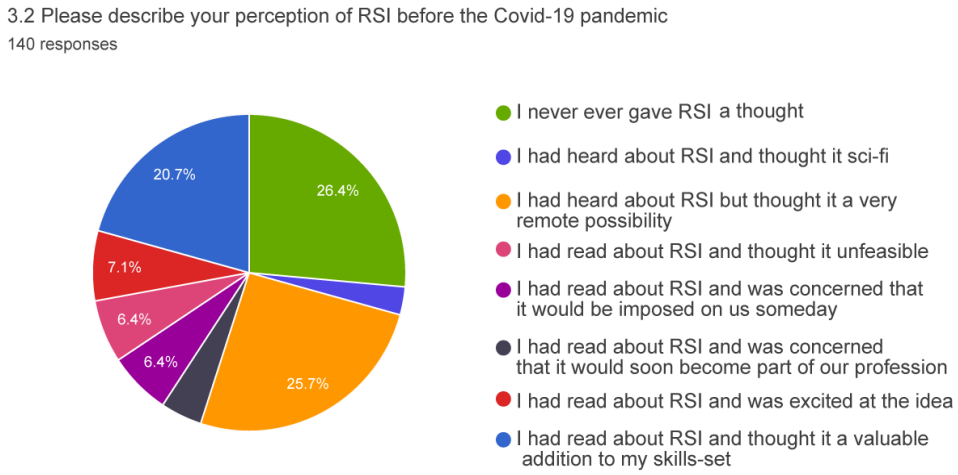


Figure 11: Respondents' perceptions of RSI before the Covid-19 pandemic

Respondents' perceptions about RSI before the pandemic are evidenced in Figure 11. Slightly over a quarter (26.4%) of respondents reported they had never given RSI a thought, indicating that they had not formed a perception about RSI. Another 25.7% had heard about RSI but considered it a very remote possibility. Another 20.7% had read about RSI but did not consider it feasible in Africa.

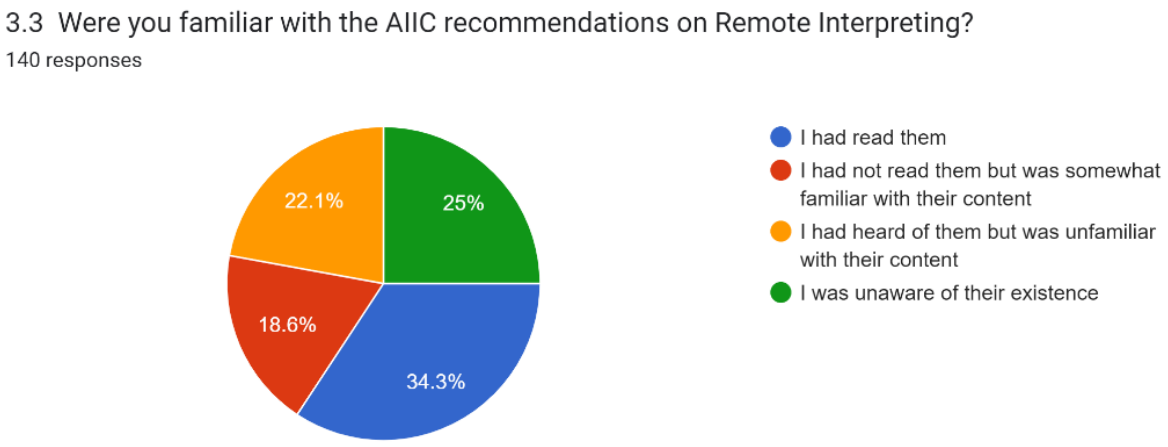


Figure 12: Respondents' familiarity with AIIC's recommendations on Remote Interpreting

Regarding AIIC's recommendations for Distance Interpreting and Remote Interpreting (2020a), Figure 12 above reveals that 65.7% of respondents were not sufficiently familiar with the recommendations to apply them in a manner that would protect their hearing, eyesight, physical health, and mental health. Neither were they in a position to advise clients on RSI requirements for speakers and meeting participants, in order to ensure optimal virtual meeting conditions.

4.4 First experience with RSI

Most of the respondents provided RSI for the first time between March and July 2020. The graph below indicates a steady increase in the number of respondents who accepted RSI assignments in the second quarter of 2020. By July 2020, 68% of respondents had started providing RSI services.

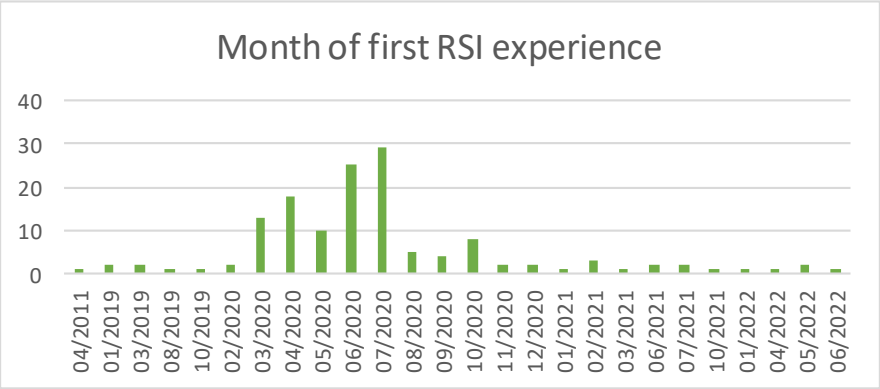


Figure 13: Month in which respondents provided RSI for the first time

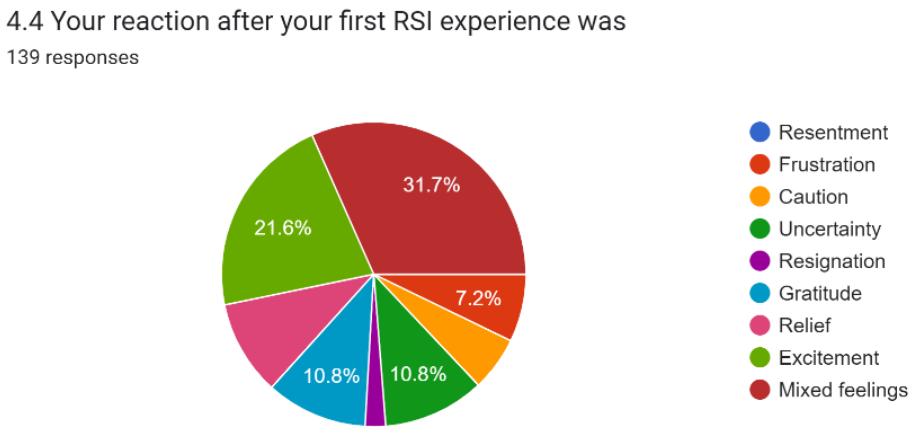


Figure 14: Respondents' reactions to their first RSI experience

Regarding respondents' reaction to their first RSI experience (Figure 14), 43.2% experienced positive feelings, 25.1% experienced negative feelings, and 31.7% had mixed feelings.

Correlation with exposure to training revealed that on-boarding and training by SIDP providers and clients were important contributing factors to respondents' positive perceptions of RSI. The majority (58%) of respondents who received training from the SIDP or the client experienced positive feelings towards RSI, whereas those who had to consult the internet felt mostly uncertain, and those who relied on colleagues experienced resignation and frustration. Regarding online meeting platforms, 92% of respondents did their first RSI meeting on Zoom.

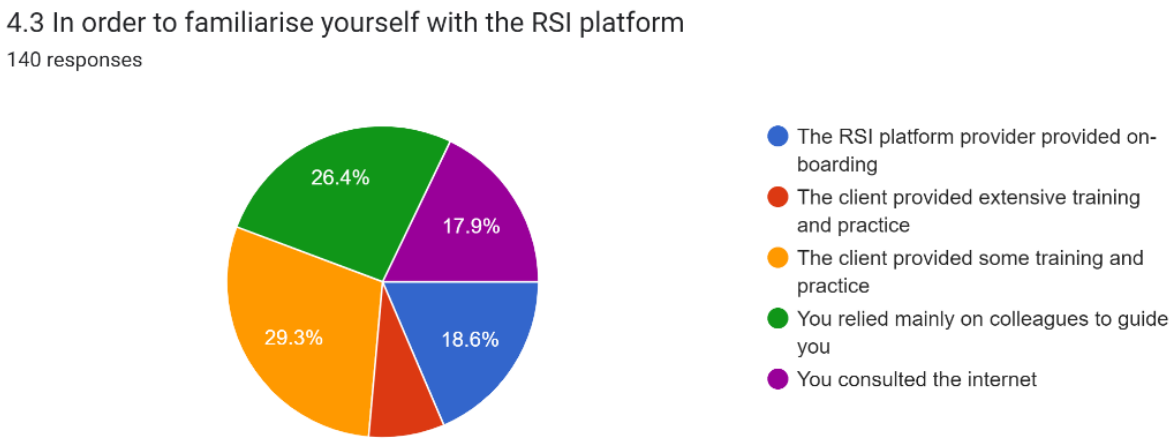


Figure 15: Respondents' sources of knowledge to learn about RSI

4.5 RSI during the Covid-19 pandemic

To better understand the experience of interpreters in Africa with regard to RSI between 2020 and 2022, numerous questions were asked in the questionnaire and expounded upon in the interviews. Interpreters' experience was broken down into aspects that are important on their own and as cross-cutting variables that influence other aspects of RSI.

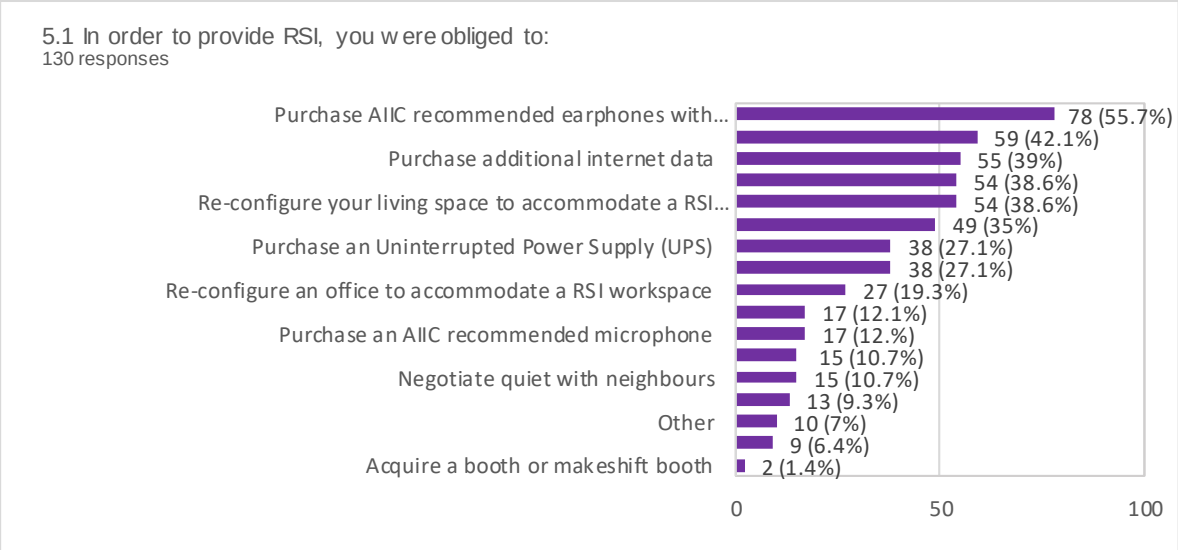


Figure 16: Acquisition of equipment and extra bandwidth during the Covid-19 pandemic

4.5.1 The home-based RSI set-up

Since most interpreters had not provided RSI before the pandemic, many had to acquire equipment and devices to meet AIIC recommendations and client requirements, as shown in Figure 16. Most respondents (93%) bought headsets, consisting of noise-cancelling earphones and an embedded mike, with a USB connection to their computer or laptop. Many respondents also acquired a second device (a laptop or iPad), with which they connected to the platform as a meeting participant to listen to other language channels for relay purposes, and to their booth partner, as initially online platforms used in Africa and elsewhere did not offer these functions. Many respondents in different regions of Africa expressed concern over power outages, indicating why 34% invested in solar panels, UPS inverters, and large power banks. Almost 60% had to reconfigure their living spaces to create a dedicated RSI office spot, and 46% had to negotiate quiet with household members and neighbours.

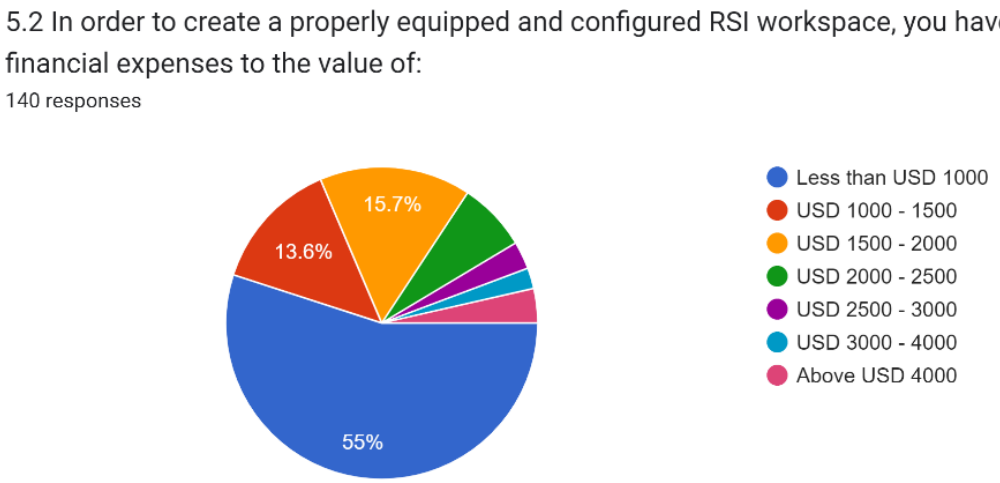


Figure 17: Financial costs of RSI home-based set-up

In terms of costs, 85% of respondents and interviewees indicated that they had spent up to 2000 USD to set up RSI at home. This corroborates Przepiórkowska's (2021) findings in Poland, where 76% of respondents reported having incurred significant financial costs to purchase equipment and 39% had to modify their homes. Polish respondents identified the financial impact as 'very severe' and 'stressful'; given the adjustments and investments illustrated above, it can be surmised that, in Africa, the financial impact was equally severe and stressful.

4.5.2 **Online meeting platforms and SIDPs**

Figure 18 below indicates that 98% of respondents used Zoom for RSI; Kudo was used by only two respondents and Interprefy by one. The advantages and disadvantages of using Zoom for RSI are discussed in Chapter 5 (Sections 5.2 and 5.3), based on respondents' and interviewees' responses.

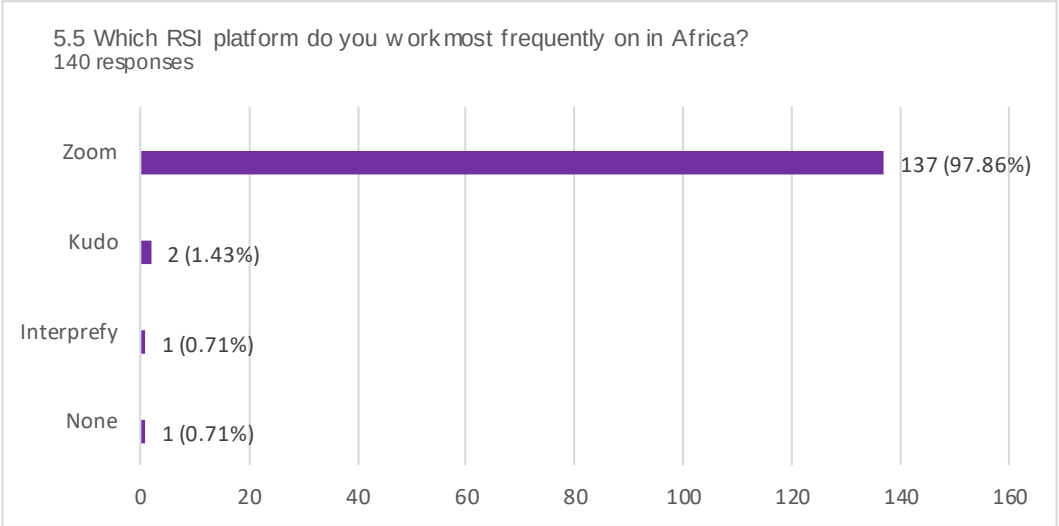


Figure 18: Online meeting platform most often used by respondents for RSI in Africa

4.5.3 **Internet connection**

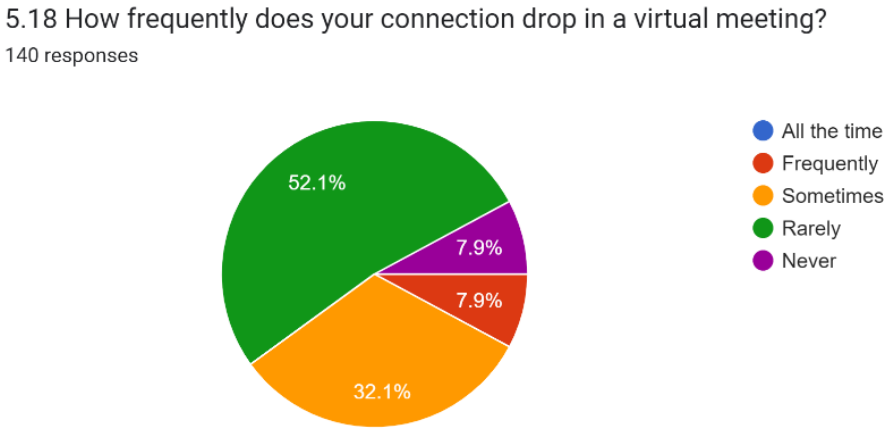


Figure 19: Frequency of respondents' internet connection drops during meetings

Numerous interviewees affirmed that they had made significant investments and efforts to ensure that they had reliable, stable connection throughout meetings (INT651, INT842, INT811, INT831, INT812). Consequently, they seldom suffered a connection drop. Respondents corroborated this, with 60% indicating that they 'rarely' or 'never' had connection issues. Interviewee INT811 had four internet service providers so that, when connections dropped during power outages, they could hop between service providers. Interviewees indicated that internet connection issues caused severe stress and anxiety, which added to cognitive load. This was described by interviewee INT811:

> Well, there's heightened anxiety because . . . I don't know if I am going to get disconnected or if my connection is going to go low and then I can't hear you. So there's this constant fear of poor connection and poor sound. Especially in my region . . . we never have reliable connection. So there's the constant fear of not being able to hear you well. So that increases cognitive load—the stress levels, particularly.

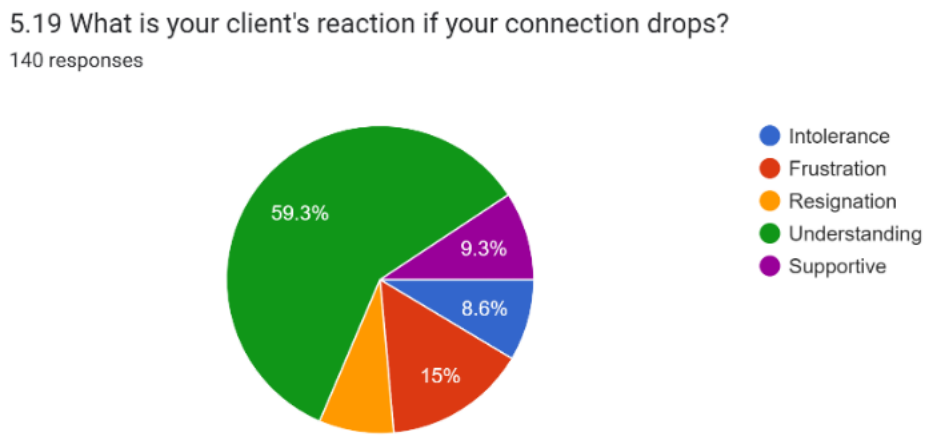


Figure 20: Clients' reactions to dropped connection

Interviewees INT622 and INT811 indicated that when their connection dropped, they would immediately communicate with a booth partner to take over, and with the technician to re-assign them, if interpreter assignment was not automatic. When asked how clients reacted to their dropped connection, respondents indicated that clients were generally 'understanding' and 'supportive'; 96.4% indicated that no client had ever refused to pay them if their connection dropped for longer than 30 minutes (See Appendix 3, Chart 3). Furthermore, since unreliable connectivity it is a continent-wide issue, booth partners were generally understanding and stepped in, according to interviewee INT812. The anxiety when speakers' and delegates' internet connection dropped is discussed as part of the technical issues in Chapter 5 (Section 5.3.2).

4.5.4 **Visual streaming quality**

As discussed in the Literature Review (Chapter 2), Braun (2018), Moser-Mercer (2005a&b), Mouzourakis (2006), Roziner & Shlesinger (2010), and Wang (2018)) have emphasised the importance of visual cues for reducing cognitive load and associated fatigue, as well as for ensuring accurate interpretation. As technology has advanced, visual image quality has

improved. At the 2014 FIFA World Cup, Seeber et al. (2019) found that interpreters were happier with the quality of visual input provided at the event, than had been found in previous studies. As a result, various questions were asked in this study's questionnaire to determine to what extent interpreters in Africa considered visual input important, and whether they were satisfied with the visual streaming on the online meeting platform that they used most frequently.

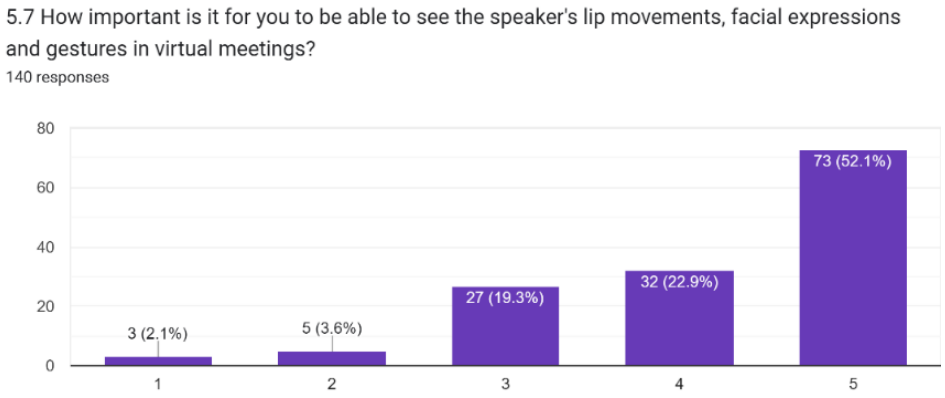


Figure 21: Importance of speaker visual cues

On a 5-point Lickert scale, where 1 meant 'not important' and 5 meant 'extremely important', the majority of respondents (75%) indicated that seeing the speaker's lip movements, facial expressions and gestures was very important. Results corroborate the findings of Moser-Mercer (2005a&b), Wang (2018) and Seeber, et al. (2014) that non-verbal, visual cues are essential for interpreters to understand the meaning of speakers' utterances.

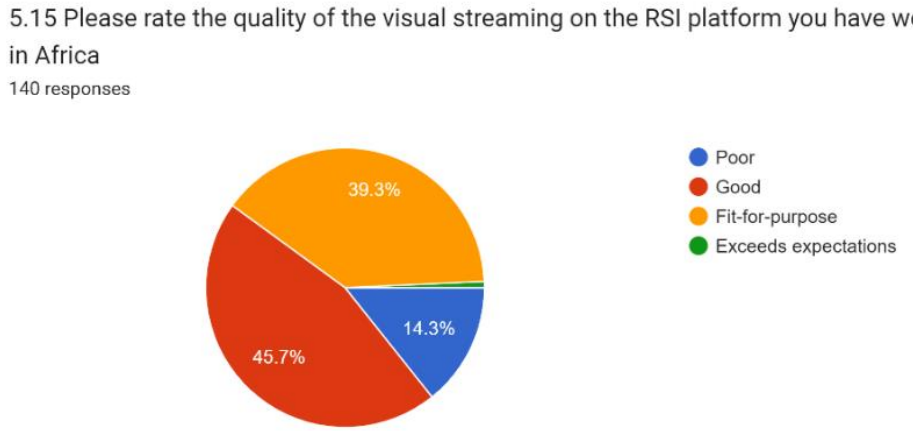


Figure 22: Quality of visual streaming in Africa

The majority (85%) of respondents indicated that the quality of video-streaming on the online meeting platform most used in Africa (Zoom) was fit-for-purpose or better. This was corroborated by interviewees INT 642 and INT821, who indicated that the image was clear, sound-image lag was acceptable and that they were generally satisfied with the quality of visuals.

Regarding what they could actually see on the online meeting platform (Figure 23), the majority indicated they could see the speaker's facial expressions, lip movements, and gestures, as well as the presentation. When compared to in-person meetings, it was interesting that 46% of respondents indicated that they frequently could not see speakers' lip movements, facial expressions and gestures when working on-site because speakers were either too far away or had their backs turned to the booth.

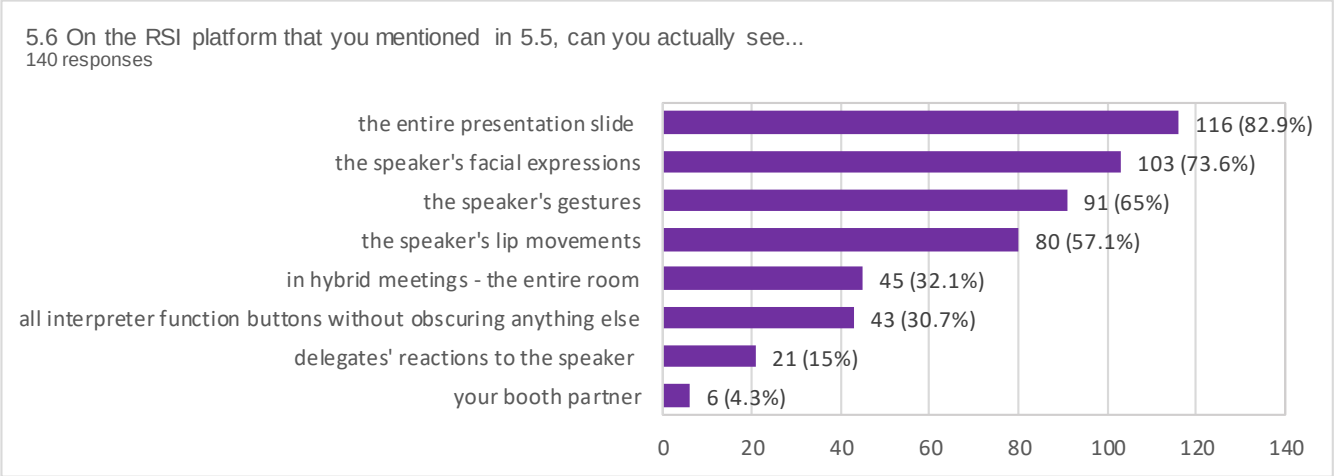


Figure 23: Availability of visual cues on platforms used in Africa

This corroborated Seeber, et al.'s (2019) study, in which respondents stated that they could see speakers better during the RSI experiment than if they had been interpreting in-person in the conference room. In this study, interviewee INT622 confirmed this as follows:

> ISO standards are applied mainly in on-site interpreting in large conference centres. In hotels, interpreting booths are often placed such that interpreters do not have good visual input.

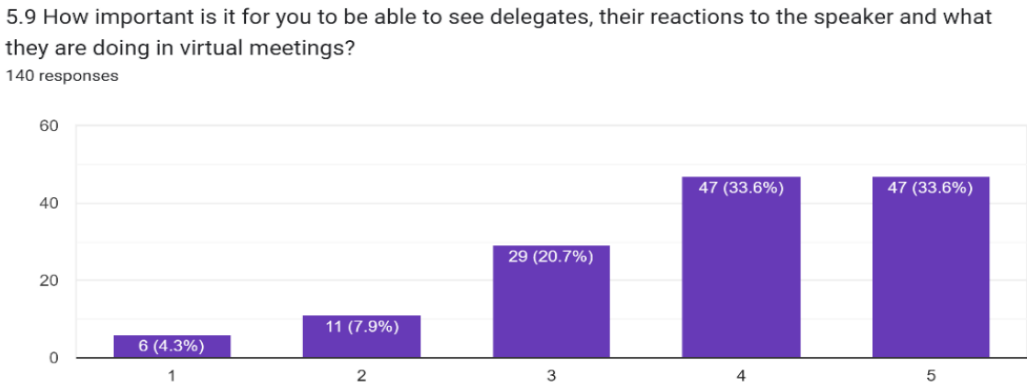


Figure 24: Importance of delegates' visual input for interpreters

Moser-Mercer (2003) found that, to remedy the sense of alienation experienced by interpreters using RSI, it was important for interpreters to see not only the speaker, but also the meeting venue and meeting participants' reactions to what speakers said. Roziner & Shlesinger (2010) corroborated this. In this study, a 5-point Lickert scale was used again; two-thirds of respondents corroborated the importance of receiving visual input from delegates, as shown in Figure 24.

Although some SIDPs, such as RsiX, allow for a proper visual of meeting participants, respondents indicated (see Figure 25) that this was not the case on the online platform used most frequently in Africa (Zoom). This is because Zoom's screen functions mainly allow for a good visual of the speaker and the presentation. Interpreters can opt to see delegates as well, but then display areas become too small.

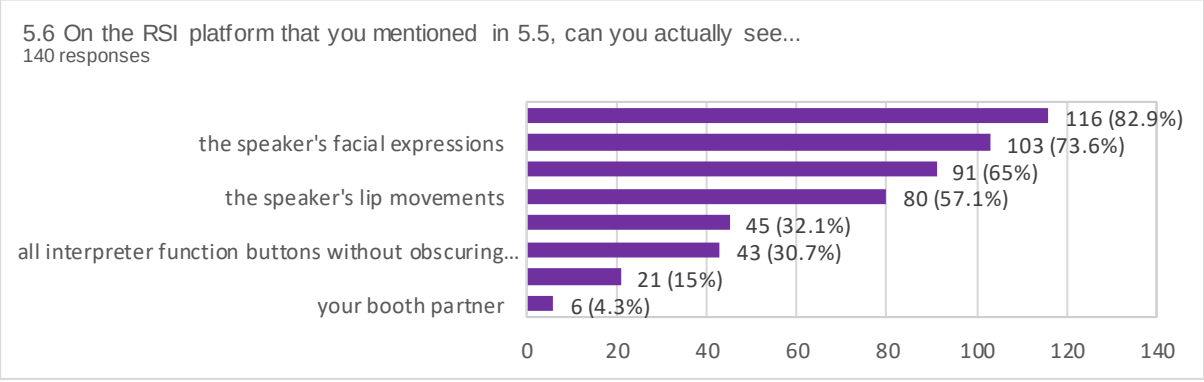


Figure 25: Visibility on the most used virtual meeting platform in Africa

Furthermore, interviewees INT651, INT862, and INT812 indicated that due to poor internet connection, participants often switched off their cameras and then interpreters could not see their reactions at all. However, interviewees INT852, INT811, and INT622 believed that this sometimes proved to be a blessing in disguise, as frequently participants with their cameras on caused distraction, because they moved around, were in busy locations or in were in their cars. Interestingly, 56% of respondents indicated that they could not always see delegates' reactions to speakers' utterances in on-site meetings, either. In this regard, RSI was not necessarily worse. Only a third of respondents indicated that interpretation function buttons were actually visible. Furthermore, 96% could not see their booth partner. Two-thirds of respondents considered it important to see their booth partner and 86% considered that if they could see their booth partner in RSI mode, it would facilitate handover. These two issues are discussed in Chapter 5 (Section 5.3.3) and Chapter 6 (Section 6.2.4).

4.5.5 **Sound quality**

Almost 70% of respondents considered the sound quality on Zoom and SIPDs 'good' and 'fit-for-purpose' (see Figure 26). This response corroborates Przepiórkowska (2021) and Matsushita's (2020) findings, in which respondents indicated being satisfied with sound, which would be an indication that SIDPs have come a long way since experiments done in 1999. However, these responses are in stark contrast to responses to questions about the advantages and disadvantages of RSI, where challenges with sound were mentioned by 30% of survey respondents and by all 20 interviewees.

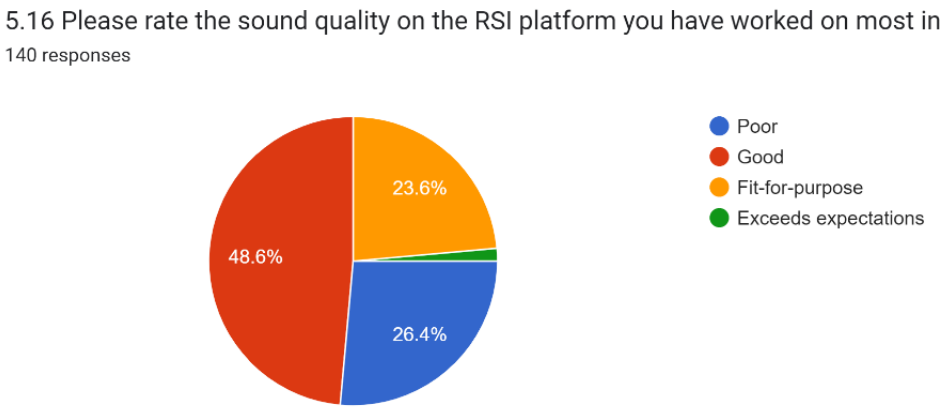


Figure 26: Sound quality on the RSI platform most used in Africa

Consequently, it can be surmised that sound issues are less related to the online meeting platforms themselves and more related to speaker and delegates' lack of adequate internet

connections and bandwidth, their lack of proper headsets, and failure to follow etiquette that would optimise platform users' experience. These challenges were identified and described in detail by interviewees, and are discussed in depth in Chapter 5.

4.5.6 **Length of sessions, team strength and remuneration**

With regard to remuneration, 75.7% of respondents indicated that they were satisfied with the remuneration paid for three-hour sessions (See Appendix 3, Chart 1). However, respondents indicated that clients frequently (30%) or sometimes (26.4%) exceeded the three-hour recommended RSI session.

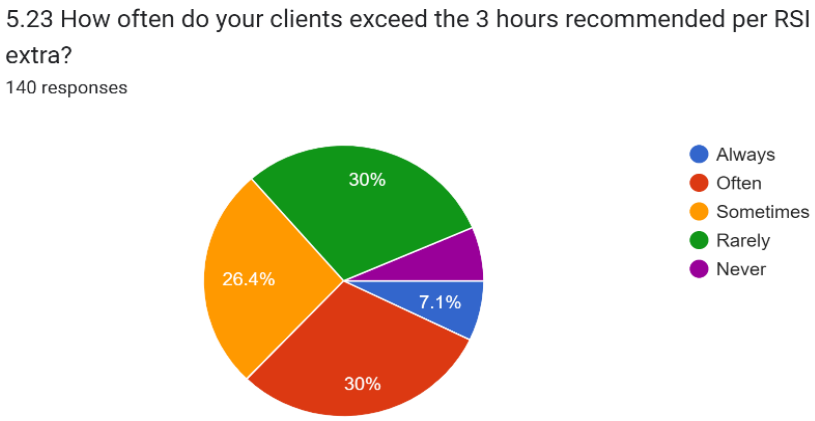


Figure 27: Frequency of sessions that exceed 3 hours with no overtime pay

Furthermore, 60% of respondents indicated that some of their clients required them to work as long as in in-person meetings (See Appendix 3, Chart 2). Interviewee INT631 corroborated this, stating:

> Some private market clients and some African organizations don't appreciate working hours. . . . I think if you do seven to eight hours of RSI per day, over a period of time you start to feel work overload, because you're in front of the screen for all that time.

As can be seen in Figure 28 below, when respondents were required to work the full day in RSI mode, the rate they were paid remained the same as was for in-person meetings in 66.4% of cases, despite the fact that RSI was more stressful, caused a higher cognitive load due to sound issues (discussed in Chapter 5, Sections 5.3.1 to 5.3.3), and interpreters had to double

up as technicians. As interviewee INT862 stated, "In RSI, you are your own technician, despite the fact that it is not your area of expertise—yet you are paid the same".

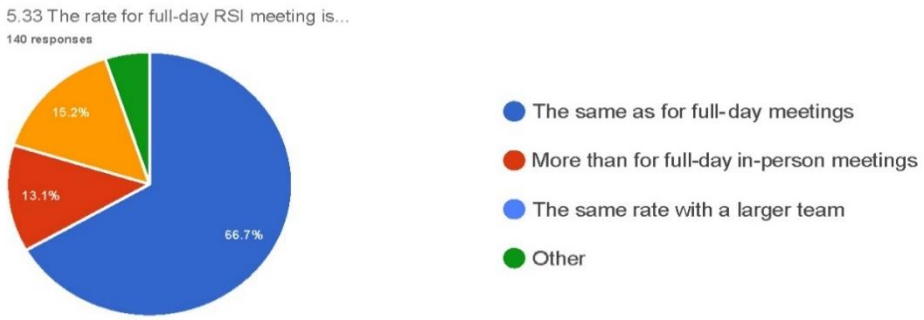


Figure 28: Remuneration for RSI

These findings correlate with Matsushita's (2020) findings in Japan, where session duration was long and team strength inadequate, leading to remuneration dissatisfaction. In the ESIT study (2021), 77% of respondents in Europe also expressed dissatisfaction with the remuneration rate for RSI sessions.

AIIC (2022) recommends that, for sessions longer than three hours, either the team should be reinforced with additional interpreters or the session should be split and a second team hired for the second session, depending on the number of hours of interpreting required per day. Interviewee INT622, however, commented that "only UN agencies in Africa observe the recommendations—most African organisations don't". This was corroborated by other interviewees.

The questionnaire included three questions regarding team strength to determine to what extent clients in Africa observed the AIIC recommendations on team strength in its revised Professional Standards (2022). Respondents were also asked to indicate the standard number of interpreters that would work in the different configurations. Responses varied, as can be seen in the penultimate column of Table 2, which reveals that many clients in Africa either do not know the recommendations or are not observing them.

Table 2 Team strength in Africa according to questionnaire responses

No.	Question	Yes	No	Respondent answers	AIIC recommended team strength
5.25	Do your clients generally observe the standard team-strength for a RSI monolingual booth during a three-hour session?	75%	25%	2 interpreters	2 interpreters
5.27	Do your clients generally observe the standard team-strength for a RSI monolingual booth for sessions longer than three hours?	60.7%	39.3%	3-4 interpreters/ or 2 teams	1 interpreters/ 2 teams after 4 hours
5.29	Do your clients generally observe the standard team-strength for a RSI bilingual booth during a three-hour session?	64.3%	35.7%	2-6 interpreters	3 interpreters
5.31	Do your clients generally observe the standard team-strength for a RSI bilingual booth for sessions longer than three hours?	55.7%	44.3%	3-6 interpreters/ or 2 teams	2 interpreters / 2 teams after 3 hours

4.5.7 **RSI hubs**

Regarding AIIC's recommendation (2020a) that RSI be provided from a hub, only 24.3% of respondents indicated that they would prefer to provide RSI from a hub, with technician support, than working at home alone. Furthermore, only 8% said they would be willing to contribute financially to set up or use a hub, and only 8.6% were willing to refer their clients to a hub. This is in direct contrast to Seeber et al.'s (2019) findings, where most respondents indicated that they would prefer to work from an RSI hub where they could receive technician support and interact with colleagues. In this study, interviewee INT812 stated that complying with the recommendation to work from hubs would be challenging in Africa, because not all major conference cities had hubs and, even if they were available in future, those interpreters that did not live in major cities would still need to commute to another city to use a hub. In such cases, it was preferable to travel to the on-site meeting, if given the choice.

Two of the interviewees discussed their experience with using hubs. INT851 explained that while hubs could be useful —especially for those interpreters whose living spaces were noisy and distracting, or who experienced significant stress regarding technical challenges— they, personally, had found the hub experience unpleasant:

> We had good lights, some good power accessories, cables, and stuff. But then we had very small tables, which were very high. They offered a computer, which

> I didn't use because I don't see any sense in using a different computer than yours for this type of assignment. Because if you're not used to their computer, it may affect your performance —especially because the beginning of meetings is the most challenging part. . . . The hub could accommodate eight interpreters doing different meetings. But I couldn't see how you could actually do that. It wasn't soundproof, so how could you work along with colleagues doing different assignments in that environment, without being distracted? You could also see all the gear the equipment providers use, which I found a bit oppressing. . . . there was a lot of black devices that I don't know what they're used for. And I didn't relax. . . . I think a hub should be a professional, relaxing place. Otherwise, it might be better to work from home.

However, interviewee INT853 had had a positive experiencing using a hub. Booths, equipment, and technical support were very good. Although various meetings could be serviced simultaneously, interpreters used different rooms and thus did not distract each other. This respondent indicated they would be willing to use a hub again.

4.5.8 **A home-based RSI hub**

Interviewee INT853 described a novel, unique, but replicable, experience during the Covid-19 pandemic. The forced and sudden transition to RSI had been quite stressful and upsetting. When SIDPs started offering training, they and a colleague decided to participate in the training together. Once they started to provide RSI, they decided that, whenever they were recruited for the same meeting, they would work together from one of their homes. The interviewee described the experience as extremely positive:

> Because of the social distancing rules, we sat opposite one another, initially, at the long dining room table. Later, we sat next to each other. We each had our own interpreting laptop and a second device for relay, but we shared one large screen in the middle. We only needed a mobile phone to communicate with the client and extended interpreting team. It was great. We could listen to each other; we could work on glossaries together, so we used the same terminology. Otherwise, if each one uses different terminology, listeners get confused, and it's a mess. . . . We could just signal each other to hand over. . . . We helped each other whenever there was a technical glitch. . . .When we had a coffee break, we

could chat and socialise and just relax together. . . .We replicated the set-up at both homes, so that we could take turns hosting each other. It was really great! Consequently, I am very happy providing RSI at home. If we can carry on this way, I will keep providing RSI, definitely.

5 RSI ADVANTAGES AND DISADVANTAGES AND ATTITUDES TOWARDS THE VIABILITY OF RSI IN AFRICA

Findings and discussion

5.1 Introduction

The aim of this research study was to determine how respondents' experiences with RSI during the Covid-19 pandemic influenced not only the perceptions they had held about RSI before the pandemic, but also their attitudes towards the viability of RSI during and after the pandemic. This chapter focuses on respondents' and interviewees' experiences providing RSI in virtual meetings during the pandemic. Their experiences are reflected in their responses to the optional 'RSI Love letter / Break-up letter' discussing the advantages and disadvantages of RSI and the section of the questionnaire dealing with the physical and psychological effects of using RSI, as well as their responses regarding their interpreting mode preferences and perceptions about the viability of RSI for the future. The key variables that influenced respondents' and interviewees' perceptions were identified during data analysis and are discussed in this chapter.

Before delving into these variables, it is important to recapitulate respondents' perceptions of RSI before the pandemic. As discussed in Chapter 4 (Section 4.3), respondents reported that, before the pandemic, 26.4% had not even given RSI a thought, 25.7% had heard of it but thought it was a very remote possibility, and 20.7% had read about RSI but thought it was unfeasible. Only 18.6% actually had any experience with RSI. Therefore, in most cases, respondents' perception about RSI were either ambivalent or based on hearsay and literature, and were not based on first-hand experience. Most of the studies prior to the Covid-19 pandemic found that interpreters held negative perceptions of RSI (as discussed in Chapter 2), with more positive perceptions emerging only towards the end of 2019 and during the pandemic (Seeber et al., 2019; Matsushita, 2020; Przepiórkowska, 2021). Furthermore, only 34.3% of respondents had read the AIIC recommendations on Distance Interpreting (2020a). Thus, prior to the pandemic, perceptions were either negative (based on reading the literature) or unfounded, as most respondents and interviewees had no personal experience on which to base an informed judgement.

Several variables were identified as impacting respondents' perceptions of RSI. Those with positive effects on perceptions are discussed in the first section of this chapter as advantages of RSI, while those with negative effects are discussed in the second section as disadvantages of RSI. The third section of this chapter focuses on respondents' and interviewees' interpreting mode preferences and their attitudes towards the viability of RSI in Africa in the present context and in the future.

5.2 Advantages of RSI

5.2.1 Eliminate stresses of travel

Seeber et al. (2019) determined that tiring or stressful travel experiences and time spent away from home can make interpreters more receptive towards RSI. Africa is the world's second-largest continent, covering a vast land surface of 30.3 million km² (Desjardins, 2020). While there are 54 countries in Africa, only 13 countries have direct flights to 20 countries; thus passengers frequently need to make stopovers to reach their destination, increasing their travel time (Correspondent, 2021).

Given the challenge of international air travel in Africa, interpreters' attitudes towards flight travel were analysed to determine whether the hardships related to travel made them more receptive to RSI. Several questions were included in the survey to gauge respondents' experience with international travel in Africa, both before the pandemic and as lockdowns and travel restrictions eased. During the interviews, respondents' travel experiences were discussed at length and related to their receptivity to RSI.

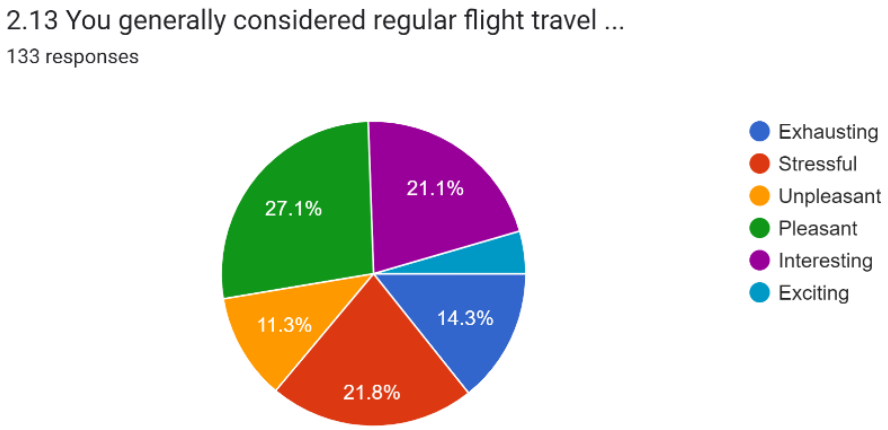


Figure 29: Respondents' perceptions of air travel for work

Regarding respondents' experiences with air travel for work, 52.7% of respondents found air travel enjoyable; 47.4% did not. The proximate nature of these results required a deeper investigation of the variables impacting respondents' perceptions and attitudes towards air travel for interpreting. Probing questions were posed during the semi-structured interviews regarding variables that affected interviewees' travel experiences.

The interviews revealed that respondents had found air travelling for work to be exciting during the early stages of their interpreting careers, as it exposed them to new destinations, cultures, peoples and colleagues. As they visited the same places repeatedly, however, the novelty wore off, and travelling became less appealing. Interviewee INT852 described the experience as follows:

> Initially, in the early part of my career, I was excited to discover new countries. I had more energy and I was keen on meeting new people, visiting places . . . but as time went by . . . it was no longer that attractive. So that's when the tiresomeness and stress set in.

This statement was corroborated by the questionnaire results: most of the respondents who found air travel exciting were under the age of 45 and, thus, in the earlier phase of their career. One of the younger interviewees (INT831) described the experience as follows:

> I love travelling for work. It makes me feel valued as an interpreter. And it also gives me greater exposure . . . in addition to discovering a country or city.

Some older interviewees did indicate that they still found travelling exciting when they were exposed to new destinations and clients, or when it allowed them to see colleagues who were dear to them. In addition, some interviewees stated that they were overjoyed to travel after the pandemic because they had missed working with colleagues abroad (INT812, INT852, INT821). Interviewee INT821 commented, however, that "once you've seen them, it's ok: you want to work from home again."

Numerous variables were identified that negatively affected respondents' and interviewees' attitudes towards travel. Various interviewees mentioned visa issues (INT651, INT822, INT622, INT811). Some complained that it could take up to 10 days to obtain a visa, during which time passports were held at embassies. This meant that interpreters risked being denied a visa for one work opportunity, while having to decline other offers for work in countries for which they were visa-exempt, simply because they were not in possession of their passport during those 10 days. Interviewee INT812 described their experience as follows:

> I've had quite a few visa issues and they've actually been extremely unpleasant. I actually describe myself these days as having 'visa fatigue'. And what I mean by that is that, very often when I'm offered a meeting, the first thing I check is if I need a visa. And if the answer is yes, I am likely to say I'm not available.

Interviewee INT651 noted that not having a visa for countries where they had a long, overnight stop-over on the way to a work assignment was also problematic, because it meant that they could not leave the airport to go to a hotel to recuperate overnight. According to various interviewees, many airports in Africa do not have hotels on premises, so interpreters often have to sit uncomfortably for hours waiting for their next flight, leading to exhaustion on arrival at their final destination (INT651, INT 631, INT822).

Interviewees also mentioned other negative variables. Due to the vastness of the African continent, travel often involved multiple stop-overs, some of which were rushed, leading to exhaustion and stress (INT651, INT631, INT622, INT822). Additionally, much time was wasted at airports with poor passenger-processing infrastructure (INT622, INT812, INT822). Furthermore, according to interviewee INT812, stop-overs often occurred at congested hubs,

such as Addis Ababa, where many flights often arrived simultaneously and late in the evening, thus reducing the likelihood of interpreters having a proper rest at a hotel if they were able to leave the airport. Interviewee INT mentioned that another stressor was the concern that luggage might not arrive on time, or at all. Numerous interviewees found flight unpredictability and overbooking very stressful and frustrating. Interviewee INT841 described their experience as follows:

> We've had a lot of situations where the . . . flight was overbooked or was delayed. . . . We had to split our interpreting teams, so that some could travel ahead and some would stay behind waiting for the next flight. And then, when we arrived, we had to rush to the meeting. . . . I found it quite stressful, because sometimes you don't necessarily have time to settle, to rest, to take a proper shower, to change, to unpack. . . . It's all a bit rushed. I feel it also [affects] your performance if you're going from the airport straight to the meeting.

Furthermore, as can be seen in Figure 30, respondents usually travelled economy class; typically, besides Bretton Woods's institutions, few other clients paid for interpreters to fly business class on long-haul flights. Since 2021, UN agencies only pay for business class for flights longer than 11 hours. In economy class, respondents were not able to stretch out or relax properly on-board in order to minimise their exhaustion and ensure that they were able to perform optimally on arrival.

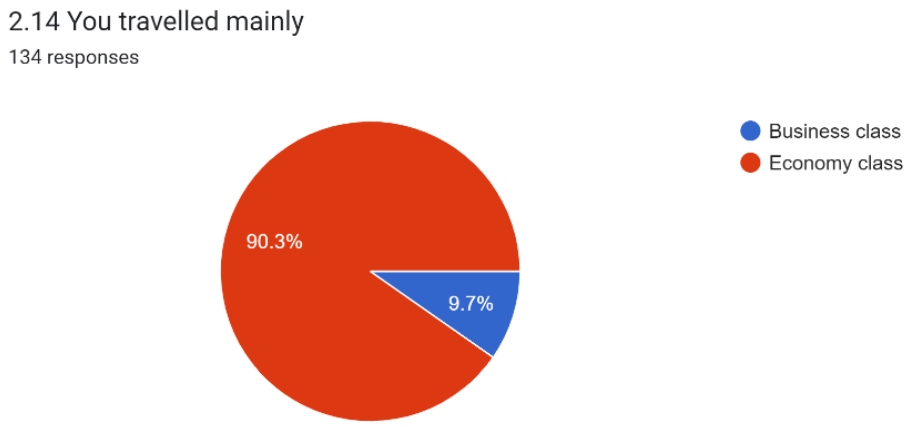


Figure 30: Use of economy class or business class by interpreters

Many interviewees also mentioned the psychological stress they experienced prior to travel due to all the household and logistical preparations that needed to be made. Many had families;

arrangements had to be made for others to assist with household management and childcare in their absence. Interviewee INT631 commented: "Normally we leave our lives behind . . . we need to prepare for it". Interviewee INT862 elucidated: "There's a great deal of organizing and planning when you're going to leave for 10 to 14 days. It really isn't a 'close the door and now we can leave'. It's not that simple".

As a result of the challenges (variables) that have been discussed, many questionnaire respondents and interviewees experienced travel as stressful, time-consuming, and unpleasant. The benefit of providing home-based RSI and not having to travel was mentioned by a third of 113 respondents. In an open-ended question, questionnaire respondents explained the benefits of home-based RSI as follows:

> "less travel stress"
> "removes anxiety of travelling for interpreters"
> "not having to waste time at airports, despite the fact that I love travelling"
> "it frees up time previously spent travelling and taking care of travel-related paperwork/arrangements"
> "I can stop flying. Not good for our health nor that of the planet's"
> "Nowadays, there are less flights, which makes travelling to conference destinations and the return exhausting and time consuming"
> "avoiding travel to unpleasant places"
> "reduces the stress associated with travelling; in my opinion, that's the main advantage"
> "lessening the frequency of having to pack; not having to book & confirm flights and paying for air tickets up front, sometimes at very short notice; no need to arrange hotel and road transport before departure; no wasting time at airports waiting for flight connections and then spending hours in an aircraft; not receiving one's per diem in time; not having to wait a long time for the travel expenses to be refunded."

When compared with the travel experiences of interpreters in other parts of the world, it is interesting to note that Matsushita (2020) found that 88.2% of his respondents felt that the most significant advantage of using RSI was that they did not have to travel. Seeber et al. (2019), on the other hand, found that 60% survey respondents enjoyed travelling for their work—and

enjoyed international travel more than national travel. Seeber et al. (2019) noted, however, that all of their respondents lived in Switzerland, "a country renowned for the efficiency of its public transport system, and level of comfort of its […] amenities," (p. 287). Furthermore, the AIIC headquarters are in Geneva and most UN agencies have offices there. It can be surmised that the clients of the respondents in Seeber et al.'s (2019) study, therefore, were more aware of the AIIC' recommendations on travel, and that interpreters based in Switzerland had more comfortable travel experiences to more sophisticated destination airports.

In Seeber et al. (2019), another distinguishing factor in terms of respondents' travel preferences related to the number of days spent away from home. The 60% of respondents who enjoyed travel spent less than a third of their working days away from home annually, whereas the 40% respondents who preferred less travel had spent half of all working days away from home annually. As discussed earlier in this section, the attitudes of respondents in this study towards international travel in Africa were influenced by how attractive the destination was, visa issues, flight duration, stop-overs and comfort, passenger-processing issues, and sometimes having to self-fund accommodation and tickets until clients reimbursed them (which could take some time).

Another advantage of home-based RSI was that it reduced, or eliminated, local travel. A third of the questionnaire respondents indicated that commuting to and from meetings (both in and between cities) was time-consuming and tiring. Interviewee INT842 described their frustration:

> It would sometimes take me one to two hours to get to work, and similarly on the way back. So it's a waste of time, really. For me, it's frustrating. It's aggravating because you get to your meeting and you're already mentally tired. And you're stressed from being in traffic. So, I have to admit, I would rather catch a plane out of the country than have to go work in another city close by me, where I would have to drive there and back every day.

Other interviewees, however, preferred to work in their own city or travel to a nearby city, rather than travel out of the country (INT631, INT632, INT851). Variables that these respondents mentioned were the level of congestion in the cities, and whether or not they had young children.

Respondents also identified safety as an important consideration in continental travel, as well as in inter- and intra-city commuting. It was common for in-person meetings to run late, requiring interpreters to travel home in the dark, which was unsafe in cities affected by high levels of criminal activity. Interviewee INT842 explained:

> So leaving work in winter, even at 17:30, means that you are driving through the night. Well, it's dark and I find that dangerous. And that, in itself, can also cause stress.

The safety of air travel in Africa was also a concern to some. Interviewee INT851 mentioned: "Just before the pandemic, we lost a number of colleagues in a plane crash when they were on their way to Nairobi. That made me reflect on whether I wanted to travel." While interviews were being conducted for this study, another plane crash-landed into Lake Victoria, killing 19 people (Sands, 2022).

5.2.2 **Work-life balance**

Another important advantage of RSI, according to respondents and interviewees, was that it freed up time that they could use to create better work-life balance. Respondents mentioned that working from home created the possibility of spending more time with family and friends, having more time for household chores, being able to exercise, follow a healthy diet, enjoy leisure activities and learn a new skill, while still earning an income. In the Love letter/Break-up letter, 44.3% of respondents selected the statement: "RSI allowed me more time for myself, to look after my health, exercise, pursue different interests."

Almost 25% of questionnaire respondents, and all of the interviewees, mentioned the advantage of being able to connect more with family and friends. Comments made by the respondents included, "more time for me and my family", "staying close to one's family", "better management of time to handle and fulfil both personal and professional commitments", and "much more family time". This was corroborated by responses in the Love letter/ Break-up letter, where 52.1% indicated that, "RSI allows interpreters more freedom and time to spend with family and friends." Interviewee INT 652 stated that, for those recently married, RSI allowed them to spend more time with their spouse, which was invaluable. One questionnaire respondent commented: "One of the greatest advantages of RSI is that women can spend more time with their children." Male respondents, too, found this an advantage. Regardless of

gender, interviewees stated that spending time with children was a great advantage (INT631, INT632, INT652, INT851). Interviewee INT651 stated:

> OK, well I must say that for me RSI was perfect. . . . I've had the chance to watch my daughter grow up whilst I was working. . . . I'm free, I can do whatever I like… I can enjoy my daughter.

Interviewee INT84 commented:

> One thing that I found that has also been very pleasant is being at home to celebrate family occasions, which I hadn't done for many, many years. I missed out on many birthdays and many other important family occasions, so it has been nice to be able to join the family at these times.

Various respondents and interviewees also mentioned the possibility of multi-tasking and carrying out some household chores during their off-time as an important advantage. Interviewee INT862 stated: "I know women who, during coffee breaks . . . do laundry or wash dishes." However, regardless of gender, respondents and interviewees found that being at home allowed more time for household chores. Interviewee INT631 commented:

> In between you could be cooking, and picking up kids . . . my kids go to school five minutes away, so I can dash to pick up the kids, unlike now, I'm away and you know . . . I'm stuck between the meeting venue and my hotel room, and some restaurants . . . so at home you feel like your life can still continue.

Two interviewees (INT622 and INT842) made important inferences regarding the fact that some women actually preferred to interpret away from home, if cultural or family norms required them to bear the greatest burden for household chores, since this could distract them from their professional work. This was probed further during the interviews. All but one female interviewee indicated that they were good at multi-tasking and preferred the stress of multi-tasking from home than all the preparation involved prior to travel to ensure that families were cared for in their absence. However, the survey questions did not allow conclusions to be drawn about the differences in receptivity to RSI based on gender and family commitments; further investigation into this aspect would be valuable.

Respondents and interviewees also mentioned that RSI allowed them more time for exercise, leisure activities and learning new skills. One questionnaire respondent stated: "We have more freedom of choice, more time for sport, family and hobbies due to working from home and having less travelling hours." In this regard, interviewee INT863 mentioned the possibility of working "seated on a yoga ball to strengthen core muscles", which would be less practical in an on-site booth as the ball might not fit through the door, and could distract a booth partner. Interviewee INT651 mentioned the freedom of going to the beach every day after RSI meetings, which would not be possible away from home. The possibility of going for long walks along the beach was raised by various respondents as well as interviewee INT842. One questionnaire respondent mentioned the possibility of learning new skills. These findings corroborate Seeber et al.'s (2019) study, where respondents considered being able to spend more time with families and having time for themselves as important advantages of home-based RSI. Matsushita (2020) did ask questions related to the variables of family time and leisure in his questionnaire, but the article focuses on the primary advantage of not having to travel, and does not discuss the findings related to these aspects.

5.2.3 **Familiarity and comfort of working from home**

Roziner and Shlesinger (2010) found that interpreters can build up psychological resistance to unfamiliar surroundings and practices; they perform best when they are properly acquainted with their environment, as well as the interpreting technology and mode they will be using. In this study, many respondents corroborated this finding. The third greatest advantage of RSI found in this survey was the possibility of working from the familiarity and comfort of home. Interviewee INT631 explained: "I have my favourite chair . . . I'm a bit picky . . . I normally need to get myself into a certain environment to focus. I will need a certain type of pen in my hand," and "I'm comfortable, I'm happy, working from home." Several interviewees mentioned their favourite chair at home. Interviewee INT811 commented: "Of course, I have my ergonomic chair, a small refrigerator, and electric kettle . . . anything to make me comfortable—my notepad, my pens, and documents". Interviewee INT822 stated: "When I am abroad, I am in a very uncomfortable environment usually. . . . I prefer RSI much more than physical meetings. . . . For me RSI is very comfortable, really." Interviewee INT862 explained the preference for home comforts as follows:

> Many times in our profession we have to work in places that we're completely unfamiliar with . . . so [RSI offers the] convenience of working from home. And

> by convenience, I mean comfort. I mean, you're minutes away from the kitchen. Your body reacts to the comfort level. There's a familiarity, in that you know where everything is.

5.2.4 **More preparation and focus time**

Interviewees also mentioned the advantage of having more time to prepare for their online meetings than for on-site meetings. Interviewee INT851 explained:

> And another advantage is that I get less distracted preparing an RSI meeting. During the few hours before it starts, I can focus: I am not in the booth with colleagues who want to chat. I can use that time to prepare for the meeting, focus, go over my glossaries again, without noise.

Conversely, interviewee INT842 noted that interpreters needed to guard against distractions at home: "Life can get in the way of adequate preparation for an RSI meeting".

5.2.5 **Borderless exposure to clients all over the world**

Numerous questionnaire respondents considered the virtual nature of RSI an advantage in that they had had the opportunity to work for clients who, under normal circumstances, would have hired interpreters living in their own country or region for in-person meetings instead of hiring interpreters from around the world for online meetings. Comments regarding RSI's advantages included "working from home with clients and colleagues from all over the world" and "having a larger client base." Interviewees INT851, INT841 and INT862 corroborated this advantage in various comments. The borderless advantage of RSI was further corroborated by responses to the Love letter / Break-up letter, where 44.3% of questionnaire respondents selected the response 'RSI has allowed me to work with colleagues from all over the world, thus broadening my exposure.' However, not all respondents saw the borderless nature of RSI as an advantage. A total of 18.6% of respondents expressed concern that the borderless nature of RSI had allowed too many interpreters from other continents to work in the African market. Meanwhile, another advantage of the borderless nature of RSI was the increased mobility and freedom of location it allowed interpreters, whilst enabling them to retain clients. In the Love letter /Break-up letter, 57.1% of respondents selected the response 'RSI is borderless, which means I can live anywhere and still keep my clients.'

5.2.6 **A plethora of meetings**

Both questionnaire respondents and interviewees stated that, due to the fact that RSI reduced travel and accommodation costs for clients, it was easier for clients to call a short online meeting than to plan an on-site meeting. A number of respondents and interviewees stated that they had interpreted for many lucrative short meetings and training courses during the pandemic and hoped this trend would continue. One questionnaire respondent commented that this had resulted in "more work opportunities for all, since clients are organising an increased number of meetings." This was reiterated by another interviewee INT632, who said: "Another advantage is the fact that the sheer number of meetings has multiplied."

Questionnaire respondents also cited reduced travel as advantageous, because interpreters could accept back-to-back meetings. In the Love letter/Break-up letter, 40% of respondents selected the response 'RSI allows interpreters to accept more meetings, if they wish to.' Numerous respondents mentioned the advantage of being able to accept more than one private sector, short, non-technical meeting on the same day in their responses to the Love letter/Break-up letter questions. The studies by Seeber et al. (2019), Matsushita (2020), and Przepiórkowska (2021) did not expound on the increased number of meetings available.

Respondents and interviewees thus identified a number of advantages to using RSI based on their first-hand experiences and the realities of interpreting in the African context, which could positively influence their perceptions about using RSI in this context.

5.3 Disadvantages of RSI

5.3.1 **Sound quality**

As discussed in Chapter 4 (Section 4.5.5), a combined total of 70% of questionnaire respondents indicated that the sound quality in their experience with RSI 'good' or 'fit-for-purpose'. However, these responses were in stark contrast to questionnaire responses on the advantages and disadvantages of RSI, where a third of respondents indicated 'poor sound' and 'exposure to intolerably bad sound quality' as the worst disadvantage of RSI. To understand this aspect more deeply, numerous questions were asked during interviews to probe what the challenges were with regard to sound quality. Interviewee responses corroborated questionnaire responses to Question 5.17 (Figure 31) and are discussed below.

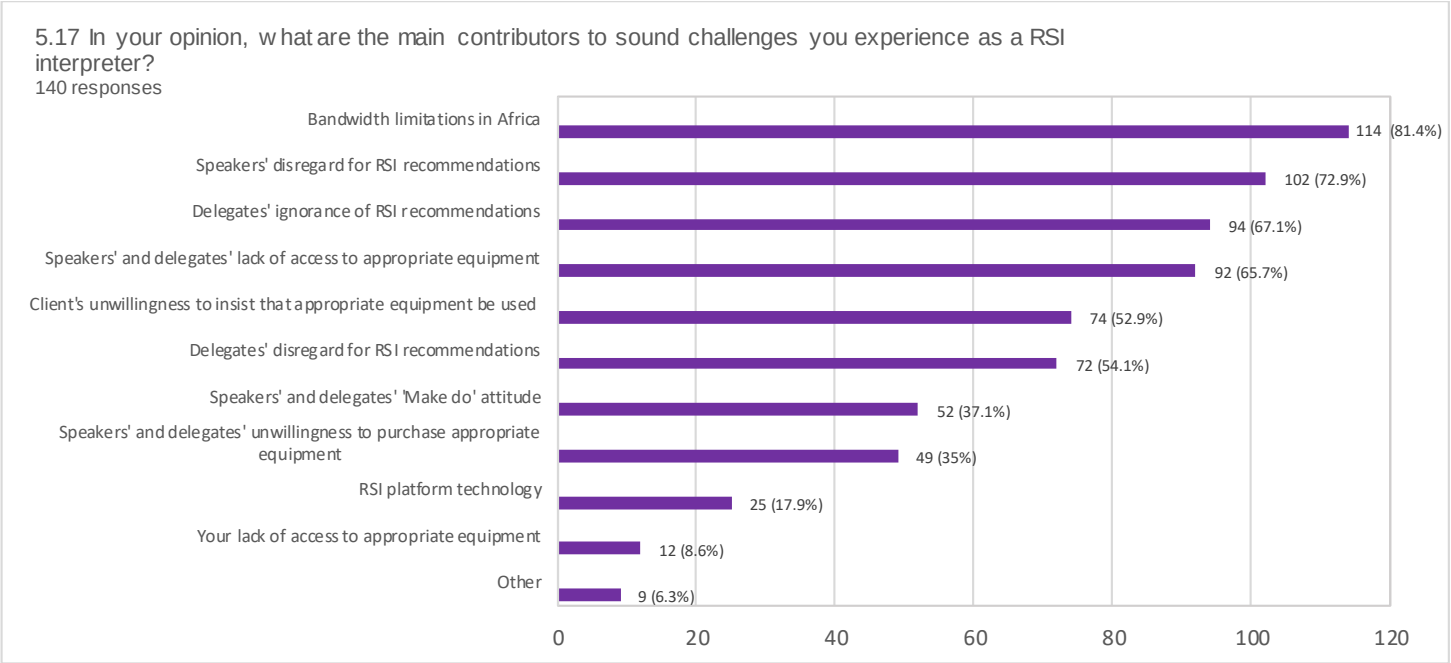


Figure 31: Main contributors to poor sound quality, according to respondents

From a purely technical perspective, questionnaire respondents believed that inadequate sound quality was caused mainly by the 'bandwidth issues' and 'poor internet connectivity' characteristic of the African context, and less by limitations in SIDP or online meeting platform technology. Limited bandwidth requires compressed sound, as explained by interviewee INT632:

> In simple terms . . . whenever any data is compressed, you're basically changing its form so that you can use less 'space' or bandwidth, so that data can travel from point A to point B faster. Now, when it is delivered at its destination, it is retrieved from its compressed form. When it is retrieved, the data may be distorted . . . so, when it comes to sound, frequencies can be lost.

Interviewee INT831 commented on the unpleasantness of this: "The sound is terrible. The compressed sound is really something we should not be exposed to for long periods of time." Interviewee INT651 corroborated that compressed sound made it difficult for them to interpret from Language C (Italian), because many frequencies that are still required by interpreters to understand a C language had been compressed and distorted, and were no longer audible, making it difficult to decipher utterances and interpret them correctly. Internet connectivity problems also contribute to poor sound, as speakers' sound can oscillate or warble, making it difficult for interpreters to understand them.

Many questionnaire respondents blamed the virtual meeting behaviour of speakers and delegates for the poor sound, however. It was determined that while respondents had incurred significant costs to comply with RSI equipment recommendations, 73% believed that speakers disregarded the RSI recommendations, and 52% believed meeting participants knew the recommendations but disregarded them. A total of 65% of respondents believed that sound problems were caused by speakers' and meeting participants' lack of appropriate sound equipment (no headsets with embedded microphone). Additionally, 35% believed that speakers and meeting participants were unwilling to purchase the correct equipment. The problem was compounded by clients' unwillingness to insist that speakers and meeting participants use the correct equipment, or not speak at meetings, according to 53% of questionnaire respondents.

These findings were corroborated by interviewees. Interviewee INT642 stated:

> I would say the main drawback is the quality of some speakers' sound. They are in places where the connections is bad. Or their equipment is not good. They don't know how to speak into the microphone. Certain speakers tend to speak too fast . . . and indistinctly. They don't understand that remotely they can't speak as fast as in a conference situation. . . . They seem totally unaware that they are being interpreted. . . . Also, they could do with a little more formality and discipline in the way they speak.

Regarding the complaint that speakers and delegates did not use appropriate headsets, disregard recommendations for speaking at virtual meetings, and need more discipline, interviewee INT862 commented:

> One of the main disadvantages is that it's not mandatory for a speaker or anyone who takes the floor to wear a headset with an embedded microphone. Why is this a disadvantage? First of all, because most times either the rooms are very large and there's a tremendous echo, and you cannot, despite your best efforts, understand clearly what the speaker is saying. Or, on the other hand, speakers are in smaller rooms but they're not using, for instance, a laptop. They resort to an iPhone and the sound is terrible. Some participants don't mute their mics and there's constant background noise that causes distraction. And I had a speaker who was actually in a car driving while he was presenting and, every time, you could hear him going over potholes, you could hear the cracks in the road. You

> could hear other people honking at the speaker because clearly he was driving and presenting simultaneously. . . . So it should be mandatory for any person participating in a virtual meeting to wear a headset with microphone and to be in a conducive space.

Interviewee INT852 corroborated this:

> Some participants join the meeting very casually, sitting in moving cars, sitting in their gardens . . . sitting in their bedrooms . . . not very professional. And, secondly, they don't realize how difficult it is not only for other participants to hear them, but, even more so, for the interpreters—because we need perfect sound to interpret. That is the major issue. The voice breaks, there's interruption, there's noise in the background: dogs barking, babies crying—and, you know, things like that. They're even ordering their house helpers, you know—"get me a glass of water" and "please cook this"—and things like that. And they're not very careful with their mics, which are very often not muted.

Some respondents and interviewees had resorted to switching off their microphones in situations where speakers and meeting participants did not comply with RSI meeting recommendations. Interviewee INT811 explained:

> We give participants the specifications for a remote meeting and we tell them that, even if they're all sitting in the same room, they each have to use their own headsets. They each have to mute their microphones when they're not speaking, to avoid disturbances and echoes. In some cases, there's an echo… We tell them that there's an echo in the room and we switch off the mics.

Numerous interviewees complained about speakers' bad practice of speaking from cars, airports, and other noisy locations (INT651, INT812, INT841, INT862). Regarding the possibility of interpreters switching off microphones to indicate that it was difficult to hear and interpret, interviewee INT622 explained:

> Sometimes you do switch off your mic on Zoom, but they don't know if you've lost connection or if they've lost connection. They don't know if you're having a technical problem and they think you're still there and they're genuinely

> waiting for an interpretation. But you know you've communicated with the chairperson to tell him it's impossible to interpret and you're switching off the mic. But he hasn't communicated that to the other participants, and so it's very frustrating.

Even when speakers were aware that they should follow the same etiquette in a virtual meeting that they would in a formal conference setting, and that they needed to use the correct headsets, other sound challenges could still arise. Interviewee INT861 reported becoming aware that there was a new trend: presenters prepared speeches beforehand and then read them out extremely fast while their PowerPoint slides were shown on the screen. Interpreters did not have access to the speeches, which made interpreting them at such a high speed difficult, especially when sound was compressed and not easily decipherable. The interviewee commented: "When speakers have certain heavy accents, and they read fast, it becomes difficult to distinguish between certain words such as 'can' and 'can't', which could lead to very serious misinterpretation." This corroborated Wang's (2018) findings that accuracy was affected by fast speech delivery and poor quality of sound equipment.

It was evident from both respondents' and interviewees' comments that poor quality sound was the greatest disadvantage they experienced when using RSI. It can be concluded that poor sound quality negatively influenced their perceptions about the viability of RSI in the African context.

5.3.2 **Technostress**

As discussed in Chapter 4 (Section 4.2.5), 97.2% of questionnaire respondents indicated that, prior to the pandemic, they were already at ease with technology in general. Interviewee data analysis corroborated this, since interviewees revealed that they felt at ease using laptops, iPads, smartphones and other devices (INT822, INT853, INT821, INT652, INT631, INT841). They were also comfortable using different software and were easily able to access documents from various internet platforms in preparation for meetings (INT651, INT812). However, the sudden, forced transition to RSI caused significant anxiety and stress, because there were many facets of SIDPs that were unfamiliar to them. These findings corroborate the findings of the RSPH (2021) study in which workers who were not accustomed to using electronic devices and IT continuously for their work indicated that they found the transition to online work during

the pandemic very stressful. It also corroborates Przepiórkowska's (2021) findings that respondents found the transition stressful.

In this study, the fact that interpreters were working from home, often alone, meant that there was no technician or other person with technological skills who could help them when a technical challenge arose. As interviewee INT812 explained, "I am my own technician." The interpreters needed to learn how to handle a broad range of technical challenges: how to sign in to different SIDPs; issues around being assigned; headsets not picking up sound or microphones not being heard; distinguishing between their own internet connection drop and that of platform speakers and participants; working with different platform interfaces; managing the chat function and moving it so that participants' constant chats did not disturb them; navigating between different screen options; navigating between different channels; listening to colleagues on a second device and coordinating two sets of headphones; and managing the handover on a third device successfully (INT811, INT831, INT642, INT861, INT864).

Despite the fact that many SIDPs offered training, and various interviewees (INT861, INT861, INT652) confirmed that many interpreters took advantage of this, much of their learning was still on-the-job, which significantly increased cognitive load while interpreting, as explained by interviewee INT812. As discussed in the literature review, Gile's (1995, 1999) model proposes that interpreters have a 'Total Available Processing Capacity', which ideally is distributed evenly between the Listening and Analysis Effort, Processing Effort, Memory Effort and Coordination Effort. These efforts create significant cognitive load because none take place automatically in the interpreter's brain. As explained by Roziner and Shlesinger (2010), novel and unfamiliar terminology, concepts, surroundings, interpreting modes, and tasks all add to cognitive load. In in-person meetings, interpreters do very few manual tasks. They switch microphones on and off, signal to booth partners, write down a few names and numbers, and quickly find a term on a glossary. Mostly, they are focussed on the intellectual tasks required for interpreting. If any technical challenge arises, they signal to technicians or their booth partner quickly leaves the booth and reports the matter to the technician. They work on the underlying assumption that any technical problem will be solved by someone else. In RSI mode, however, not only do interpreters have to interpret, but they need to take care of all technical aspects themselves. Their attention is thus divided between interpreting and technical issues, which means that they have less processing capacity to deal with the demands of

interpreting. This significantly increases anxiety and stress. Interpreter INT862 articulated this well:

> All of a sudden . . . we are asked to carry out two separate functions. Without asking for it, we were appointed both interpreters and technicians. I have an academic background as an interpreter. I have never received any training whatsoever as a sound technician . . . so in RSI, it is always a subconscious stress, because it is always at the back of your mind that you have to be ready at any moment to solve technical problems, but you haven't received any training for that.

Many questionnaire respondents and a quarter of interviewees reported finding the additional technical demands stressful (INT651, INT851, INT812, INT642, INT811). Numerous interviewees reported feelings anxious, because subconsciously they were constantly anticipating technical problems that would interfere with their interpretation (INT811, INT831, INT852, INT851). Interviewee INT651 reflected on the impact:

> We have to be the interpreters. We have to be the sound technician. We have to be the video technician. So, meaning that we are basically the 'jack of all trades' during RSI. And this is a big disadvantage. And financially, we don't get compensation for that, while clients are saving a lot of money with RSI.

However, it was not merely the likelihood of having to manage technical issues that interpreters stress and frustration. As explained by interviewee INT811, "the sheer number of devices we need to manage causes added cognitive load and stress." Until recently, Zoom (identified by respondents as the platform most commonly used in Africa – see Chapter 4, Section 4.5.2) did not have a relay function, which meant that interpreters requiring relay needed to log in to the meeting as a participant on a second device and then listen to the relay language on an additional set of earphones. Two interviewees (INT812, INT853) purchased mixers, which allowed them to connect both devices to a single set of earphones and switch between the two devices, but most respondents and interviewees did not. Furthermore, Zoom did not have a function that allowed interpreters to listen to their booth partners when on the same channel. Interpreters would listen to their booth partners on a second device, as participants. With Zoom's recent addition of a relay function, interpreters can now listen to their booth partners on the incoming channel, if they switch their outgoing channel to another language. However,

this still requires some manual juggling, especially at the moment of handover. The divided attention caused by the use of many devices also added to cognitive load, according to various questionnaire respondents and interviewee INT651.

Interviewee INT811 stated that the heat generated by so many devices, in addition to high environmental temperatures, was physically uncomfortable and raised a health concern:

> The heat from the machines just exhausts me. . . We don't know now what the health consequences of being surrounded by 3 to 4 devices are going to be. . . I guess we'll find out in a couple of years.

Interviewee INT851 reported "throwing away" devices at the end of a long session, saying that they were associated with the stress of working:

> At the end of the session, I just want to throw my devices away from me…I identify the devices with work, my smartphone has become a working tool. So, when I need to rest, everything that I identify as a working tool, I have to stay away from, because they prevent me from relaxing. I want to relax, hear nothing, and talk to no-one.

One of the persistent challenges with using Zoom for RSI has been the handover to a booth partner at the end of a 20 or 30-minute turn. The questionnaire asked respondents to rate how important it was for them to see their booth partner on a 5-point Lickert scale. While a third considered it 'moderately important', 15.7% considered it 'very important' and 25.7% considered it 'extremely important'.

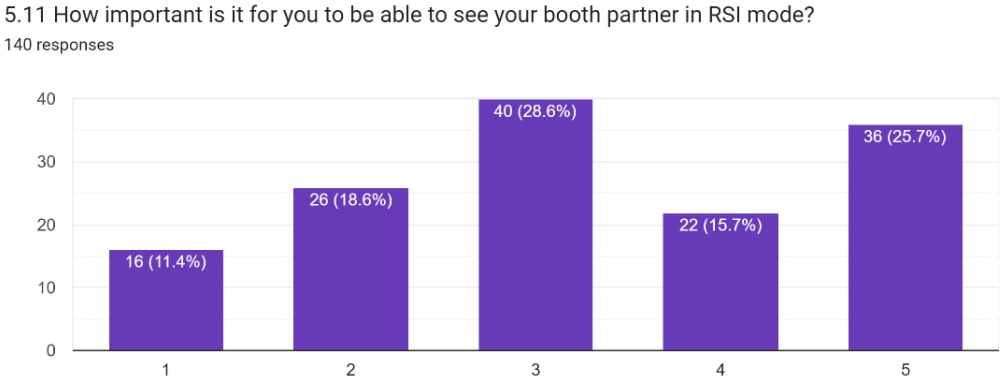


Figure 32: Importance of seeing a booth partner

When asked if they believed that if they could see their booth partner in RSI mode, it would facilitate handover, a large majority responded 'yes'.

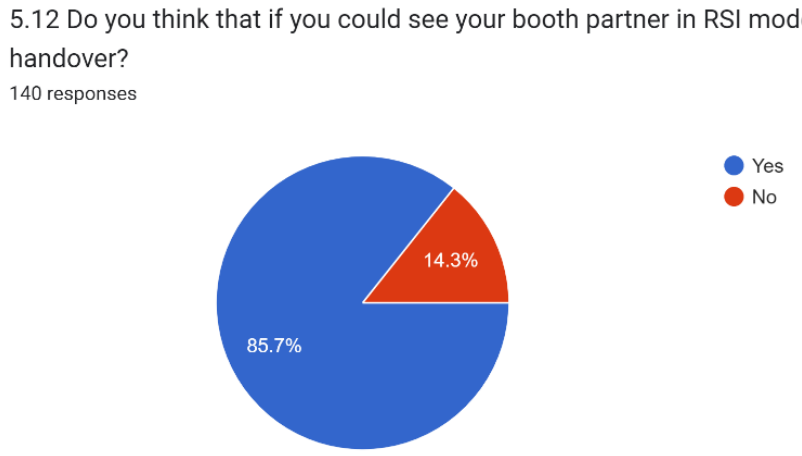


Figure 33: Seeing booth partners would facilitate handover

Respondents and interviewees reported using makeshift arrangements to ensure handover. This corroborated ESIT's (2021) preliminary survey results, where 74% of respondents reported using makeshift solutions to listen to their colleague through another device in order to assist booth partners and ensure smooth handover. In this study, respondents and interviewees explained that they used the Over-To-You (OTY) and Over-To-Me (OTM) convention via WhatsApp to hand over to booth partners. However, this was insufficient as it did not prevent them from talking over each other. As a result, they also needed to either listen to their booth partner on a second device or listen to them on their interpreting device but switch channels quickly on takeover. The process was 'complicated' and 'stressful', as noted by the majority of questionnaire respondents. Interviewees reported watching their booth partner's microphone on the Zoom participants' list, to ensure that their booth partner's microphone was off before they started interpreting (INT642, INT812).

Another issue that caused technostress was power outages. In all regions of Africa, power outages were reported as 'frequent' many respondents and interviewees. Interviewee INT642 noted that many colleagues had "Plan B, C, and D" to ensure that their internet connection was quickly restored in the case of power outages. The idea of having multiple solutions was echoed by interviewees INT852, INT 652, INT811.

Many interviewees reported that initially in 2020, they considered all the technical requirements of RSI very stressful. However, as time progressed, they became more familiar with the requirements and learnt how to solve technical problems swiftly, which reduced their stress levels, so by end 2021 they were far more comfortable with the technical side of RSI. This corroborates Roziner & Shlesinger's (2010) findings that unfamiliarity and novelty cause an increase in cognitive load, fatigue and stress, and Mouzourakis' (2006) statement that as technology advanced and interpreters became more familiar with it, their resistance to RSI would dissipate. Interviewee INT861 described their experience:

> Especially in the beginning, when I wasn't very used to working in RSI mode, I was always stressed, in fear that the connection would drop. . . . When the image froze or I lost sound, I was always afraid that it was my fault. . . . Now, I've relaxed a bit.

In a similar vein, interviewee INT864 explained:

> In the beginning, we all had to be much more tolerant of each other in this situation. So when things didn't work, you had to reconnect. Sometimes you had to reshuffle the order of speakers because of their bad connections. And I think, from both sides, RSI has demanded a lot more patience and tolerance, due to difficult working conditions.

Interviewee INT842, however, explained:

> I feel very comfortable with RSI now. We have been doing it for a while and we probably have been at home for two years. So, I think we now see RSI as just one more component of our lives.

Numerous interviewees corroborated the notion that RSI was no longer novel and unfamiliar, and that they had become more comfortable using it.

5.3.3 **Interpreter disconnectedness from colleagues, technicians, and speakers**

Among the RSI disadvantages mentioned in the questionnaire, respondents reported a 'feeling of disconnect' from other interpreters, speakers, participants, and technicians in work situations. These feelings were corroborated by interviewees.

Firstly, interviewees reported that if their screen froze or they could not hear the speaker, they could not immediately ascertain whether the problem was on their side or the speaker's. They had to communicate with booth partners or interpreter team WhatsApp groups to determine the source of the problem. This was time-consuming, frustrating, and caused a break in concentration, which heightened stress (INT622, INT812, INT862).

Secondly, both questionnaire respondents and interviewees reported a disconnectedness from technicians, if they were present at the meeting. Interviewee INT862 described their experience:

> I've had two or three separate incidents where I've sent a message to the technician, using the chat box, [to tell him that] my languages had not been attributed. And normally, on average it has taken 15 to 20 minutes to obtain a response. So because we cannot turn on a microphone and communicate with him, it becomes frustrating. . . . It's not only a question of technicians being remote. There's a lack of communication between interpreters and technicians as well. . . . There's a big difference between remote interpreting with technicians, and interpreting at conference where we're physically present and the technician is also physically present.

Other interviewees also reported waiting a long time to obtain a response from technicians when they communicated with them via the chat function. Interviewee INT863 explained:

> In an on-site setting, you can always go to the technician quickly. You go to the people providing the sound and have them improve the sound. But when you're in an RSI booth, the only way you can grab their attention is by turning off your mic and saying, "I will not interpret if the sound isn't improved." Now that's the only way— and it's very rude to do that, and it's difficult, and the client might get mad—but it's the only way to improve things.

Interviewees also reported a disconnectedness from speakers and meeting participants. When participants inadvertently and inappropriately switched on their microphones, even though interpreters could see who it was, they did not have the hosting right that would enable them to switch off the offending microphone. Hosts and technicians often took a while to react, by which time the interpreters' concentration was broken (INT862, INT812, INT651). With regard

to speakers, when their sound was poor or they spoke too fast, even if interpreters messaged them asking them to slow down, via the chat function, it was unlikely the speaker would see the message while presenting. Many chairs would also not interrupt speakers and ask them to slow down, leaving the interpreters coping with very fast delivery (INT862, INT864, INT861). Interviewee INT841 stated:

> It's also harder to communicate with the organizers, speakers, and technicians. Sometimes you can write to the organizers or speakers saying that the speaker is speaking too fast and needs to slow down. And then they take up to one hour to respond, because maybe they're busy with something else. While in the on-site booth, you can just wave at the technician and he'll help you out.

Although Moser-Mercer (2003) and Roziner & Shlesinger (2010) spoke about interpreters experiencing a feeling of 'alienation', this was different from what questionnaire respondents and interviewees in this study described. In the previous studies, alienation was caused by not having access to visual cues and not feeling immersed in the conference venue. The 'feeling of disconnect' that this research study's respondents and interviewees were discussing, was caused by unresponsiveness on the part of technicians, speakers, and organizers to swiftly resolve challenges experienced during interpreting.

5.3.4 **Physical effects of RSI**

Just under half of the respondents reported experiencing neck ache and backache since they had started using RSI, as shown in Figure 34. The questionnaire did not ask whether respondents used an ergonomic chair or a large screen; this would have helped to clarify the reasons behind the high percentage of respondents who reported neck and back pain. However, during the interview phase, the researcher specifically requested that interviewees to keep their cameras on while explaining their RSI home-office configuration. The researcher observed that many interviewees leaned forward, with their elbows on their desks or tables, and leaned their heads downwards to look into their laptop or iPad. Those who worked from desktop computers or had large screens linked to their laptops did not lean forward as much.

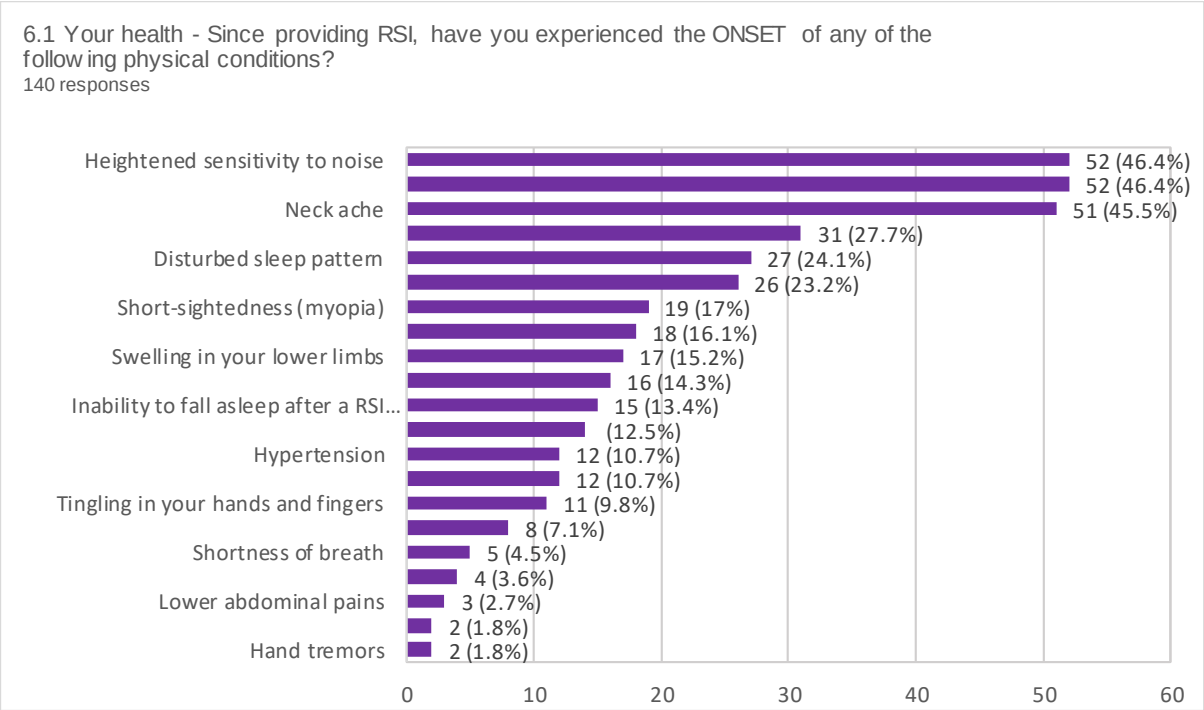


Figure 34: Physical effects experienced by respondents since beginning to use RSI

It can therefore be concluded that neck and back pain are not a direct consequence of RSI, but rather of poor sitting posture. An important observation here is that during in-person meetings, especially when mobile booths are used, interpreters are urged not to lean on the booth tables too much, as the weight of an interpreter's upper body—together with the console, lamp, and laptop—can cause the table and, consequently, the mobile booth, to collapse. Interpreters at on-site meetings are therefore more aware that they need to sit up straight. As such restrictions do not exist at home, it is easier for interpreters to stop paying attention to their posture.

Other important physical effects were tinnitus and increased sensitivity to noise. During the interviews, various interviewees reported a heightened sensitivity to noise (INT861, INT851, INT651). Interviewee INT651 reported loss of hearing in the left ear and tinnitus, which can be attributed to acoustic shock and poor sound quality. Interviewee INT811 reported myopia, which can be attributed to too much screen time. Interviewee INT851 reported suffering from severe headaches after RSI assignments. The physical effects that were reported require an empirical, medical, and causality analysis that was beyond the scope of this research study.

5.4 Psychological effects of RSI

A large percentage of respondents (40%) reported feeling loneliness while providing RSI during the Covid-19 pandemic lockdowns.

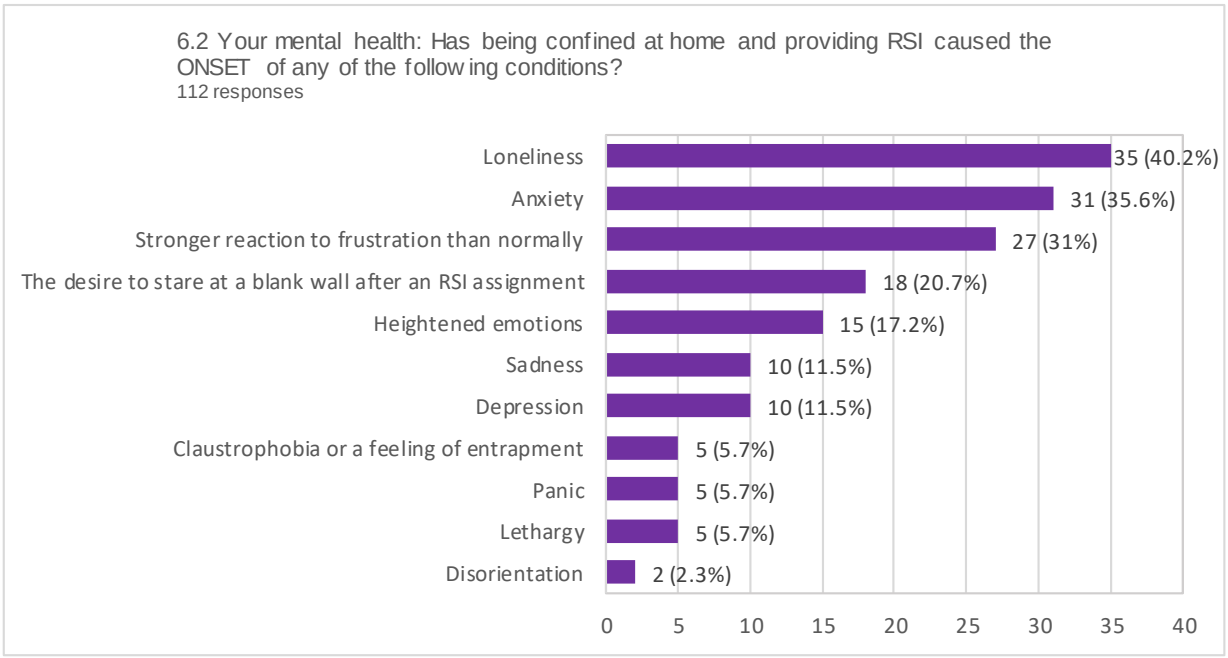


Figure 35: Psychological effects experienced by respondents since beginning to use RSI

Interviews revealed that a possible reason for the loneliness reported by respondents was having to deal with technological and interpretation stress all alone, as there were no technicians or colleagues on hand to help (INT812, INT831).

When loneliness was correlated with living arrangements, no statistically significant difference was found between those who lived by themselves and those who lived with others. Furthermore, interviewees who lived by themselves did not reveal that they felt lonely. In fact, INT841 stated that it was pleasant to live alone because it allowed more time and quiet to prepare for RSI meetings and facilitated concentration.

Respondents' responses of feeling 'anxiety', 'panic' and 'stronger reaction to frustration' corroborate interviewees' statements regarding technostress and the annoyance of unmuted microphones, poor sound quality, power outages and the disconnectedness from technicians and speakers, discussed earlier in the previous section (5.3). Further empirical studies need to be conducted on the respondents' reported 'desire to stare at a blank wall after an RSI assignment', in order to determine causality — for example, whether this feeling was due to cognitive overload, technostress, or over-exposure to sound.

5.5 Preferred interpreting modalities

The questionnaire asked several questions designed to understand whether first-hand experience had influenced perceptions about RSI to such a degree that interpreters had formed a preference about RSI.

To the question 'If financial gains were exactly the same, would you prefer only RSI meetings, a mix of both or only in-person meetings?' in Figure 36 below, 20% of respondents responded that they would prefer to do in-person meetings only and not use RSI at all. This percentage corroborates Matsushita's (2020) findings in Japan, where 20% of respondents were averse to using RSI, and Przepiórkowska's (2021) findings in Poland, where 22% of respondents completely rejected RSI. In this study, these findings were corroborated by two interviewees during the interviews. Interviewee INT651 had suffered hearing loss and consequently felt that in-person meetings were much more effective at protecting interpreters' hearing. Another interviewee 8INT 852) was very exasperated with speakers' and participants' non-compliance with RSI requirements in virtual meetings and believed that the resulting poor sound quality did not allow interpreters to provide a professional service; on this basis they were completely averse to RSI assignments.

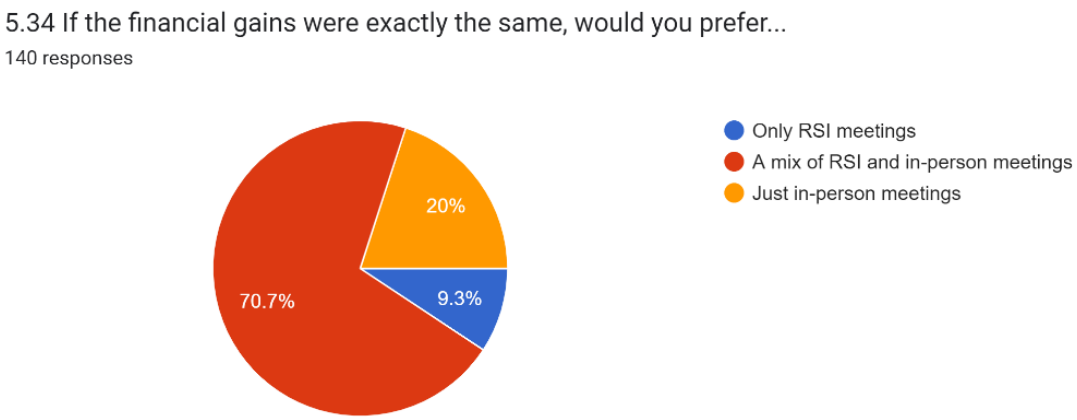


Figure 36: Interpreting mode preferred by respondents

In contrast, 9.3% of respondents and five interviewees (both genders, ages above 50 years) stated that they preferred to provide RSI exclusively (INT811, INT642, INT821, INT 822, INT853). Responses to Question7.1 (Figure 37) revealed that any preference for RSI was mainly for home-based RSI and less for hub-based RSI. The preference for RSI, if financial gains were exactly the same , is lower than in the ESIT (2021) study, where 26% of survey

respondents indicated that they preferred to provide home-based RSI exclusively, and Przepiórkowska's (2021) study, where 52% were happy to provide home-based RSI exclusively.

In this study, the majority of respondents (70.7%) and interviewees (70%) indicated that they would prefer to provide a mix of both in-person and remote interpreting. This percentage corroborates Matsushita's (2020) findings in Japan, where 80% of respondents indicated they would be willing to continue to provide RSI after the pandemic as well as in-person, because RSI eliminated the need to travel. In Przepiórkowska's (2021) study, however, the percentage of respondents in Poland who favoured RSI exclusively was much higher (52%), and only 27% preferred a mix of both RSI and in-person meetings.

Additional data collected during the interviews revealed that financial gains were not the only factor that should be considered with regard to interviewees' preference of interpreting modality, as alerted by interviewees INT812 and INT852. Other factors included meeting destination, the number of travelling days to and from the meeting, visa issues, the length of the RSI assignment, and family commitments as explained by various interviewees (INT811, INT842, INT651, INT631, INT632). As a result, most interviewees indicated feeling positive that RSI had been added to their skills-set and was a modality available to them in the future (INT853, INT811, 851, INT841).

5.6 Viability of RSI in the African context

The most important conclusion that can be drawn from the responses to question 7.1 (shown in Figure 37), was that 62.1% of respondents believed that RSI was here to stay, regardless of whether they liked RSI or not. However, an additional 23.6% hoped RSI was here to stay, revealing a positive attitude towards RSI. Furthermore, 53.6% were very happy providing RSI from home. Additionally, 40% indicated that interpreters should continue to improve their RSI skills set. Moreover, 49.3% indicated that they believed that RSI would become increasingly feasible. As explained by INT622 and INT632, the advent of 5G and uncompressed audio over IP in Africa, would resolve many of the internet connection and technical sound issues, thus making RSI more acceptable and viable. As only 5% of questionnaire respondents agreed with the questionnaire statement, 'I believe that even with advancing technology RSI is not feasible in Africa', this also infers that the remaining 95% believed that RSI would become more feasible with advancing technology. This finding corroborates Moser-Mercer (2003) who—

already in 2003–stated that "as technology improves, so does the technical feasibility of remote interpreting" (p. 1).

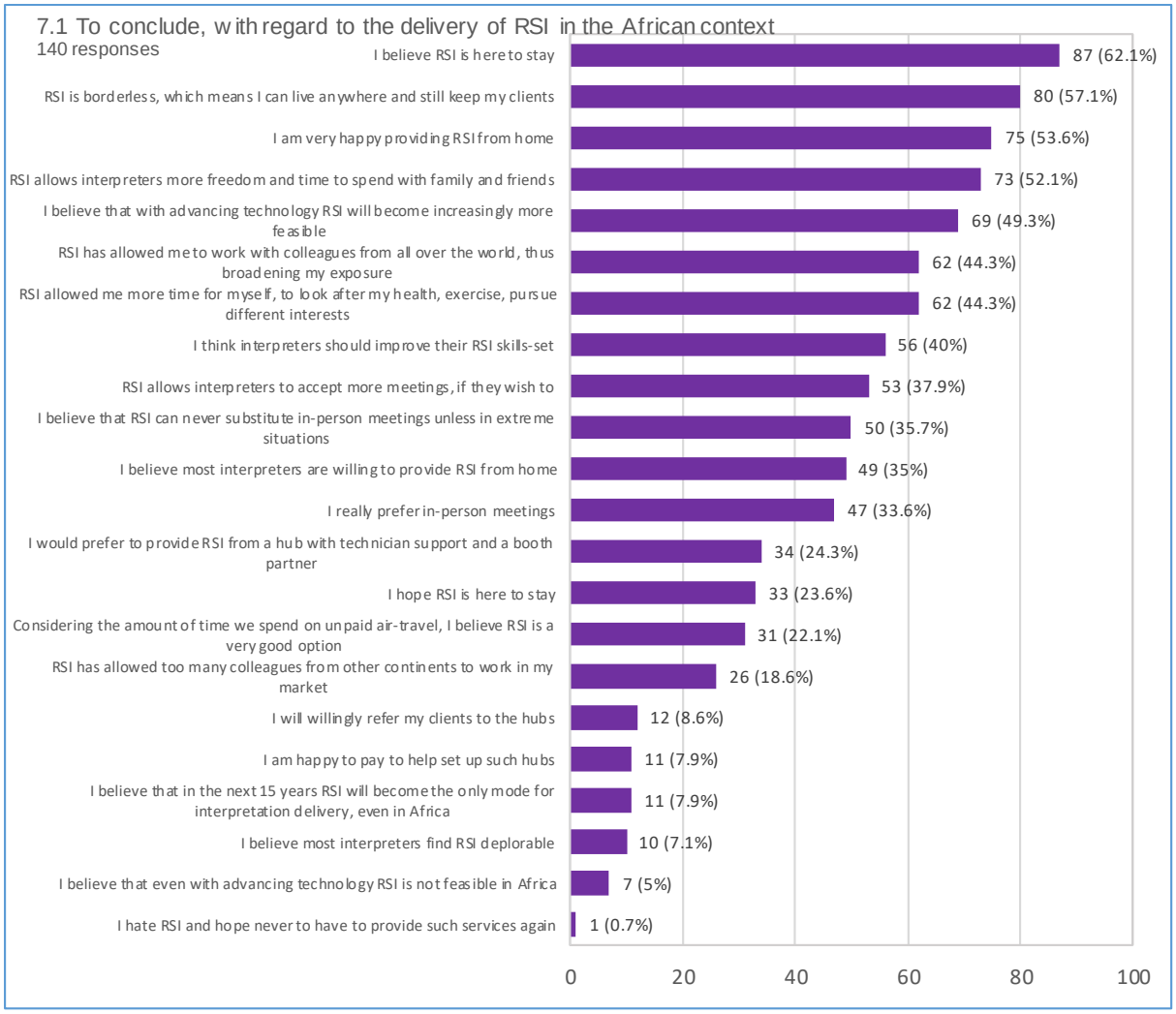


Figure 37: Perceptions of RSI in the African context

Another important factor to consider with regard to the feasibility of RSI was the type of meeting at which it was used. Numerous interviewees were of the opinion that RSI was viable for short, three- to four-hour meetings, but not for eight-hour meetings. Longer duration caused significant fatigue unless a second team was hired. Furthermore, many questionnaire respondents and interviewees considered RSI appropriate for board meetings, business meetings, training courses, and even technical meetings, if the speed was well-managed. For difficult negotiations and conflict resolution, most interviewees were of the opinion that in-person meetings were preferable. Interviewee INT811 explained the reasoning behind this as follows:

> I think in-person and virtual meetings complement one another. I think that each come with their benefits. There's a reason why people need to meet physically. If clients are negotiating, you don't want to be doing that via RSI. The negotiations are probably going to go on longer and less efficiently on RSI, which worsens interpreter fatigue. When people are physically present, things move faster—especially during the coffee breaks! There's a lot of negotiation that goes on behind the scenes, and you find yourself interpreting smoothly because they've already discussed and negotiated during the coffee breaks.

This corroborated Wang's (2018) findings that remote interpreting was less appropriate for tense or emotionally charged meetings. Leeman Price et al. (2011) also found that interpreters in emotionally charged settings needed to observe visual cues, thus in-person meetings were preferable.

Regarding AIIC's (2020a) recommendation that RSI be provided from a hub if at all possible, this research study found that, in Africa, interpreters' home-based comforts had taken precedence, and most preferred to work from home rather than a hub, as discussed in Chapter 4 (Section 4.5.7).

To conclude, only 33.6% of respondents indicated that they preferred in-person meetings; while 53.6% were happy to provide RSI from home; 9.3% were happy to exclusively provide home-based RSI; and 0.7% absolutely disliked RSI. From this it can be concluded that, based on first-hand experience providing RSI in Africa during the pandemic, two-thirds of respondents were comfortable with the possibility of providing home-based RSI in the African context in the future. This indicates that interpreters' pre-pandemic perceptions of using RSI in Africa were influenced positively by their first-hand experience during the pandemic and, despite the challenges, two-thirds had adopted a positive attitude towards RSI's future viability RSI as a viable option going forward.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

In this final chapter, conclusions are drawn based on the research findings. In addition, recommendations emanating from discussions during the interviews are provided for interpreters, clients, and Zoom. The limitations of this research study and areas for further research areas are also discussed.

6.2 Conclusions

This study set out to use Creswell's (2003) Mixed-Methods Sequential Explanatory approach, consisting of a quantitative and qualitative phase (questionnaire and Love letter/Break-up letter) followed by an exploratory qualitative phase (interviews), to identify and explore interpreters' perceptions of RSI before, during and after the pandemic on the basis of their experience with RSI during the Covid-19 pandemic. The aim of this research study was to answer the question, *'How has first-hand experience during the Covid-19 pandemic influenced spoken-language conference interpreters' attitudes towards Remote Simultaneous Interpreting in Africa?'*. The research question was broken down into the following sub-questions, which provide a frame for the conclusions.

6.2.1 What were interpreters' perceptions about RSI before the pandemic?

This research revealed that only 4% of 140 questionnaire respondents had regularly provided RSI services before the pandemic. A further 15% had provided RSI occasionally. It was therefore concluded that only 20% of respondents had had first-hand experience with RSI before the pandemic upon which to base an informed opinion, and the remaining 80% formed perceptions based on their reading or on hearsay. Furthermore, 25% of respondents indicated that, prior to the pandemic, they had never given RSI a thought; this infers that they had been ambivalent about RSI. Another 25% indicated that they had read about RSI but thought it a very remote possibility in Africa, and 20% indicated that although they had read about RSI, they had considered it unfeasible in Africa. From this it can be concluded that, prior to the pandemic, most interpreters in Africa who participated in this study either had not formed perceptions about RSI yet or did not consider it feasible.

6.2.2 How was RSI practiced in Africa during the height of the pandemic (2020 to 2022)?

This study found that most questionnaire respondents did not work from RSI hubs, although hubs were recommended by AIIC (2020a). During the peak of the pandemic, it was impossible to do so due to government-imposed restrictions. As the pandemic waned, other practical reasons, such as distance between interpreter location and hubs, became important. Furthermore, 77% of questionnaire respondents indicated that they preferred to provide RSI from the comfort of their own home over a hub. Those who preferred a hub (23%) indicated that this was due to noisy home environments or because they felt lonely and preferred to work with colleagues in the same physical space.

It can therefore be concluded that most respondents provided RSI from home-based RSI spaces during the height of the pandemic. Some interviewees indicated that they had set up a dedicated RSI home office, while others, due to their living arrangements, needed to work from communal spaces such as dining rooms, sitting rooms, and bedrooms. Although the number of devices (between two and five) interpreters used to provide RSI had decreased since the beginning of the pandemic, most respondents indicated that they still needed to use two to three devices. It can thus be concluded that most interpreters in Africa experience significant cognitive overload because they have to operate numerous devices while interpreting.

The findings further revealed that there were internet connection, bandwidth, and sound challenges on all SIDPs and online meeting platforms used by clients in Africa. It was concluded that these caused significant stress. Regarding visual streaming, which was a concern until the late 2000s (as discussed in the literature review), 85% of respondents and interviewees stated that they were satisfied with visual input quality. Additionally, 65% were able to see the presentation as well as the speaker's lips, facial expressions and gestures. It was therefore concluded that visual-streaming issues had been largely resolved.

Zoom was the most-used online meeting platform in Africa between 2020 and 2022 for meetings requiring multilingual interpretation, as discussed in Chapter 4 (Section 4.5.2). Zoom is not an SIDP, but an online meeting platform that has integrated some of the interpreting functions required for RSI. Until the end of 2022, Zoom did not have a function that allowed interpreters to see booth partners, nor did it have a dedicated handover function. Until February 2022, Zoom did not have a relay function. The absence of these functions increased the

cognitive load and technostress experienced by interpreters, as discussed by various interviewees. On this basis, it is concluded that if Zoom were to provide these additional functions, the cognitive load and stress experienced by interpreters could be significantly reduced.

Regarding the remuneration rate paid for three-hour RSI sessions, 76% of respondents indicated satisfaction. However, approximately 55% of respondents indicated that their clients exceeded the AIIC three-hour recommended RSI session duration (2022) but did not always increase team strength. Furthermore, 40% of respondents indicated that there were still African organizations that expected interpreters to work for the entire eight-hour day, despite the heightened cognitive load associated with RSI. These organizations did not increase team strength and paid the same rate for an eight-hour RSI session as they would for an eight-hour in-person meeting.

It is concluded that African clients and organizations needed to be sensitised to the fact that RSI interpreters should not work for longer than the recommended three-hour session, not only because longer sessions can be detrimental to their health, but also because it can undermine the quality of interpretation and thus the objectives of the meeting.

6.2.3 **How did interpreters experience RSI in Africa during the pandemic?**

This study found that interpreters who participated in this study perceived RSI as very stressful during the first year of the pandemic due to technostress, the absence of an in-person technician, frequent power outages, internet connection failure, and poor sound quality on the part of speakers and meeting participants.

However, by the second year of the pandemic, many surveyed interpreters had become more familiar with technical problems and how to solve them, allowing for a less stressful experience. However, speakers' and meeting participants' sound and virtual meeting behaviour continued to pose challenges. It can be concluded that, while RSI was no longer unfamiliar to interpreters, technical issues persisted and negatively affected interpreters' receptivity to RSI.

6.2.4 **What advantages and disadvantages of RSI did interpreters experience in the African context?**

This study concludes that the biggest advantage of RSI experienced by interpreters was that they were not required to travel. Interpreters faced many challenges travelling internationally

within Africa, such as multiple connections with long stop-overs, complicated visa requirements, delayed and overbooked flights, and inadequate passenger-processing facilities at airports. As a result, most surveyed interpreters were happy to have the option of working from home. Travelling was considered exciting when they could go to interesting destinations, or when meetings provided exposure to new and valuable clients.

This study concludes that surveyed interpreters experienced RSI as enabling them to have a healthier work-life balance than travelling to meetings. Many surveyed interpreters considered it advantageous to be able to spend more time with spouses, children, and family. Others appreciated the additional time (not spent travelling) that they could use for exercise, leisure, hobbies and learning new skills. Others stated that it was an advantage to be able to keep doctors' appointments and other commitments which were difficult to honour when travelling.

Additionally, the borderless nature of RS advantageously provided interpreters with exposure to new clients. Numerous surveyed interpreters also mentioned that there had been an increased number of meetings, as clients did not have to pay for meeting participants' and interpreters' flight tickets, accommodation and *per diem* costs. It was also more feasible for clients to organise a last-minute meeting. Consequently, there was more work available to interpreters.

The greatest disadvantage to RSI identified by the majority of surveyed interpreters was poor sound quality. Surveyed interpreters attributed the majority of sound challenges to the fact that speakers and meeting participants did not wear the recommended headsets (earphones with embedded microphones), and frequently spoke from inappropriate places, such as rooms with echoes, cars, gardens, airports, and other noisy locations. Furthermore, meeting participants often unmuted themselves at inappropriate times, causing distractions. Most surveyed interpreters attributed this behaviour to a lack of awareness, but some also believed that speakers and participants disregarded the recommendations sent by meeting organizers. It can be concluded that much work needs to be done to sensitize clients to the need to ensure that all participants observed virtual meeting guidelines.

This study concludes that the technostress experienced by interpreters during RSI is a significant disadvantage to using RSI. The fact that interpreters had to double up as technicians during RSI added to their cognitive load, which was very stressful and caused an earlier onset of fatigue. Many surveyed interpreters mentioned that after three hours of RSI they needed to step away from their computers.

Additionally, this study concludes that solutions need to be found to counter the feeling of disconnectedness from booth partners, speakers, technicians, and clients that surveyed interpreters felt during RSI sessions. When problems arose, it could take 15 to 20 minutes to obtain a response from a technician and up to an hour to obtain a response from some organizers. This lack of responsiveness caused significant stress to interpreters. A possible solution could be home-based hubs, where interpreters could have a colleague´s support.

6.2.5 **According to interpreters, how did RSI affect their physiological and psychological well-being?**

The most common physical effects of RSI identified by surveyed interpreters were backache and neck ache. Analysis of interview responses led to the conclusion that these aches were direct side-effects of poor sitting posture, and not intrinsic to RSI. Other common side-effects were tinnitus and heightened sensitivity to noise, which could signal hearing overload. Increased blood pressure was mentioned, which could be associated with stress or the copious cups of coffee that some surveyed interpreters reported drinking during their breaks. These and other physical effects warrant further empirical study.

Regarding the psychological effects of RSI, the most common effect mentioned by respondents was loneliness. It can be concluded that the loneliness respondents experienced was due to the fact that they worked without the physical presence of a booth partner and technician.

6.2.6 **Do interpreters prefer RSI or on-site meetings in the African context?**

It was found that 77% of respondents were happy to provide a combination of RSI and in-person interpreting. Although 33.4 % of respondents preferred in-person meetings, only 0.7% were completely averse to RSI. Additionally, 53.6% indicated that they were very happy providing RSI from home, and 9.3% of respondents indicated that they actually preferred to provide home-based RSI, exclusively. It is therefore concluded that standard-setting bodies will need to reconsider some standards and recommendations regarding working from home only in extreme situations, and the need to use hubs.

6.2.7 **Do interpreters consider RSI viable in the African context after the pandemic?**

The most important conclusion of this study is that most surveyed interpreters believed that RSI was here to stay. Furthermore RSI will become more feasible with advancing technology, especially with the advent of 5G in Africa and continuous online platform improvements.

An important determining factor in respondents' perceptions of the viability of RSI was the nature of the meetings at which it is used. It was concluded, based on surveyed interpreters experience, that RSI was viable for short three- to four-hour meetings but not for eight-hour meetings, unless a second team is hired or manning strength this increased. The study also concluded that RSI was appropriate for conferences, board meetings, business meetings, training courses, and even technical meetings if the speed is well-managed. However, in-person meetings were better when difficult negotiations and conflict resolution were required.

6.3 Recommendations

During the second phase of this research study (the interviews), various interviewees made suggestions which they believed would improve the RSI experience for interpreters, clients, speakers and meeting participants. Some of those suggestions are discussed here as recommendations, because on careful consideration they were found to be implementable and able to significantly improve interpreters' experience using RSI, especially in view of the disadvantages discussed in Chapter 5 (Section 5.3). The recommendations have been divided into three categories; namely: those implementable by interpreters, those implementable by clients, and those implementable by Zoom (the most used online meeting platform in Africa, as discussed in Chapter 4 (Section 4.5.2)).

6.3.1 Recommendations for interpreters

According to the WHO Director General, the novel coronavirus is under control in most countries, with the possibility of the pandemic coming to an end in 2023 (WHO, 2023). Consequently, interpreters who prefer not to use RSI may be able to decline RSI assignments and dedicate themselves to in-person meetings only. For those who have indicated that they are willing to provide RSI services, the following recommendations are useful:

a) Interpreters should equip themselves with the best RSI office set-up possible. RSI interpreters would benefit from having a large screen in front of them, linked to their interpreting device, on which they can see presentations and speakers (especially their lips, facial expressions and gestures) clearly. The use of a screen would also prevent interpreters from leaning forward on their elbows to look down at laptop screen, thereby reducing neck ache and ensuring better sitting posture.

b) Regarding handover, interpreters are encouraged to open WhatsApp Web on their second device, which they currently use to listen to their colleague, and hand over there, thus eliminating the need for a third device.

c) To prevent musculoskeletal issues, interpreters should invest in an ergonomic chair.

d) For those working in noisy environments, and without access to hubs, it would be useful to invest in soundproof screens.

c) Numerous interviewees perceived RSI as a more sedentary activity than in-person interpreting. It is recommended that interpreters endeavour to be as active as possible when not interpreting.

d) Considering the high percentage of respondents who reported a feeling of loneliness, it is recommended that interpreters consider working either from an RSI hub, or from a home-based hub with a booth partner.

e) Based on ISO/PAS 24019, AIIC has developed RSI guidelines for clients that are readily available on its website. These should be widely disseminated by both AIIC and non-AIIC interpreters in Africa to all clients.

f) Rapidly improving technology will ensure that RSI is improved upon much faster. It is hence recommended that interpreters in Africa actively involve themselves in the development of RSI and ensure that their voices are heard.

g) Currently, there are no African representatives in the ISO sub-committee on Distance Interpreting. It is recommended that AIIC Africa, PAMCIT and African Interpreting Training Institutions become involved, so that African realities can be taken into account.

6.3.2 **Recommendations for clients**

a) It is recommended that clients familiarise themselves with the AIIC Distance Interpreting Guidelines (2020a) and apply them.

b) It is recommended that clients appoint a technician who remains in the virtual meeting throughout, who can pay undivided attention to meeting proceedings, mute participants who switch on their microphones inadvertently, check speakers' sound quality and alert

them and participants when the sound is poor, and respond to interpreters' requests swiftly.

c) It is recommended that interpreters be assigned in such a way that if their connection drops, they are automatically re-assigned when they re-join the online platform. Zoom does have this function.

d) It is recommended that clients make it mandatory for speakers to use the recommended headset (earphones with embedded noise-cancelling microphone) with a USB connection to their computers or laptops. Furthermore, speakers should be prohibited from speaking from a mobile phone. Speakers should also be made aware that they need to speak from a quiet place with proper acoustics (no echo, no background noises).

e) It is recommended that clients conduct 'dry runs' (pre-meeting simulations) with speakers, to impress upon them the importance of wearing the correct headsets. Clients should offer training to staff on virtual meeting etiquette and requirements, in the same manner that they offer other courses, as this would significantly improve communication on online platforms.

f) It is recommended that clients sensitise speakers and meeting participants to the fact that virtual platform meetings need to be approached with the same formal, professional manner as in-person meetings. RSI meetings should not be treated as makeshift options, but as information-exchange opportunities in their own right. A more professional, disciplined approach would eliminate many of the sound issues.

g) When speakers use prepared speeches as well as presentations, both should be sent to interpreters beforehand for adequate preparation purposes, as per AIIC Guidelines on Distance Interpreting (2020a).

h) Due to compressed sound that makes certain frequencies undecipherable, speakers should speak more slowly than they would in an in-person meeting, in order to ensure accuracy of interpretation.

i) Since clients are saving money on interpreters' flight tickets, accommodation and *per diem*, they should ensure that a second team is contracted for RSI meetings longer than

three hours per day. This will reduce interpreter cognitive fatigue and ensure better interpretation quality.

6.3.3 Recommendations for Zoom

a) It is recommended that Zoom offer a handover function as this will eliminate the need for a third device, thereby significantly reducing interpreters' cognitive load.

b) Interpreters would appreciate a separate chat function that they could use for messages to interpreters working in the same booth. Many interviewees revealed that they were uneasy using the existing chat function while interpreting, in case they erroneously sent a message to everyone on the platform or to the wrong person.

c) It is recommended that a large message appear on the screen when the speaker's sound or connection is poor. This will serve two purposes. Firstly, it will serve to sensitise speakers and participants to the fact that they need to use an ethernet connection instead of mobile phone Wi-Fi, as well as proper headsets. Secondly, when participants listen to interpreters, they do not hear the floor and are unaware that the speaker's sound is problematic. This is to the interpreter's detriment, as listeners may believe that the interpreter's performance is inadequate.

d) It is recommended that Zoom develop a function whereby interpreters can use emojis to communicate with the technician and, as a last resort, with the speaker. Emojis would allow the interpreter to swiftly press a button instead of writing a polite, long message. It is suggested that there be emojis be created for 'poor connection', 'poor sound', 'slow down', 'speak into your mic', 'background noise', 'mute mic', and 'unmute mic'. This recommendation would be useful for other online meeting platforms and SIDPs too.

6.4 Limitations of the study

Several limitations were identified in this study.

First, with regard to methodology, the initial phase of this study involved a non-probabilistic, voluntary questionnaire. As a result, it could be said that the study was not representative of the entire population of spoken-language conference interpreters in Africa. The researcher had

no means of reaching every spoken-language conference interpreter in Africa, as their contact details were not always known.

Second, the voluntary nature of the questionnaire means that responses could be seen as biased, since interpreters who responded were those who had an interest in the subject matter and in putting forward a specific opinion.

Third, although the questionnaire was anonymous, upon receiving a reminder to complete the questionnaire, some interpreters responded pleasantly, stating that they had already done so. Others reached out to communicate their support and encouragement, and to request a copy of the final research report. This could be seen as violating the anonymous nature of the questionnaire, in that the researcher could have tried to determine the identity of respondents based on such messages. However, the researcher's interest was limited to identifying trends and the underlying reasons for those trends. As such, it would have served no purpose to try to identify respondents. In order to protect the anonymity of such questionnaires in future, it is suggested that future anonymous questionnaires have a notification requesting respondents not to communicate with the researcher unless they have ethical reservations or complaints.

Interviewees were selected according to probabilistic, stratified sampling and could be seen as more representative of the entire population of spoken-language conference interpreters in Africa. However, they were still a convenience sample in that they had to be willing to participate in the research. As such, there could be other interpreters in Africa who would be more representative of the entire population, but who were not available, willing, or known.

This study focussed entirely on the spoken-language conference interpreters in Africa who work as freelancers. Although this was done purposefully to narrow the scope of the study to manageable proportions, it is important to alert readers to the fact that three very important groups were excluded; namely: in-house spoken-language interpreters, spoken-language conference interpreting graduates who graduated just prior to or during the pandemic, and conference sign-language interpreters. Each of these groups dealt with RSI during the pandemic, faced their own set of challenges and formed their own perceptions about RSI. It would be valuable to study their perceptions about the feasibility of RSI during, and after, the pandemic, as well.

6.5 Concluding remarks

This research study investigated how interpreters in Africa experienced RSI during the Covid-19 pandemic, how those experiences influenced their previous perceptions of RSI, and to what extent interpreters thought that RSI was a feasible option during and after the pandemic. This study concludes that the online meeting platform that is mostly used in Africa (Zoom) has proven adequate for RSI, but could be more effective for RSI if particular interpreter-friendly functions were added. In addition, how well SIDPs and Zoom work, from an interpreter's perspective, was found to depend largely on external factors, such as internet connection, bandwidth, power outages, and the behaviour of speakers and meeting participants during RSI sessions. With the advent of 5G and uncompressed sound over IP, RSI may soon become very feasible from a technical perspective. However, speakers and participants need to be sensitised, and even trained, on the requirements for RSI and the etiquette required to ensure that interpreting can be successful during virtual meetings.

This study represents the first academic investigation into the use of RSI as a new mode of interpreting in Africa. Since the study was narrowed down to spoken language conference interpreters in Africa, there are many areas that require further in-depth study, such as graduate interpreters who did not have the opportunity to establish a client base before the pandemic and their experience of RSI; in-house interpreters' experiences with RSI; the impact of gender on interpreters' willingness to use RSI; the advantages and disadvantages of using RSI hubs in the African context; the potential for home-based hubs; the relationship between multi-member households and willingness to use RSI from home; the relationship between technostress and cognitive overload; the challenge of makeshift handover protocols; empirical assessments of interpreter performance on Zoom as opposed to their performance on dedicated SIDPs; and empirical causality of the physical and psychological effects of RSI on interpreters.

The general perception among the interpreters who participated in this research study was that RSI is here to stay. Before the pandemic, 80% had had no first-hand experience with RSI, and 63% were either ambivalent towards RSI or had negative perceptions about it. By November 2022, only 0.7% of the interpreters who participated in this research study were completely averse to the idea of providing RSI; 77% indicated that they would be happy with a combination of in-person meetings and RSI; 53.6% indicated that they were very happy providing home-based RSI, and 9.3%, stated that they would be happy to provide home-based RSI exclusively.

Regarding interpretation hubs, only 24.3% indicated that they would prefer providing RSI from a hub with technician support. Thus, it can be concluded that first-hand experience positively influenced the perceptions of and attitudes toward RSI of most of the interpreter in this study, despite the negative aspects of technostress, disconnectedness from booth partners and clients, and poor sound quality that they had encountered in their experience with using RSI.

REFERENCES

AIIC. (2020b). *AIIC Position Paper on RSI, in extremis, temporary guidance until the measures to fight the Covid-19 pandemic are lifted*. Geneva: AIIC.

AIIC. (2022, March 09). *Professional standards*. Retrieved October 12, 2022, from https://aiic.org/document/10235/NormesProf-ProfStandards_2022_E&F_final.pdf

AIIC Africa. (2022). *Ethics in RSI - an online workshop*. Retrieved November 16, 2022, from aiic.net: https://aiic.org/client/event/roster/eventRosterDetails.html?productId=447&eventRosterId=23

AIIC Taskforce on Distance Interpreting. (2020a, March 17). AIIC Guidelines for Distance Interpreting (Version 1.0). aiic.net. Retrieved June 18, 2021, from <https://aiic.net/p/8734

AIIC Taskforce on Distance Interpreting. (n.d.). *AIIC Interpreter Checklist for Performing Remote Interpreting Assignments from Home in extremis during the Covid-19 Pandemic*. Retrieved June 13, 2022

Anushree, D. (2022). *Perception*. Retrieved March 3, 2022, from https://www.learnpick.in/prime/documents/ppts/details/5200/ppt-on-perception

AT Editor. (2020). *SADC CANCELS ITS IN-PERSON MEETINGS AS DRC REPORTS FIRST COVID-19 CASE*. Retrieved May 8, 2020, from https://africatimes.com/2020/03/10/sadc-cancels-its-in-person-meetings-as-drc-reports-first-covid-19-case/

Ayala, J.,Goldsmith, J., Longhurst, S. (2020, February 29). *Summary of AIIC Switzerland Remote Simultaneous Interpreting Seminar*. Retrieved September 25, 2020, from AIIC: https://aiic.ch/press/remote-interpreting-ws2/

Bailey, S. (2019). Remote interpreting tests at the Council of Europe. *AIIC Remote interpreting workshop I (30 Nov. 2019)*. Geneva: AIIC. Retrieved from https://aiic.ch/press/remote-interpreting-ws1/

Bothma, R. & Verhoef, M. (2008). Assessing the role of the interpreter in facilitating classroom communication. In M. D. Verhoef (Ed.), *Multilingualism and educational interpreting: Innovation and delivery* (pp. 32-46). Pretoria: Van Schaik.

Brady, A. (2019). Remote interpreting tests at the UN, SCIC & European Council. *AIIC Remote interpreting workshop I (30 Nov. 2019)*. Geneva: AIIC. Retrieved from https://aiic.ch/press/remote-interpreting-ws1/

Brady, A. (2020, February 29). *Videoconferences with Interpretation at UNOG*. Retrieved September 25, 2020, from https://aiic.ch/press/remote-interpreting-ws2/

Braun, S. (2015). Remote Interpreting. In H. M. Jourdenais (Ed.), *Routledge Handbook of Interpreting*. London: Routledge.

Braun, S. (2018). Video-mediated interpreting in legal settings in England Interpreters' perceptions in their sociopolitical context. *Translation and interpreting studies, 13*(3), 393 - 420.

Breima, R., & Steiert, A. (2021). Remote Interpreting: The New Face of Spoken Language Services. *MultiLingual, 32*(2), 96-101.

Brewis, C. (2014). Die waarde van tolkingvir tersiêre onderrig en leer. ´n Ondersoek na die persepsies van tolkgemedieerde kommunikasie in die Fakulteit Regsgeleerdheid aan die Universiteit van Stellenbosch. *Stellenbosch Papers in Linguistics Plus, 45*, 43-70.

Cher, A. (2020). *Uncertainty looms over Asia's top events as coronavirus fears grip*. Retrieved May 2, 2020, from https://www.cnbc.com/2020/02/12/uncertainty-looms-over-asia-events-as-coronavirus-fears-grip.html

CogniFit Research. (2021). *What is perception?* Retrieved March 03, 2022, from https://www.cognifit.com/perception#:~:text=Perception%20is%20the%20ability%20to,we%20receive%20throughout%20sensory%20organs.

Correspondent, A. (2021, June 3). *AFRAA publishes 2020 Africa Air Transport Report*. Retrieved October 15, 2022, from Logistics Update Africa: https://www.logupdateafrica.com/afraa-publishes-2020-africa-air-transport-report-air-cargo?infinitescroll=1

Creswell, J. (2003). *Research design: Qualitative,quantitaive and mixed-methods approaches*. Thousand Oaks: Sage.

Desjardins, J. (2020, February 19). *Mapped: Visualizing the true sizeof Africa.* Retrieved April 14, 2022, from Visual Capitalist: https://www.visualcapitalist.com/map-true-size-of-africa/

Duggal, R. (2018). *The one marketing truism you cannot ignore: Perception is reality*. Retrieved March 3, 2022, from https://www.forbes.com/sites/forbescommunicationscouncil/2018/05/29/the-one-marketing-truism-you-cannot-ignore-perception-is-reality/?sh=56720d407030

El-Metwally, M. (2022). *RSI Solutions by Interpreters for Interpreters 1: RsiX*. Retrieved October 23, 2022, from https://www.linkedin.com/pulse/rsi-solutions-interpreters-1-x-maha-el-metwally/

ESIT. (2021, April 19). *ESIT Research Project on Remote Simultaneous Interpreting.* Retrieved Oct 24, 2022, from https://ec.europa.eu/education/knowledge-centre-interpretation/news/esit-research-project-remote-simultaneous-interpreting_en

European Commission: Knowledge Centre on Interpretation. (n.d.). *Pan-African Masters Consortium in Interpretation and Translation*. Retrieved September 13, 2022, from https://ec.europa.eu/education/knowledge-centre-interpretation/pan-african-masters-consortium-interpretation-and-translation-pamcit_en

Fantinuoli, C. (2019). The technological turn in Interpreting: The challenges that lie ahead. *BDÜ Conference Translatingand Interpreting, 4*(0), 1-16.

Fedorenkova, N. (2022). *Conference Interpreting Businesses under Lockdowns*. Retrieved October 2, 2022, from Multilingual: https://multilingual.com/issues/july-august-2021/conference-interpreting-businesses-under-lockdowns/

Feinauer, I. & Lesch, H.M. (2013). Health workers: idealistic expectations versus interpreters' competence. *Perspectives: Studies in Translatology, 21*(1), 117-132.

Fiedler, J., Pruskil, S., Wiessner, C., Zimmermann, T., & Scherer, M. (2022). Remote interpreting in primary care settings: a feasibility trial in Germany. *BMC health services research, 22*(1).

Galowich, D. (2018, September 19). *Understanding Biases And Their Impact On Our Perceptions*. Retrieved March 9, 2021, from https://www.forbes.com/sites/forbescoachescouncil/2018/09/19/understanding-biases-and-their-impact-on-our-perceptions

Gambier, Y., Gile, D., & & Taylor, C. (1997). Conference Interpreting: Current trends in research. *Benjamins Translation Library, 23*, 29-122.

Gany, F., Kapelusznik, L., Prakash, K., Gonzalez, J., Orta, L. Y., Tseng, C.-H., & Changrani, J. (2007b). The Impact of Medical Interpretation Method on Time and Errors. *Journal of general internal medicine: JGIM, Volume 22*(S2), 319-323.

Gany, F., Leng, J., Shapiro, E., Abramson, D., Motola, I., Shield, D. C., & Changrani, J. (2007a). Patient Satisfaction with Different Interpreting Methods: A Randomized Controlled Trial. *Journal of general internal medicine: JGIM, 22*(S2), 312-318.

Gentile, P. (2018). Through Women's Eyes. Conference Interpreters' Self-Perceived Status in a Gendered Perspective. *HERMES - Journal of Language and Communication in Business, 58*, 19-42. doi:https://doi.org/10.7146/hjlcb.v0i58.111658

Getachew, A. (2020). *Pan-African body cancels meeting over coronavirus fears*. Retrieved May 2, 2020, from https://www.aa.com.tr/en/africa/pan-african-body-cancels-meeting-over-coronavirus-fears/1763751

Gile, D. (1995). *Basic Concepts and Models for Interpreter and Translator Training.* Amsterdam & Philadelphia: John Benjamins.

Gile, D. (1999). Testing the Effort Models' Tightrope Hypothesis in simultaneous interpreting. *Hermes, 23*, 153-172.

Hanington, B. M. (2012). *Universal Methods of Design. 100 Ways to Research Complex Problems, Develop Innovative Ideas, and Design Effective Solutions.* Beverly: Rockport Publishers.

Interactio. (2022). *Interactio*. Retrieved October 23, 2022, from https://www.interactio.io/remote-interpreting-get-a-quote?utm_term=voiceboxer.com&utm_campaign=&utm_source=adwords&utm_medium=ppc&hsa_acc=5869437849&hsa_cam=12352094381&hsa_grp=145238769492&hsa_ad=615987578322&hsa_src=g&hsa_tgt=aud-814125929028:kwd-947877

Interprefy. (2022). *Interprefy*. Retrieved October 23, 2022, from https://www.interprefy.com/solutions

Ivankova, N.V., Creswell, J.W., Stick, S.L. (2006, February). Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice. *Field Methods, 18*(1), 3-20. doi: 10.1177/1525822X05282260

Jacobs, F. (2018). *These cities are the hubs of Africa's economic boom*. Retrieved October 20, 2022, from https://bigthink.com/strange-maps/richest-cities-in-africa/

JCS. (2022). *Providing Best-in-Class Services to the Meetings Industry*. Retrieved October 23, 2022, from https://www.convention.co.jp/en/activities/

Lebese, S. (2015). Formulation of court interpreting models: A South African Perspective. *Stellenbosch Papers in Linguistics, 44*, 61-80. doi:10.5774/44-0-191

Leemann Price, E., Pérez-Stable, E., Nickleach, D., López, M., & Karliner, L. (2011). Interpreter perspectives of in-person, telephonic, and videoconferencing medical interpretation in clinical encounters. *Patient education and counselling, 87*(2).

Lesch, H. (2011). In search of an interpreting research methodology for Africa. *Southern African Linguistics and Applied Language Studies , 29*(3), 361–373.

Matsushita, K. (2020). The results of an online survey on the implementation of remote simultaneous interpretation during Covid-19. *Interpreting and Translation Studies, 20*, 125-146.

Moser-Mercer, B. (2003). *Remote Interpreting: Assessment of Human Factors and Performance Parameters.* Retrieved October 9, 2020, from https://www.semanticscholar.org/paper/Remote-interpreting%3A-Assessment-of-human-factors-Moser-Mercer/191331aa9be5a1b54ae54eb61099e4480d62014f

Moser-Mercer, B. (2005a). Remote interpreting: the crucial role of presence. *Bulletin suisse de linguistique appliquée, 81*, 73-97.

Moser-Mercer, B. (2005b). Remote Interpreting: Issues of Multi-Sensory Integration in a Multilingual Task. *META: Translators´Journal, 50*(2), 727-738.

Moser-Mercer, B., Künzli, A., Korac, M. (1998). Prolonged turns in interpreting: Effects on quality, physiological and psychological stress (Pilot study). *Interpreting, 3*(1), 47-64.

Mouzourakis, P. (2006). Remote Interpreting: A technical perspective on recent experiments. *Interpreting, 8*(1), 45-66. https://doi.org/10.1075/intp.8.1.04mou

Oakman, J. K. (2020). A rapid review of mental and physical health effects of working at home: how do we optimise health? *BMPC Public Health, 20*(1825). https://doi.org/10.1186/s12889-020-09875-z

Olufemi, T. (2019). Burnout among sign language interpreters in Africa. *Journal of Gender, Information and Development in Africa, 8*(3), 91-109. https://doi.org/10.31920/2050-4284/2019/8n3a5

Pickens, J. (2018). *Attitudes and perceptions*. PDF4PRO. Retrieved from https://pdf4pro.com/amp/view/attitudes-and-perceptions-jblearning-com-4c9e7b.html

Pienaar, M. & Cornelius, E. (2015). Contemporary Perceptions of Interpreting in South Africa. *Nordic Journal of African Studies, 24*(2), 186-206.

Private Market Sector Standing Committee. (2015). *Conference and remote interpreting: a new turning point?* Geneva: AIIC. Retrieved from <https://aiic.net/p/3590>

Przepiórkowska, D. (2021). Adapt or Perish: How forced transition to Remote Simultaneous Interpreting during the Covid-19 Pandemic affected interpreters' professional practices. *Między Oryginałem a Przekładem, 4*(54), 137-159. https://doi.org/10.12797/MOaP.27.2021.54.08

Rojo López, A., Foulquié-Rubio, A.-I., López, L., & Sánchez, F. (2021). Analysis of speech rhythm and heart rate as indicators of stress on student interpreters. *Perspectives: Studies in Translation Theory and Practice, 29*(4), 591-607. doi:10.1080/0907676X.2021.1900305

Roziner, I., & Shlesinger, M. (2010). Much ado about something remote: Stress and performance in remote interpreting. *Interpreting, 12*(2), 214-247.

RSPH. (2021). *Survey reveals the mental and physical health impacts of home working during Covid-19*. Retrieved March 3, 2022, from https://www.rsph.org.uk/about-us/news/survey-reveals-the-mental-and-physical-health-impacts-of-home-working-during-covid-19.html

Sahel and West Africa Club & OECD. (February, 2017). *The six regions of the African Union*. Retrieved October 21, 2021, from Maps and Facts:

//efaidnbmnnnibpcajpcglclefindmkaj/https://www.oecd.org/swac/maps/48-six-regions-African-Union

Sands, L. (2022). *Tanzania investigating crash landing into Lake Victoria that killed 19*. Retrieved November 12, 2022, from https://www.washingtonpost.com/world/2022/11/07/tanzania-lake-victoria-crash-investigation/

Scribani, J. (2018, September 28). *Map: Which cities hold Africa´s wealth*. Retrieved May 17, 2020, from Visual Capitalist: https://www.visualcapitalist.com/map-cities-hold-africas-wealth/

Seeber, K. (2011). Cognitive load in simultaneous interpreting: Existing theories - new models. *Interpreting, 13*(2), 176-204.

Seeber, K., Keller, L., Amos, R., & Hengl, S. (2019). Expectations vs experience: Attitudes towards video remote conference interpreting. *Interpreting, 21*(2), 270-304.

TCworld. (2020). *CSA Research launches survey on the global language market*. Retrieved May 25, 2021, from https://tcworld.info/news-about-technical-communication/csa-research-launches-survey-on-the-global-language-market-979/

Technical Committee ISO/TC 37, Language and terminology, Subcommittee SC5, Translation, interpreting and related terminology. (2020). *ISO/PAS 24019:2020 (E)*. Retrieved Jan 23, 2021, from http://efaidnbmnnnibpcajpcglclefindmkaj/https://aiic.org/document/4822/ISO-PAS%2024019%202020-01%20EN.pdf

Voiceboxer. (2022). *Innovative RSI solution for institutions and corporates*. Retrieved October 23, 2022, from https://www.interactio.io/remote-interpreting-get-a-quote?utm_term=voiceboxer.com&utm_campaign=&utm_source=adwords&utm_medium=ppc&hsa_acc=5869437849&hsa_cam=12352094381&hsa_grp=145238769492&hsa_ad=615987578322&hsa_src=g&hsa_tgt=aud-928573764214:kwd-947877

Wang, J. (2018). "Telephone interpreting should be used only as a last resort": Interpreters' perceptions of the suitability, remuneration and quality of telephone interpreting. *Perspectives, studies in translatology, 26*(1), 100-116.

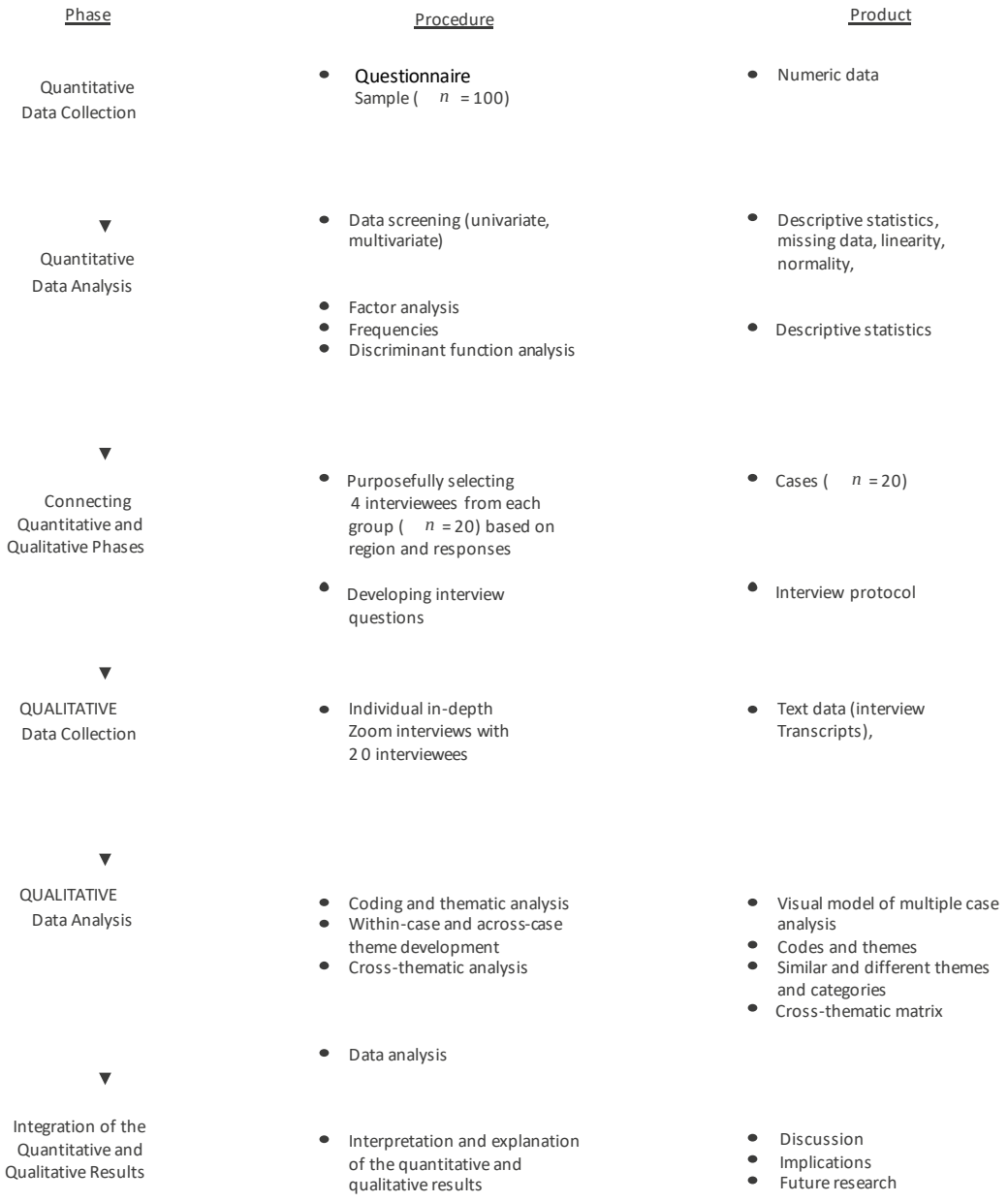
WHO. (2020). *WHO announced Covid-19 outbreak a pandemic*. Retrieved April 29, 2020, from http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic

WHO. (2023, January 30). *Statement on the fourteenth meeting of the International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic*. Retrieved February 2, 2023, from WHO: https://www.who.int/news/item/30-01-2023-statement-on-the-fourteenth-meeting-of-

the-international-health-regulations-(2005)-emergency-committee-regarding-the-coronavirus-disease-(covid-19)-pandemic

APPENDICES

Appendix 1: Visual Model for Mixed-Methods Sequential Explanatory Design Procedures



Adapted from the illustration in Ivankova, et al. (2006).

Appendix 2: Interview guide

REMOTE SIMULTANEOUS INTERPRETING DURING THE COVID-19 PANDEMIC IN THE AFRICAN CONTEXT

SEMI-STRUCTURED INTERVIEW GUIDE QUESTIONS

Travel

1) Travel: do you get the day to rest before assignment (24 hrs) for flights longer than 10 hours or do you get business class?

2) Night flights over 3 hours: do you get to rest for the 12 hours on arrival before first assignment?

3) How do you feel about travel pre- and post-pandemic?

First RSI experience

4) First RSI experience: What motivated you to start providing RSI?

RSI Office

5) Kindly explain your RSI set-up at home. If possible show the researcher your set-up via your camera.

6) What equipment did you have to purchase and what were the costs? Have your recovered the costs?

7) What are your living arrangements? Did you have to modify your home, office-space and make special arrangements with household members/ neighbours to ensure quiet during interpreting sessions?

8) When you are interpreting from home, do you have anyone who can assist you if there is a technical problem?

Your RSI experience

9) In your opinion, what are RSI's main drawbacks?

10) In your opinion, what are RSI's advantages?

11) Regarding RSI's impact on interpreter health, have you suffered any physical effects and how are you dealing with them?

12) Regarding RSI's impact on mental well-being, have you suffered any physical effects and how are you dealing with them?

RSI feasibility

13) In your opinion, what is RSI's future feasibility in Africa?

Improvement suggestions for RSI

14) If you could advise SIDP developers and clients, what advice would you give them?

Regarding this research

15) What additional questions should the research have asked in the questionnaire or interview?

16) Is there any other area you would specifically have liked this research to focus on?

Max 40 mins

Appendix 3: Additional graphs and charts for questionnaire responses

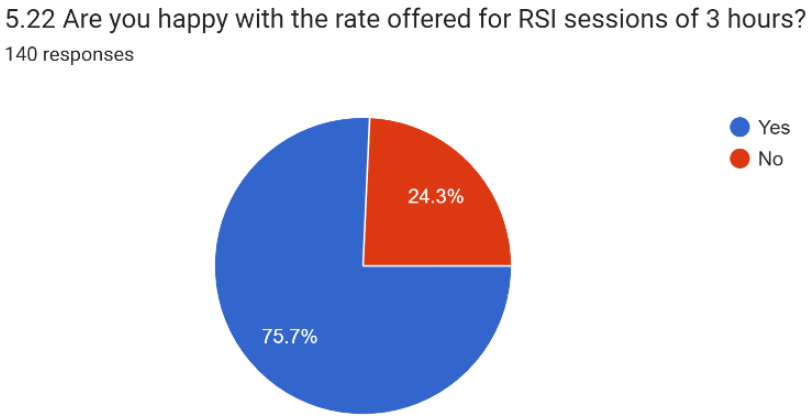


Chart 1: Satisfaction with remuneration rate for three-hour session
(See Chapter 4 (Section 4.5.6) on length of sessions, team strength and remuneration)

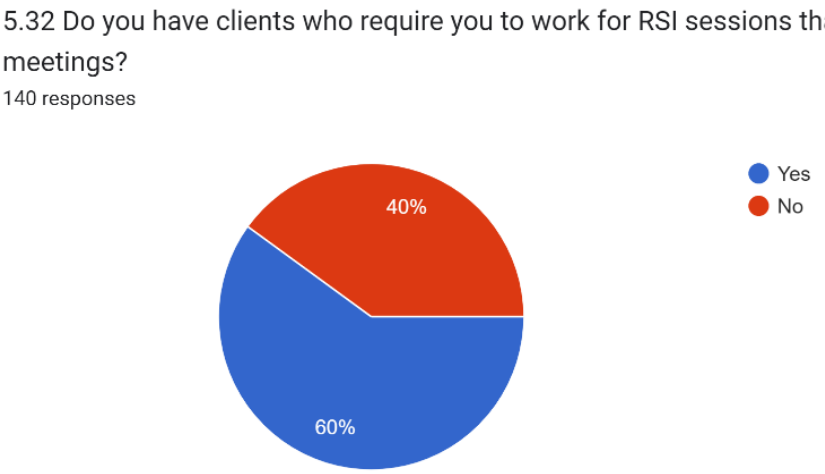


Chart 2: Percentage of respondents whose clients require them to work for RSI sessions that are as long as in-person sessions.
(See Chapter 4 (Section 4.5.6) on Length of sessions, team strength and remuneration)

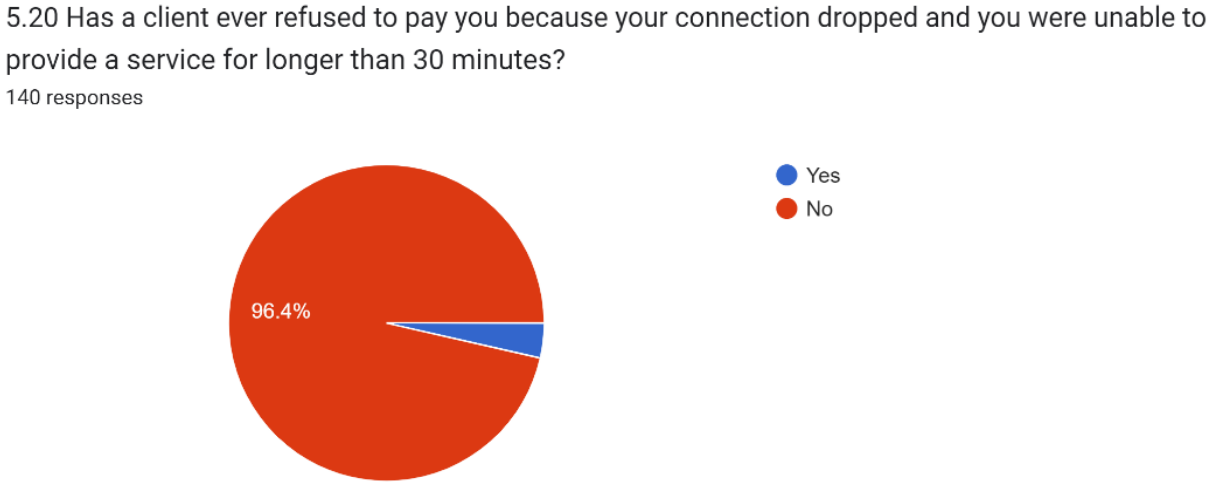


Chart 3: According to respondents, most clients in Africa still pay if an interpreter's internet connection drops for longer than 30 minutes.
(See Chapter 4 (Section 4.5.3) on Internet Connection)

Appendix 4: Questionnaire

(See next page)

Remote Simultaneous Interpreting (RSI) in Africa during the Covid-19 pandemic

*Required

1. By ticking the box below, I confirm that I understand that I am completing this questionnaire anonymously, voluntarily, and providing informed consent for my responses to be used in research on Remote Simultaneous Interpreting (RSI) in Africa *

Tick all that apply.

- [ ] Yes

2. Personal description

Your data will be used for statistical compilation and analysis only. Your data is anonymous but will still be protected in a password-protected device for extra security. Only the researcher will be able to access these anonymous responses.

2. 2.1 Please indicate your gender *

Mark only one oval.

- ◯ Female
- ◯ Male

3. 2.2 Please indicate your age group *

Mark only one oval.

- 20 - 25 yrs
- 25 - 30 yrs
- 30 - 35 yrs
- 35 - 40 yrs
- 40 - 45 yrs
- 45 - 50 yrs
- 50 - 55 yrs
- 55 - 60 yrs
- 60 - 65 yrs
- 65 - 70 yrs
- Above 70 yrs

4. 2.3 Please indicate the region where you were domiciled during the Covid-19 pandemic *

Mark only one oval.

- East Africa
- Central Africa
- North Africa
- Southern Africa
- West Africa
- Outside Africa

5. 2.4 Please indicate your level of qualification *

Mark only one oval.

- Diploma
- University degree in languages or linguistics
- Other university degree
- Post-graduate degree in languages or linguistics
- Other post-graduate degree
- Other

6. 2.5 Please indicate your years' of experience as a conference interpreter *

Mark only one oval.

- 1 - 5 yrs
- 5 - 10 yrs
- 10 - 15 yrs
- 15 - 20 yrs
- 20 - 25 yrs
- 25 - 30 yrs
- More than 30 yrs

7. 2.6 On average, how many days pre year did you work as a conference interpreter before the Covid-19 pandemic? *

8. 2.7 Please rate your computer and IT skills *

Mark only one oval.

- Poor
- Fair
- Satisfactory
- Good
- Very good
- Excellent

9. 2.8 Before the Covid-19 pandemic, how often did you use a personal computer, laptop or tablet to prepare for your meetings, without printing documents? *

Mark only one oval.

- Always
- Often
- Sometimes
- Rarely
- Never

10. 2.9 Before the Covid-19 pandemic, how often did you use your laptop or tablet in the booth to consult documents, glossaries, dictionaries etc.? *

Mark only one oval.

- ◯ Always
- ◯ Often
- ◯ Sometimes
- ◯ Rarely
- ◯ Never

11. 2.10 On average, how many days did you spend flying to and from meetings in Africa before the Covid-19 pandemic?

Mark only one oval.

- ◯ 1 day each way
- ◯ 2 days each way
- ◯ More than 2 days each way
- ◯ Other: _____

12. 2.11 Did you primarily fly...

Mark only one oval.

- ◯ Short-haul (1-3 hours)
- ◯ Medium-haul flights (3-6 hours)
- ◯ Long-haul flights (6-12 hours)
- ◯ Other: _____

13. 2.12 Your flights were mainly...

Mark only one oval.

- ◯ Direct
- ◯ With stop-overs

14. 2.13 You generally considered regular flight travel ...

Mark only one oval.

- Exhausting
- Stressful
- Unpleasant
- Pleasant
- Interesting
- Exciting

15. 2.14 You travelled mainly

Mark only one oval.

- Business class
- Economy class

16. 2.15 The main advantage of travel was the...

Mark only one oval.

- ◯ Per diem
- ◯ Opportunity to see new places
- ◯ Other: _____

17. 2.16 Before the Covid-19 pandemic, you worked mainly in: *

Tick all that apply.

- ☐ East Africa
- ☐ Central Africa
- ☐ North Africa
- ☐ Southern Africa
- ☐ West Africa

18. 2.17 Please indicate your living arrangements during the Covid-19 pandemic *

Mark only one oval.

- ◯ I live by myself
- ◯ I live with pets
- ◯ I live with children
- ◯ I live with adults
- ◯ I live in a multiple-member household
- ◯ I live in a multiple-member household with pets
- ◯ Other: _____

19. 2.18 Surroundings *

Mark only one oval.

- ◯ I live in an urban, quiet setting
- ◯ I live in an urban, noisy setting
- ◯ I live in a rural, quiet setting
- ◯ I live in a rural, noisy setting
- ◯ Other: _____

3. Pre-pandemic RSI knowledge and experience

20. 3.1 Please rate your pre-pandemic RSI experience in Africa *

Mark only one oval.

- I had never provided RSI before the Covid-19 pandemic
- I had provided RSI occasionally before the Covid-19 pandemic
- I frequently provided RSI before the Covid-19 pandemic

21. 3.2 Please describe your perception of RSI before the Covid-19 pandemic *

Mark only one oval.

- I never, ever gave RSI a thought
- I had heard about RSI and thought it sci-fi
- I had heard about RSI but thought it a very remote possibility
- I had read about RSI and thought it unfeasible
- I had read about RSI and was concerned that it would be imposed on us someday
- I had read about RSI and was concerned that it would soon become part of our profession
- I had read about RSI and was excited at the idea
- I had read about RSI and thought it a valuable addition to my skills-set

22. 3.3 Were you familiar with the AIIC recommendations on Remote Interpreting? *

Mark only one oval.

- ◯ I had read them
- ◯ I had not read them but was somewhat familiar with their content
- ◯ I had heard of them but was unfamiliar with their content
- ◯ I was unaware of their existence

4. First RSI experience

23. 4.1 Approximately when did you do your first RSI meeting?

_____

24. 4.2 On which RSI platform did you do your first RSI meeting?

_____

25. 4.3 In order to familiarise yourself with the RSI platform *

Mark only one oval.

- The RSI platform provider provided on-boarding
- The client provided extensive training and practice
- The client provided some training and practice
- You relied mainly on colleagues to guide you
- You consulted the internet

26. 4.4 Your reaction after your first RSI experience was

Mark only one oval.

- Resentment
- Frustration
- Caution
- Uncertainty
- Resignation
- Gratitude
- Relief
- Excitement
- Mixed feelings

5. RSI experience during the Covid-19 pandemic

27. 5.1 In order to provide RSI, you were obliged to: *

Tick all that apply.

- [ ] Purchase a generator
- [ ] Purchase an Uninterrupted Power Supply (UPS)
- [ ] Purchase a computer/laptop
- [ ] Purchase a secondary computer/laptop
- [ ] Purchase a large computer screen
- [ ] Purchase a tablet
- [ ] Purchase earphones
- [ ] Purchase AIIC recommended earphones with embedded microphone
- [ ] Purchase an AIIC recommended microphone
- [ ] Purchase additional internet data
- [ ] Purchase additional internet bandwidth
- [ ] Re-configure your living space to accommodate a RSI workspace
- [ ] Re-configure an office to accommodate a RSI workspace
- [ ] Acquire a booth or makeshift booth
- [ ] Negotiate quiet with household members
- [ ] Negotiate quiet with neighbours
- [ ] Other: _____

28. 5.2 In order to create a properly equipped and configured RSI workspace, you have incurred financial expenses to the value of: *

Mark only one oval.

- ◯ Less than USD 1000
- ◯ USD 1000 - 1500
- ◯ USD 1500 - 2000
- ◯ USD 2000 - 2500
- ◯ USD 2500 - 3000
- ◯ USD 3000 - 4000
- ◯ Above USD 4000

29. 5.3 Since the beginning of the pandemic, which of the following RSI platforms have you worked on? *

Tick all that apply.

- ☐ Interactio
- ☐ Interprefy
- ☐ Kudo
- ☐ RSI X
- ☐ Voiceboxer
- ☐ Zoom
- ☐ Other: _____

30. 5.4 Of all the RSI platforms that you have worked on in Africa, which one do you prefer and why? *

31. 5.5 Which RSI platform do you work most frequently on in Africa? *

32. 5.6 On the RSI platform that you mentioned in 5.5, can you actually see.... *

Tick all that apply.

- [ ] the speaker's lip movements
- [ ] the speaker's facial expressions
- [ ] the speaker's gestures
- [ ] the entire presentation slide
- [ ] delegates' reactions to the speaker
- [ ] your booth partner
- [ ] in hybrid meetings - the entire room
- [ ] all interpreter function buttons without obscuring anything else

33. 5.7 How important is it for you to be able to see the speaker's lip movements, facial expressions and gestures in virtual meetings? *

Mark only one oval.

	1	2	3	4	5	
Totally unimportant	◯	◯	◯	◯	◯	Extremely important

34. 5.8 During in-person meetings, how often can you actually see the speaker's lip movements, facial expressions and gestures? *

Mark only one oval.

- ◯ Always
- ◯ Very often
- ◯ Sometimes
- ◯ Seldom
- ◯ Only on a screen - speakers are too far away or have their back to the booth

35. 5.9 How important is it for you to be able to see delegates, their reactions to the speaker and what they are doing in virtual meetings? *

Mark only one oval.

	1	2	3	4	5	
Totally unimportant	◯	◯	◯	◯	◯	Extremely important

36. 5.10 During in-person meetings, how often can you actually see delegates' reactions to the speaker and what they are doing? *

Mark only one oval.

- ◯ Always
- ◯ Very often
- ◯ Sometimes
- ◯ Seldom
- ◯ They are too far away or their backs are turned to the booth

37. 5.11 How important is it for you to be able to see your booth partner in RSI mode? *

Mark only one oval.

	1	2	3	4	5	
Totally unimportant	◯	◯	◯	◯	◯	Extremely important

38. 5.12 Do you think that if you could see your booth partner in RSI mode, it would facilitate handover? *

Mark only one oval.

- ◯ Yes
- ◯ No

39. 5.13 Please rate your satisfaction with the handover mode used on the RSI platform you have worked on most in Africa *

Mark only one oval.

	1	2	3	4	5	
Most unsatisfactory	◯	◯	◯	◯	◯	Very satisfactory

40. 5.14 Please briefly explain your handover mode

_____

41. 5.15 Please rate the quality of the visual streaming on the RSI platform you have worked on most in Africa *

Mark only one oval.

- ◯ Poor
- ◯ Good
- ◯ Fit-for-purpose
- ◯ Exceeds expectations

42. 5.16 Please rate the sound quality on the RSI platform you have worked on most in Africa *

Mark only one oval.

- ◯ Poor
- ◯ Good
- ◯ Fit-for-purpose
- ◯ Exceeds expectations

43. 5.17 In your opinion, what are the main contributors to sound challenges you experience as a RSI interpreter? *

Tick all that apply.

- [ ] RSI platform technology
- [ ] Bandwidth limitations in Africa
- [ ] Speakers' disregard for RSI recommendations
- [ ] Delegates' ignorance of RSI recommendations
- [ ] Delegates' disregard for RSI recommendations
- [ ] Your lack of access to appropriate equipment
- [ ] Speakers' and delegates' lack of access to appropriate equipment
- [ ] Speakers' and delegates' unwillingness to purchase appropriate equipment
- [ ] Speakers' and delegates' 'Make do' attitude
- [ ] Client's unwillingness to insist that appropriate equipment be used
- [ ] Other: _____

44. 5.18 How frequently does your connection drop in a virtual meeting? *

Mark only one oval.

- ◯ All the time
- ◯ Frequently
- ◯ Sometimes
- ◯ Rarely
- ◯ Never

45. 5.19 What is your client's reaction if your connection drops? *

Mark only one oval.

- Intolerance
- Frustration
- Resignation
- Understanding
- Supportive

46. 5.20 Has a client ever refused to pay you because your connection dropped and you were unable to provide a service for longer than 30 minutes? *

Mark only one oval.

- Yes
- No

47. 5.21 On average, how many days have you worked in RSI mode per year during the Covid-19 pandemic? *

48. 5.22 Are you happy with the rate offered for RSI sessions of 3 hours? *

Mark only one oval.

- Yes
- No

49. 5.23 How often do your clients exceed the 3 hours recommended per RSI session without paying extra? *

Mark only one oval.

- Always
- Often
- Sometimes
- Rarely
- Never

50. 5.24 What is the standard team-strength for a monolingual booth during a 3-hour RSI session? *

51. 5.25 Do your clients generally observe the standard team-strength for a monolingual booth during a 3-hour RSI session? *

Mark only one oval.

- Yes
- No

52. 5.26 What is the standard team-strength for a monolingual booth for a RSI session that exceeds 3 hours? *

53. 5.27 Do your clients generally observe the standard team-strength for a monolingual booth for sessions longer than 3 hours? *

Mark only one oval.

- Yes
- No

54. 5.28 What is the standard team-strength for a bilingual booth during a 3-hour RSI session? *

55. 5.29 Do your clients generally observe the standard team-strength for a bilingual booth during a 3-hour RSI session? *

Mark only one oval.

- Yes
- No

56. 5.30 What is the standard team-strength for a bilingual booth during a RSI session longer than 3 hours? *

_____

57. 5.31 Do your clients generally observe the standard team-strength for a RSI bilingual booth for sessions longer than 3 hours? *

Mark only one oval.

- Yes
- No

58. 5.32 Do you have clients who require you to work for RSI sessions that are as long as in-person meetings? *

Mark only one oval.

- Yes
- No

59. 5.33 The rate for full-day RSI meetings is... *

Mark only one oval.

- ◯ The same as for full-day in-person meetings
- ◯ More than for full-day in-person meetings
- ◯ The same rate with a larger team
- ◯ Other: _____

60. 5.34 If the financial gains were exactly the same, would you prefer... *

Mark only one oval.

- ◯ Only RSI meetings
- ◯ A mix of RSI and in-person meetings
- ◯ Just in-person meetings

6. The RSI interpreter's body and mind experience

61. 6.1 Your health - Since providing RSI, have you experienced the ONSET of any of the following physical conditions?

Tick all that apply.

- [ ] Hypertension
- [ ] Palpitations
- [ ] Dizziness
- [ ] Ringing in your ears (tinnitus)
- [ ] Heightened sensitivity to noise
- [ ] Short-sightedness (myopia)
- [ ] Sensitivity to bright lights
- [ ] Heightened sensitivity to colours
- [ ] Shortness of breath
- [ ] Neck ache
- [ ] Tingling in your hands and fingers
- [ ] Upper abdominal pains
- [ ] Lower abdominal pains
- [ ] Backache
- [ ] Tingling in your legs and feet
- [ ] Swelling in your lower limbs
- [ ] Restless legs at night
- [ ] Inability to fall asleep after a RSI meeting
- [ ] Disturbed sleep pattern
- [ ] Inability to return to asleep if suddenly awoken
- [ ] Hand tremors

62. 6.2 Your mental health: Has being confined at home and providing RSI caused the ONSET of any of the following conditions?

Tick all that apply.

- [ ] Heightened emotions
- [ ] Stronger reaction to frustration than normally
- [ ] Claustrophobia or a feeling of entrapment
- [ ] Disorientation
- [ ] Panic
- [ ] Anxiety
- [ ] Sadness
- [ ] Depression
- [ ] Lethargy
- [ ] Loneliness
- [ ] The desire to stare at a blank wall after an RSI assignment

Skip to question 63

7. RSI Love letter / Break-up letter

Thank you for your time and effort in completing the questionnaire thus far. Questions 7.2 and 7.3 are optional, but your insights are extremely important to this study and so your answers would be highly appreciated.

63. 7.1 To conclude, with regard to the delivery of RSI in the African context *

Tick all that apply.

- [ ] I hope RSI is here to stay
- [ ] I believe RSI is here to stay
- [ ] I am very happy providing RSI from home
- [ ] I believe most interpreters are willing to provide RSI from home
- [ ] I think interpreters should improve their RSI skills-set
- [ ] I would prefer to provide RSI from a hub with technician support and a booth partner
- [ ] I am happy to pay to help set up such hubs
- [ ] I will willingly refer my clients to the hubs
- [ ] I really prefer in-person meetings
- [ ] I hate RSI and hope never to have to provide such services again
- [ ] I believe most interpreters find RSI deplorable
- [ ] I believe that with advancing technology RSI will become increasingly more feasible
- [ ] I believe that even with advancing technology RSI is not feasible in Africa
- [ ] I believe that RSI can never substitute in-person meetings unless in extreme situations
- [ ] I believe that in the next 15 years RSI will become the only mode for interpretation delivery, even in Africa
- [ ] Considering the amount of time we spend on unpaid air-travel, I believe RSI is a very good option
- [ ] RSI allows interpreters more freedom and time to spend with family and friends
- [ ] RSI allows interpreters to accept more meetings, if they wish to
- [ ] RSI is borderless, which means I can live anywhere and still keep my clients
- [ ] RSI has allowed me to work with colleagues from all over the world, thus broadening my exposure
- [ ] RSI has allowed too many colleagues from other continents to work in my market
- [ ] RSI allowed me more time for myself, to look after my health, exercise, pursue different interests

64. 7.2 In your opinion, what are RSI's main advantages?

65. 7.3 In your opinion, what are RSI's main disadvantages?

This content is neither created nor endorsed by Google.

Google Forms