

**The use of synchronous computer-mediated communication text-based
online chat to self-repair recurrent errors in indicative-subjunctive-related
structures when speaking in advanced learners of Spanish**

Isabel Molina-Vidal

Submitted in accordance with the requirements for the degree of
Doctor of Philosophy

The University of Leeds

School of Education

September 2024

The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

This copy has been supplied on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

The right of Isabel Molina-Vidal to be identified as Author of this work has been asserted by her in accordance with the Copyright, Designs and Patents Act 1988.

Acknowledgments

I would like to thank my supervisor, Dr Aisha Walker for her constant support and wise advice over the years. Doing a PhD part-time is a long-term commitment, and she has been there consistently in the good and in the difficult times of the pandemic. I would also like to thank Dr Mohammad Ahmadian for his support and supervision. I am also very grateful to the School of Education from the University of Leeds for making this project possible by granting me a scholarship. I would also like to thank my mentor Becky Muradás-Taylor for her useful input.

I would not have been able to finish this work without the constant support, patience, and kindness of my community of female friends. The daily conversations with Marina Monte Fernández about life, family, teaching and researching have provided the necessary mental stability to carry such a long and comprehensive project. Ester Porciello, Caribel Ortiz Montero, Laly Torrents and Andrea Benavidez for making me feel accompanied, understood and giving me the energy and motivation to carry on with the hard work.

I am very grateful for the support of my colleagues at Spanish, Portuguese, and Latin American studies at the University of Leeds. Bettina Hermoso Gómez generously allowed me to conduct this study with the undergraduates in the module she is coordinating. Lucía López Cuartero, Natalia Martín Goicoechea and Santi Martínez Clemente helped me to gather the data for this research while fighting for our rights during the strike period. Juan Muñoz López for listening to my mental noise, for making me laugh, and giving me immense comfort during coffee breaks and lunches in our office. María García Florenciano, Dr Alba García del Pozo and Dr Gregorio Alonso for offering their experience and knowledge. I am very grateful to the 25 undergraduates who participated in this project. I hope they still love learning Spanish in spite of having to discuss about unsolvable political and social issues in the Hispanic World.

Finally, I would like to thank my family. My brothers Jaime Molina Vidal and Pablo Molina Vidal for their unconditional love, support and help in every aspect of my life.

Silvia Ros Berenguer and Eva Ayela Aznar, as well as my nephews and nieces Sergi, Marc, Nuria and Aitana. My parents, María Isabel Vidal Alcocer and Jaime Molina Más for never questioning any of my decisions of living abroad and leaving everything behind to become the person I wanted to be. They have always trusted me and believed in me. I would not be the woman I am without the courage and clarity of mind of my mother. She refused to perpetuate the societal and historical conventions, which were imposed on her by instilling in me the value of independence and freedom of choice. A living proof that education does change the course of history and lives. She has given us the biggest lesson.

This work is dedicated to my parents, specially to the memory of my father, and to all the loved ones I lost during this period and I could not say goodbye or thank you.

‘Language is our greatest display of cognitive technology’

Daniel Everett.

‘Todo hombre puede ser, si se lo propone, escultor de su propio cerebro’

‘Human beings are able to shape their own brains’

Santiago Ramón y Cajal.

Abstract

The aim of this research is to see the effects of using synchronous computer-mediated communication (SCMC) text-based online chat in oral skills in relation to the self-repair of indicative-subjunctive-related errors by advanced learners of Spanish.

For this purpose, three research questions were proposed. Firstly, the study explored whether the use of text-based online chat facilitated the noticing and subsequent use of self-initiated-self-repair (SISR) (initiated by the participant themselves) or self-repair (SR) (elicited by the tutor) of indicative-subjunctive-related errors while using the text-based online tool to discuss a given topic. The second research question was whether practice over time with text-based online chat promotes automatization of SISR or SR in the text-based online chat. The third research question was aimed at finding out whether the SISR or SR occurring (if any) during the text-based online chat discussion were transferred to the FTF (face-to-face) oral discussion of the same topic, and whether such transfer was automatized.

An additional aspect addressed in this research, which does not constitute, however, a research question but was necessary to include in the design of the study, is whether explicit instruction of the dichotomy indicative-subjunctive from the point of view of a cognitive grammar contributes to noticing and the subsequent SISR or SR of those errors by participants. A grammar workshop explaining the difference between indicative-subjunctive modes based on a cognitive grammar perspective was implemented before the intervention with SCMC text-based online chat.

To respond to the first research question, feedback sheets of FTF oral discussions of individual participants during semester one (prior to intervention with SCMC text-based online chat) were compared to transcripts of text-based online conversations of the same participants to identify instances of SISR or SR of indicative-subjunctive-related errors. To respond to research question two, feedback sheets of FTF oral discussions during semester one were compared to transcripts of text-based online chat conversations of three participants who took part in the study for an extended period of time. The aim of this comparison was to identify instances of recurrent use of SISR or SR of indicative-subjunctive-related errors, that could be regarded as automatization. Practice over an extended period of time by participants was a necessary condition to look for automatization. Finally, to answer the third research question, transcripts of the SCMC text-based online chat conversations were compared with feedback sheets and audio recordings of FTF oral discussions during semester 2 (after intervention with text-based online chat). The same comparison was conducted with the three participants who took part in the study for an extended period of time to find out whether automatization (if any) was transferred from the text-based online context to the FTF oral one.

Participants also filled out a questionnaire before and after attendance to the grammar workshop. The questionnaires were analyzed to find out how explicit instruction of indicative-subjunctive modes from the point of view of a cognitive grammar influenced noticing and subsequent SISR or SR of these forms. Finally, participants completed a reflective log on their experience using the text-based online chat before and after the FTF oral discussions. These reflective logs were analyzed and compared to individual participants' performance to get more granular results of the potential benefits (if any) of using SCMC text-based online chat.

The results of this research indicate that SCMC text-based online chat combined with explicit instruction on the use of indicative-subjunctive structures does not contribute significantly to the use of SISR or SR of indicative-subjunctive-related errors in the online and the FTF settings, but it does contribute significantly to the accurate output of a wide range of indicative-subjunctive-related structures without the need to resort to self-repair in both the text-based online chat and in the FTF oral debates. On the

other hand, this study also shows that explicit instruction on Spanish modality from the point of view of a cognitive grammar promotes awareness and a more effective application of the uses of indicative and subjunctive in both the online and the FTF contexts. Finally, analysis of participants' perceptions in the reflective logs show that SCMC text-based online chat contributes to raise awareness and noticing of indicative-subjunctive-related errors and increases confidence in the FTF oral discussion. Thus, the research concludes that SCMC text-based online chat may be used as a pre-task in preparation for oral debates for the careful planning of accurate production and incorporation of a wide range of grammatical structures including indicative-subjunctive-related structures.

Table of contents

Abstract.....	5
Table of contents	8
List of figures.....	11
List of tables.....	12
Abbreviations	16
Introduction.....	18
Chapter 1: Justification of the research	18
1.1 The context	18
1.2 The indicative-subjunctive dilemma	19
1.3 Practical and theoretical significance of this study	25
Chapter 2: Theoretical Framework: How does SLA occur?.....	27
2.1 Learning vs. acquisition: Explicit and implicit knowledge.....	28
2.1.1 Learning vs. Acquisition: The interface between implicit and explicit	31
2.2 How learning occurs from a neurobiological point of view	33
2.3 Self-repair (SR) and self-initiated self-repair (SISR)	36
2.3.1 Conditions for SISR: Explicit instruction	38
2.3.2 Conditions for SISR: Attention, Noticing and Cognitive Dissonance.....	39
2.3.3 Conditions for SISR: From declarative to procedural. The nature of practice	44
2.3.4 Conditions for SISR: From proceduralization to automatization	45
2.4 The medium: Affordances of SCMC text-based online chat for SLA	46
2.4.1 Time and visualization for noticing and SISR.....	47
2.4.2 Creating a habit: Practice and automaticity.....	51
2.5 Writing for speaking: Transferring knowledge from the online to the FTF context.....	52
2.5.1 Retrieval of knowledge	55
2.6 Implications of the literature review and research questions	58
Chapter 3: The research design	61
3.1 Overall study design	61
3.2 Participants	62
3.3 Criteria for the selection of participants.....	64

3.4 Stages of the study: Tasks and data collection tools.....	69
3.4.1 Pre-intervention stage. Task 1: S1 FTF oral debates	69
3.4.2 Task 2: Indicative/Subjunctive workshop	71
3.4.3 Intervention stage. Task 3 SCMC text-based online chat	73
3.4.4 Task 4: S2 FTF oral debates	92
3.4.5 Task 5: Reflective log	100
3.5 Ethical implications of the study	104
Chapter 4: Results	106
4.1 Results for answering research question 1	106
4.1.1 Analysis of FTF oral feedback sheets from S1	107
4.1.2 Analysis of transcripts of SCMC text-based online chats	108
4.1.3 Comparison of text-based online chat and S1 oral feedback sheets	121
4.1.4 Grammar workshop's participation and questionnaires.....	127
4.1.5 Analysis of reflective logs in relation to practice with text-based online chat	135
4.2 Results for answering research question 2	143
4.3 Results for answering research question 3	157
4.3.1 Comparison of text-based online chat and S2 oral feedback sheets	159
4.3.2 Text-based online chat and accurate use of indicative-subjunctive-related structures in FTF oral debates without resorting to SISR.....	175
4.3.3 Analysis of reflective logs in relation to performance in FTF oral debate	195
4.4 Knowledge retrieval from the text-based online chat to the FTF oral debate over time	202
Chapter 5: Discussion.....	221
5.1 RQ1. How, if at all, can SCMC text-based online chat facilitate noticing and SISR/SR of indicative-subjunctive-related structures?	222
5.2 RQ2. How, if at all, can SCMC text-based online chat facilitate automaticity of SISR/SR of indicative-subjunctive-related structures?	231
5.3 RQ3. How, if at all, can SCMC text-based online chat facilitate the transfer of knowledge and abilities from the writing online setting to the FTF speaking context?.....	235
5.3.1 Transfer of knowledge from the writing online context to the FTF oral debates.....	236

5.3.3 Transfer of knowledge from the writing online context to the FTF oral debates over time	242
Chapter 6: Conclusions.....	245
6.1 Contributions of the research to the field of SLA	248
6.1.1 Noticing and SISR/SR in the online discussion	248
6.1.2 Noticing and SISR/SR of indicative-subjunctive-related errors in the online discussion	249
6.1.3 Grammatical development: Higher amount and accurate output of indicative-subjunctive-related structures in the online discussion	249
6.1.4 Range of grammatical constructions: Accurate output of new indicative-subjunctive-related structures in the online discussion.....	250
6.1.5 Application of explicit knowledge on the use of indicative-subjunctive in the online discussion	250
6.1.6 Automatization of SISR/SR in the online discussion	251
6.1.7 Automatization of accurate output of new indicative-subjunctive-related structures in the online discussion	251
6.1.8 Accurate use and automatization of SISR/SR in indicative-subjunctive-related structures in the FTF oral discussion.....	252
6.1.9 Grammatical development: Higher amount and accurate output of indicative-subjunctive-related structures in the FTF oral discussion	252
6.1.10 Range of grammatical constructions: Accurate output of new indicative-subjunctive-related structures in the FTF oral discussion.....	253
6.1.11 Automatization of accurate output of new indicative-subjunctive-related structures in the FTF oral discussion	253
6.1.12 Confidence.....	254
6.2 Pedagogical implications of this research	254
6.3 Constraints and limitations of the study and recommendations for further research	257
References:.....	259
Websites and apps	274
Appendixes	274
Appendix 1: Feedback sheet for FTF oral debate (criteria).....	274
Appendix 2: Pre-Workshop Questionnaire.....	274
Appendix 3: Screen shots of indicative/subjunctive online activity	275

Appendix 4: Post-Workshop Questionnaire	275
Appendix 5 Transcript of text-based online chat	276
Appendix 6: Reflective log	277
Appendix 7: Ethical approval.....	277
Appendix 8: Analysis of S1 oral feedback sheets	277
Appendix 9 Other than indicative-subjunctive-related SISR/SR in text-based online chat.....	280
Appendix 10: SISR/SR of indicative-subjunctive-related structures in text-based online chat and FTF oral debates	283
Appendix 11 Accurate output of indicative-subjunctive-related structures without resorting to SISR/SR in text-based online chat and FTF oral debates.	291
Appendix 12 Reflective Log	304

List of figures

Figure 1 Levels of language competence according to the CEFR: A1-A2 Basic User, B1-B2 Independent User and C1-C2 Proficient User (2020).	19
Figure 2 The cognitive factor in SLA and how the medium might contribute to it....	28
Figure 3 Overall study design.	62
Figure 4 S1W4 feedback sheet chatW1/1.....	71
Figure 5 Wording of tutor’s elicitation for indicative-subjunctive-related errors.	76
Figure 6 Positive feedback provided by the tutor.	77
Figure 7 Colour code for SISR/SR in text-based online transcripts.	80
Figure 8 Colour code for instances of SISR/SR shown in different posts: W1T2Green4.....	81
Figure 9 Colour code for instances of SISR/SR shown in different posts: W1T2Green4.1.....	81
Figure 10 Example of colour coded yellow use of * W2T1Yellow1, Yellow1.1 & Yellow 1.2.....	82
Figure 11 Example of colour coded blue use of * W5T3Blue29 and W5T3Blue29.1.	83
Figure 12 Example of colour coded pink use of * W2T2Pink1 and W2T2Pink1.1. ..	83
Figure 13 Example of colour coded red use of * W1T2Red1 and W1T2Red1.1.	84

Figure 14 Example of colour coded dark blue use of * W10T1DarkBlue1.	84
Figure 15 Example coded W3T3DarkRed12.....	86
Figure 16 Example coded W7T2Grey18 & 18.1.	86
Figure 17 Example coded W9T1Black7.1.....	87
Figure 18 Example coded W6T1Purple92.....	87
Figure 19 Tutor’s elicitation leading to participant’s accurate and inaccurate self- repair.	113
Figure 20 Unnecessary SISR followed by participants’ asking for tutor’s feedback and tutor’s explanation.	115
Figure 21 Participant asking for feedback after tutor’s elicitation.....	116
Figure 22 Overall responses to Q1 of pre-workshop questionnaire 1.....	130
Figure 23 Individual responses to Q2 of pre-workshop questionnaire 1.....	131
Figure 24 Individual Responses to Q1 of questionnaire 2.....	132
Figure 25 Individual responses to Q2 of questionnaire 2.....	134

List of tables

Table 1 Grammar differences across Languages (adapted from Llopis-García, Real- Espinosa and Ruiz-Campillo, 2012).	25
Table 2 Correlation between neurobiological factors and SLA concepts underpinning the design of the study.	36
Table 3 Affordances of SCMC text-based online chat: Time and Visualization.....	51
Table 4 Affordances of SCMC text-based online chat: Practice and Automaticity. ..	52
Table 5 Affordances of SCMC text-based online chat for the retrieval of knowledge.	58
Table 6 Stages potentially leading to SISR in speaking.....	61
Table 7 Overall results of participation in this research.	65
Table 8 No. Of text-based online sessions attended by individual participants.	65
Table 9 Participants meeting the criteria to respond to RQs 1 and 3.	67
Table 10 Participants meeting the criteria to answer to RQ2.	68
Table 11 Data collection tools at pre-intervention stage.	73
Table 12 Template showing how data from S1 FTF oral debates feedback sheets has been collected.	90

Table 13 Template showing how data from text-based online chat transcripts has been collected.	91
Table 14 Table used for comparison of accurate SISR/SR in text-based online chat and accurate SISR in FTF oral debates in S2.	94
Table 15 Data collection tools at intervention stage.	104
Table 16 Use of indicative-subjunctive-related structures in S1.	108
Table 17 Participants, groups and SCMC text-based online chat transcripts.	109
Table 18 Total amount of SISR/SR signalled with *.	111
Table 19 Accurate indicative-subjunctive-related or other SISR/SR after researcher/tutor’s elicitation but participant does not use the * to signal such repair.	117
Table 20 Indicative-subjunctive-related necessary SISR not provided by the participant.	118
Table 21 Participant asks for tutor’s direct feedback on their participations and before proceeding with self-repair.	118
Table 22 Overall amounts of SISR/SR in SCMC text-based online chat.	120
Table 23 Accurate use of an indicative-subjunctive-related structure without resorting to SISR/SR.	120
Table 24 S1 Oral feedback sheets and text-based online chat transcripts collected by individual participants.	122
Table 25 Comparison of S1 oral feedback and SCMC text-based online chat participation for all participants in indicative-subjunctive-related structures. ...	123
Table 26 Instances of accurate use of indicative-subjunctive-related structures without resorting to SISR/SR in SCMC text-based online chat by individual participants.	126
Table 27 Participants in this study who also attended the grammar workshop.	129
Table 28 Correlation attendance to grammar workshop/participation in text-based online chat.	135
Table 29 Correlation participation in text-based online chat and reflective log with regards to the use of * to signal SISR/SR in indicative-subjunctive-related structures.	139
Table 30 Correlation participation in text-based online chat and reflective log with regards to improved use of indicative-subjunctive-related structures.	141

Table 31 Accurate, inaccurate/unnecessary, or missing use of SISR/SR for participant ChatW1/1 over time.....	145
Table 32 Accurate, inaccurate/unnecessary, or missing use of SISR/SR for participant ChatW1/6 over time.....	146
Table 33 Accurate, inaccurate/unnecessary, or missing use of SISR/SR for participant ChatW2/10 over time.....	147
Table 34 Accurate use of an indicative-subjunctive-related structure without resorting to SISR/SR by participant ChatW1/1 over time.....	148
Table 35 Repeated use of indicative-subjunctive-related structures without resorting to SISR/SR by participant ChatW1/1.	149
Table 36 Accurate use of an indicative-subjunctive-related structure without resorting to SISR/SR by participant ChatW1/6 over time.....	151
Table 37 Repeated use of indicative-subjunctive-related structures without resorting to SISR/SR by participant ChatW1/6.	152
Table 38 Accurate use of an indicative-subjunctive-related structure without resorting to SISR/SR by participant ChatW2/10 over time.....	152
Table 39 Correlation attendance to grammar workshop/participation in text-based online chat for all three participants.	154
Table 40 Comparison of participation in text-based online chat over an extended or limited period.	157
Table 41 Data collected and analyzed to compare text-based online chat performance and FTF oral participation for individual participants.....	160
Table 42 Accurate use of SISR/SR in both text-based online chat and FTF oral debate.	162
Table 43 Matching structures subject to accurate SISR/SR in both text-based online chat and FTF oral debate.....	163
Table 44 Accurate use of SISR/SR in text-based online chat but inaccurate/unnecessary use of SISR in FTF oral debate.....	164
Table 45 Accurate use of SISR/SR in text-based online chat but missing SISR in FTF oral debate.	165
Table 46 Matching structures subject to accurate SISR/SR in text-based online chat but missing SISR in FTF oral debate.....	166
Table 47 Inaccurate/unnecessary use of SISR/SR in text-based online chat but accurate SISR in FTF oral debate.....	167

Table 48 Matching structures subject to inaccurate/unnecessary SISR/SR in text-based online chat but accurate SISR in FTF oral debate.	168
Table 49 Inaccurate/unnecessary use of SISR/SR in both text-based online chat and FTF oral debate.....	169
Table 50 Inaccurate/unnecessary use of SISR/SR in text-based online chat but missing SISR in FTF oral debate.....	170
Table 51 Missing use of SISR/SR in text-based online chat but accurate SISR in FTF oral debate.	171
Table 52 Missing use of SISR/SR in text-based online chat but inaccurate/unnecessary SISR in FTF oral debate.	172
Table 53 Missing use of SISR/SR in both text-based online chat and FTF oral debate.	173
Table 54 Matching structures subject to missing SISR/SR in both text-based online chat and FTF oral debate.....	174
Table 55 Accurate use of SISR/SR in text-based online chat, but accurate output of an indicative-subjunctive-related structure without resorting to SISR in FTF oral debate.	177
Table 56 Matching structures subject to accurate SISR/SR in text-based online chat but accurate output without resorting to SISR in FTF oral debate.....	178
Table 57 Inaccurate/unnecessary use of SISR/SR in text-based online chat, but accurate output without resorting to SISR in FTF oral debate.....	179
Table 58 Missing use of SISR/SR in text-based online chat, but accurate output without resorting to SISR in FTF oral debate.	180
Table 59 Matching structures subject to missing SISR/SR in text-based online chat, but accurate output without resorting to SISR in FTF oral debate.....	181
Table 60 Accurate output without resorting to SISR/SR in text-based online chat but accurate SISR in FTF oral debate.....	182
Table 61 Matching structures subject to accurate output without resorting to SISR/SR in text-based online chat, but accurate SISR in FTF oral debate.	183
Table 62 Accurate output without resorting to SISR/SR in text-based online chat, but inaccurate/unnecessary SISR in FTF oral debate.	184
Table 63 Accurate output without resorting to SISR/SR in text-based online chat, but missing SISR in FTF oral debate.....	185

Table 64 Matching structures subject to accurate output without resorting to SISR/SR in text-based online chat, but missing SISR in FTF oral debate.	187
Table 65 Accurate output without resorting to SISR/SR in both text-based online chat and FTF oral debate.	188
Table 66 Matching structures subject to accurate output without resorting to SISR/SR in both text-based online chat, and FTF oral debate.....	193
Table 67 Correlation participation in FTF oral debate and reflective log with regards to improved use of indicative-subjunctive-related structures.	201
Table 68 Knowledge retrieval from text-based online chat to FTF oral debate by participant ChatW1/1.....	206
Table 69 Recurrent use of the same structures in both text-based online chat and FTF oral debate by participant ChatW1/1.	208
Table 70 Repeated use of the same structure in both text-based online chat and FTF oral debate by participant ChatW1/1.	209
Table 71 Knowledge retrieval from text-based online chat to FTF oral debate by participant ChatW1/6.....	212
Table 72 Repeated use of the same structures in both text-based online chat and FTF oral debate by participant ChatW1/6.	214
Table 73 Knowledge retrieval from text-based online chat to FTF oral debate by participant ChatW2/10.	217
Table 74 Comparison of performance in text-based online chat and FTF oral debate over an extended period or a short period of time.	221

Abbreviations

A	Accurate.
CALL	Computer assisted language learning.
CEFR	Common European Framework of Reference.
CDST	Complex Dynamic Systems Theory.
CMC	Computer-mediated communication.
CMFLC	Computer-mediated Foreign Language Communication.
DFG	Douglas Fir Group.
FTF	Face-to-face.

Indic.	Indicative.
L1	Language 1.
L2	Language 2. Second or additional language.
LRE	Language-related episode.
NR	Needs repair.
RQ	Research question.
S1	Semester 1.
S1A	Semester 1 Accurate.
S1NR	Semester 1 Needs repair.
S2	Semester 2.
SCMC	Synchronous Computer-Mediated Communication.
SISR	Self-initiated Self-repair.
SLA	Second Language Acquisition.
SR	Self-repair.
Subj.	Subjunctive.
TELL	Technology-Enhanced Language Learning.
TL	Target Language.
V1	Verb 1/Main Verb.
V2	Verb 2/Subordinate Verb.
VLE	Virtual Learning Environment.
W	Week.
ZPD	Zone of Proximal Development.

Introduction

The field of SLA (second language acquisition) is concerned with how learners of a foreign or second language will achieve communicative competence. In this sense, the contributions of technology to language learning from CALL (computer-assisted language learning) to TELL (technology-enhanced language learning) have consistently been researched. However, how technology and different digital tools may contribute to SLA in general, and more specifically to grammatical development, is still an area open to further exploration. Additionally, evidence about how the brain works in relation to learning (Bueno, 2019) should also be considered in any current study about SLA.

The following chapters discuss the theoretical framework underpinning the design of a task that would potentially help learners to self-repair a recurrent error in the use of Spanish indicative and subjunctive modes, and how such study is going to be carried out. The first chapter presents the context of the study and provides an explanation of why learners make errors when using indicative and subjunctive modes in Spanish. Chapter two presents the theoretical framework based on three different perspectives: the point of view of SLA, the use of technology for learning, and the contributions from neuroscience. This theoretical framework thus leads to the research questions, which are proposed at the end of chapter two. Chapter three is devoted to the research's methodology, the collection of data, and how such data is going to be analyzed. Chapter four presents the results of this research. Chapter five discusses those results presented in the previous chapter. Finally, Chapter six shows the conclusions of this study, the potential contributions and pedagogical implications, the limitations, and the areas of further research.

Chapter 1: Justification of the research

1.1 The context

The CEFR (Common European Framework of Reference for Languages) establishes six levels of competence in a language (2020) as shown in Figure 1:

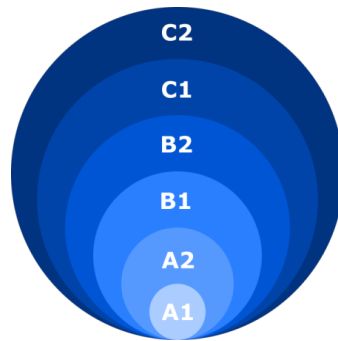


Figure 1 Levels of language competence according to the CEFR: A1-A2 Basic User, B1-B2 Independent User and C1-C2 Proficient User (2020).

These levels are used as a reference in the Spanish language modules at the University of Leeds, and in the specific case of the module SPPO3010 Practical Language Skills in Spanish 3, it has been established as part of the learning outcomes that students will have reached at least a C1 level of Spanish by the end of the academic year, and of the degree in all language skills. A C1 level of Spanish implies an accurate use of indicative and subjunctive subordinate structures in all language skills. However, classroom observation and assessment conducted by the researcher through collection and analysis of oral feedback from students in the Spanish module SPPO3010 in the past years (2014-2020), has revealed that, in spite of the fact that students have been learning Spanish since secondary school (A levels in Spanish were required by the University of Leeds to be able to study Spanish when this research was conducted), and have spent either a semester or a year abroad in a Spanish-speaking country, most of them are still not able to use the indicative and subjunctive modes accurately. In fact, the lack of use of subjunctive by learners is most probably one of the main reasons of concern for teachers (Llopis-García, Real-Espinosa and Ruiz-Campillo, 2012:102), and has been even referred to as a *grammatical Bermuda Triangle* by Llopis-García, Real-Espinosa and Ruiz-Campillo (2012:88). Accordingly, any attempt to help students to repair this error needs to consider why this happens. The next section will, thus, explore the indicative-subjunctive dilemma with the aim of shedding some light in this respect, and how to address it.

1.2 The indicative-subjunctive dilemma

One of the key competences of a teacher is to identify and attend to students' needs as well as designing activities based on the learners' difficulties (Instituto Cervantes, 2012). In this sense, in addition to classroom observation through collection and

analysis of oral feedback from students in the Spanish module SPPO3010 at the University of Leeds in the past years (2019, 2020), there are numerous studies reporting the difficulty in the acquisition of the Spanish modes indicative and subjunctive by learners with different L1, such as students with Polish as L1 (Castro, 2018), and learners with English as L1 (Massery, 2009; Sanchez-Naranjo, 2009). Some of such studies conclude that ‘learners at all levels of instruction continue to transfer first language syntactic rules of Polish or English irrealis [modality] to L2 structures during acquisition mainly due to the lack of the same structures in their native languages’ (Massery, 2009:13). This is also observed even in advanced L2 learners (Sanchez-Naranjo, 2009).

In the specific case of the indicative/subjunctive dichotomy, the role that the first language plays and the concept of interference might be crucial. Negative language transfer has been traditionally regarded as the influence that L1 would have on L2 when both languages differ, while positive transfer was seen as those L1 structures, which were successfully transferred to L2 due to the similarity shared by both languages (Ellis, 2015). Similarly, language distance has been identified by some researchers such as Kellerman (1983, cited in Ellis, 2015:11) as a contributing factor for the interference and transfer of L1 structures to the learner’s L2. When learners’ L1 and L2 are similar, they will rely on their L1 to produce L2 output, whereas learners whose L1 and L2 differ significantly will not. In the case of English as L1 and Spanish as L2, learners might find that indicative/subjunctive structures are syntactically similar and close to L1 structures and hence the negative transfer of L1:

Pienso que... (I think that...)

No pienso que... (I do not think that...)

More specifically, when analysing some of the factors that may contribute to the difficulty in acquiring the subjunctive mode, Lee and Rodriguez (1997, cited in Sanchez-Naranjo, 2009:8) argue that ‘it is difficult for students to perceive morphological differences between the present indicative and the present subjunctive’. Such morphological differences are, in most of the cases, the endings *-e* in indicative for (-ar/-er/-ir infinitives) and *-a* in subjunctive, for example,

habla/indicative, *hable*/subjunctive, *lee*/indicative – *lea*/subjunctive, and *vive*/indicative – *viva*/subjunctive. Additionally, according to Lee and Rodriguez (1997, cited in Sanchez-Naranjo, 2009:8) ‘students are not aware of the communicative values of the subjunctive, and that is why they tend to overgeneralize the indicative’. In line with this, Collentine (1997, cited in Sanchez-Naranjo, 2009:8), states that this confusion is due to ‘the extremely low communicative value of the regular subjunctive forms in certain contexts and, consequently, that the contrast between the subjunctive and the indicative is not perceptually salient to the learners’.

In addition to the inherent differences between Spanish and English as L2 and L1, Llopis-García, Real-Espinosa and Ruiz-Campillo (2012:17) identify another difficulty, namely, the inefficiency of traditional approaches to grammar teaching in explaining how indicative and subjunctive modes work in Spanish. These approaches to grammar teaching have yielded an ineffective number of rules and lists of patterns that learners must memorize while also resulting in a large number of exceptions to those alleged rules. One of the examples that are mentioned is the difficulty to distinguish between the interpretation of the grammatical form (analytical interpretation) and interpretation of that form in context (holistic interpretation) when using indicative and subjunctive modes in Spanish (Llopis-García, Real-Espinosa and Ruiz-Campillo, 2012:18):

I think Peter **is** coming.

Creo que Pedro viene (indicative).

I do not think Peter **is** coming.

No creo que Pedro venga (subjunctive).

Both these sentences might be interpreted by learners from a holistic point of view as statements because in both the speaker states that ‘they think... or do not think...’ something. However, this holistic approach does not explain why the verb modes are different (*viene-venga*) in Spanish. Therefore, an analytical point of view is required to see the cause of this change in mode, which is that in Spanish when saying ‘I do not think that...’ the speaker is not making a statement about the action expressed by the subordinate verb ‘is’. This means that, they are not stating that Peter ‘is’ coming

because the use of the negative ‘do not think’ invalidates the statement or affirmation of the subordinate verb ‘is’, and that is why the verb ‘is’ should be in a subjunctive form.

Llopis-García, Real-Espinosa and Ruiz-Campillo further argue that: ‘The dichotomy indicative/subjunctive in Spanish represents a challenge for both teachers and learners’ (2012:88). For learners because there are cases in which all speakers of Spanish as their L1 (literate or not, and from any social background) would agree in not saying ‘I want you to have time for me’ ‘*quiero que **tiene**s tiempo para mí*’ because *quiero que* + **indicative** is incorrect (incorrect understood as not expressing the meaning they intend to convey) (Llopis-García, Real-Espinosa and Ruiz-Campillo, 2012:13). However, some learners would make that mistake. For teachers it is a challenge because we do not know sometimes how to explain such dichotomy since some of the rules that we have traditionally used to explain it (according to a prescriptive grammar) do not apply, for example, when teaching that ‘*no creo que*/I do not think that’ is always followed by subjunctive although this is not always the case if we are making a statement as in rhetorical questions:

Do not you think this **is** a little bit risky?

*¿No crees que **es** un poco arriesgado?* (Indicative)

The authors emphasise that speakers of Spanish as L1 agree on some basic rules of using the language: ‘The grammar of a language has some operational principles that all speakers of that language unconsciously apply, and regardless of their country of origin, the level of education or their profession’ (2012:30). This is also supported by Grice’s Cooperative Principle (1975), which proposes four categories which speakers follow to create effective communication and interaction. According to Grice, ‘it is just a well-recognized empirical fact that people do behave in these ways; they have learned to do so in childhood and not lost the habit of doing so’ (1975:48). By ‘behaving in these ways’, Grice refers to following the cooperative principle’s rules, meaning that speakers of a L1 language would not purposely make mistakes when communicating thus violating any of the maxims of the Cooperative Principle.

Llopis-García, Real-Espinosa and Ruiz-Campillo (2012:30-32) also highlight that the same meaning can be conveyed by using different grammar choices, and those grammar choices depend on the speaker's point of view and communicative intention. By using grammar in a specific way, the speaker is expecting the listener to understand the message in that particularly chosen way, and in a way that is as effective as possible.

Ultimately, what the authors postulate is that both teachers and learners share the same mental representations of the world regardless of their respective L1 languages, but what makes those languages different is the way the same representations of the world are expressed through grammar (2012:37, 65). For example:

Creo que la ama (indicative used to make a statement).

I think he loves her ('I think' used to make a statement).

No creo que la ame (subjunctive used not to make the statement that he loves her).

I do not think (that) he loves her ('I do not think' used not to make the statement that he loves her).

In these examples, both the Spanish and the English language have the abstract category of communicating 'making a statement-not making a statement'. The difference is that the Spanish language has a different grammatical way of highlighting 'not making a statement' by using the subjunctive form and the English language does not.

In the light of this, the authors advocate (2012:19-24) for a different approach in presenting and teaching Spanish grammar, namely:

Operative grammar, defined as a grammar that establishes specific rules of how forms and meaning are connected, so that those forms can be manipulated to express different meanings based on that form.

Cognitive grammar, based on Slobin's concept of 'thinking for speaking' (1996), and understood as a grammar that explains form in relation to meaning, and meaning

is conceived in terms of experience and visualization (images), that is, linguistic concepts are regarded as a product of our general cognitive abilities.

Furthermore, Llopis-García, Real-Espinosa and Ruiz-Campillo (2012:22) based on previous work on cognitive grammar and the concept of thinking for speaking (Slobin, 1996:75), the theory of meaningful learning (Ausubel, 1963:217) and the link between language and thought (Pinker, 1995; 2001) identify the pedagogical benefits of using a cognitive approach for the teaching of Spanish grammar, which are:

-Promoting a communicative learning of the language by linking form and meaning.

-The connection between form and meaning is not random but motivated, thus encouraging reflection and a meaningful learning of those forms and meanings.

-Meaning is considered in terms of experience, also as a metaphor, thus allowing a conception of the language as a representation of the world, and universal concepts that are shared across cultures but are expressed through different perspectives and options in different cultures.

Table 1 shows how the same grammatical structures or concepts are formulated differently in different languages, namely, Spanish, English, and German:

Spanish	English	German
Creo que él la ama (Indicative)	I think he loves her (Indicative)	Ich glaube, dass er sie liebt (Indicative)
No creo que él la ame (Subjunctive)	I do not think he loves her (Indicative)	Ich glaube nicht, dass er sie liebt (Indicative)
Es imposible que él la ame (Subjunctive)	It is impossible (that) he loves her (Indicative)	Es ist unmöglich, dass er sie liebt (Indicative)
Quiero que él la ame (Subjunctive)	I want him to love her (Infinitive)	Ich möchte, dass er sie liebt (Indicative)

Table 1 Grammar differences across Languages (adapted from Llopis-García, Real-Espinosa and Ruiz-Campillo, 2012).

Finally, the benefits and effectiveness of teaching Spanish modality following a cognitive grammar approach have been already pointed out by Llopis-García (2009) and Solá-Simón (2020).

In summary, this research has been designed according to the following main reasons why the teaching and learning of indicative-subjunctive modes might be challenging:

- 1) Lack of semantic relevance.
- 2) Lack of morphological salience.

In turn, such lack of relevance and salience might be due to:

- 1) Those uses and modes do not exist or are differently expressed in English.
- 2) The formal instruction or explanation that should have emphasized the semantic relevance of those modes has been inefficient.

1.3 Practical and theoretical significance of this study

This research has been designed with the aim of offering the following potential contributions to the field of SLA at a practical level:

-To use SCMC text-based online chat as a tool that would allow learners of Spanish to become aware of their errors when using indicative and subjunctive modes and self-repair them through writing in an online setting.

-To use SCMC text-based online chat as a tool that would allow learners of Spanish to transfer knowledge related to the self-repair of indicative-subjunctive modes from the written online setting to the oral FTF one.

In summary, given the relevance of the use of indicative and subjunctive modes in Spanish, and the difficulty for both teachers to teach and learners to master its use, this research could make a substantial contribution to the field.

At a theoretical level, this research would potentially contribute to the field of SLA and technology in the following aspects:

-Showing the affordances of using SCMC text-based online chat to promote noticing, awareness, and options for self-repair of indicative-subjunctive-related errors, thus promoting relearning.

-Showing that SCMC text-based online chat could be used as a mediating tool or strategy for learning through writing.

-Showing that SCMC text-based online chat could be used as a way of improving speaking skills through writing.

From a pedagogical point of view, SCMC text-based online chat could become a tool that teachers will incorporate in their language modules in combination with FTF tuition thus making the most of a blended-learning design. This would, in turn, mitigate the difficulty that teachers experience when trying to explain the use of Spanish modality in context and in a meaningful way. On the other hand, advanced students (who have already automatized inaccurate uses of the modes) would use it to relearn and repair their errors, thus contributing to acquiring a better communicative competence.

The potential contributions of this research would thus bridge the need for further evidence on the affordances of SCMC text-based oral chat for SLA, which has already been highlighted by Beauvois (1997:94) and Blake (2009:227). In the specific field of Spanish, no studies of this type have ever been conducted to this date, as far as the researcher is concerned. This means that this study will contribute significantly to the teaching and learning of Spanish by addressing an existing gap.

This research presents a task that will potentially contribute to the repair of recurrent errors in the use of Spanish modality when speaking with the use of technology. Therefore, and to do so, it needs to consider, in the first instance, how SLA learning occurs and, secondly, how the specific medium of SCMC might contribute to such

learning. The next section will, therefore, provide the main theoretical framework underpinning the design of this study.

Chapter 2: Theoretical Framework: How does SLA occur?

According to Ellis (2015:5) the numerous factors involved in the acquisition of a second language make it a much more complex process than the acquisition of a L1. In this sense, how SLA occurs has been regarded from different perspectives throughout the years. Firth and Wagner (1997, cited in Larsen-Freeman, 2018:57) exposed in their paper ‘the existence of a deep division in the field between those who emphasized SLA as a cognitive process and those who challenged that perspective and advocated for a social approach’. However, a more balanced consideration of SLA in which both the cognitive and the social are intertwined has emerged since the early years of the 21st Century (Larsen-Freeman, 2018). In line with this conception of learning, Complex dynamic system theory (CDST) regards languages as complex systems in which many components interact, and cannot be considered independently (Larsen-Freeman, 1997). Aligned with this, the Douglas Fir Group (DFG, 2016) identifies three components to language learning: The cognitive, the social and the emotional. Accordingly, although learners’ knowledge of a language may act as a complex system in which different factors interact, due to the limitations of this research, and after considering the potential affordances of SCMC text-based chat over the FTF environment, only the cognitive aspect of SLA in relation to SLA theories and contributions from neurobiology is explored, as shown in Figure 2:

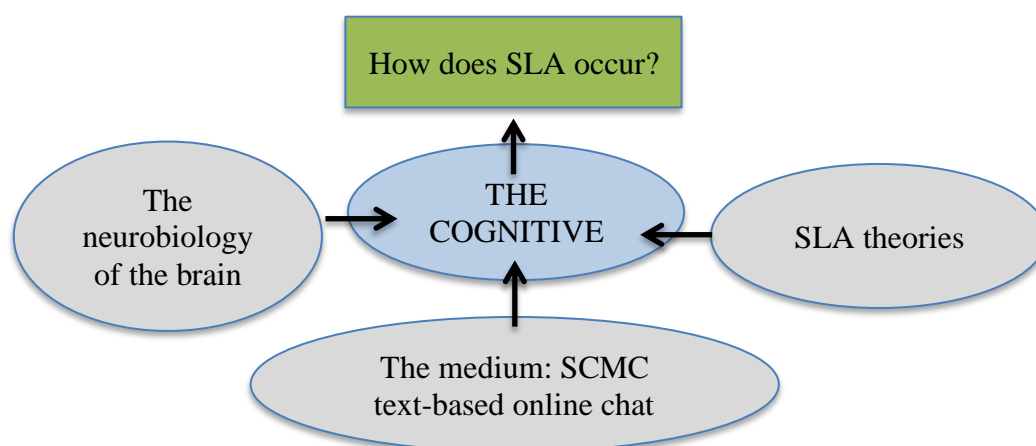


Figure 2 The cognitive factor in SLA and how the medium might contribute to it.

This chapter is, thus, intended at providing the theoretical framework underpinning the design of the SCMC task proposed in this research, and is structured as follows: The first section 2.1 discusses how SLA occurs at a cognitive level in relation to theories of SLA, and the neurobiology of the brain. Section 2.2 explores the nature of self-correction or re-learning, and the conditions for such self-correction or re-learning to happen. Section 2.3 focuses on how SCMC text-based online chat could arguably contribute to the acquisition of a second language at a cognitive level. Section 2.4 explains how skills developed in the online environment might be transferred to the FTF setting. Finally, section 2.5 summarizes the main contributions of the literature review, and the research questions that have arisen from the discussion of the previous sections.

2.1 Learning vs. acquisition: Explicit and implicit knowledge

Sometimes students fail to make an effective use of Spanish indicative/subjunctive modes even after years of explicit instruction and exposure to the language during their term or year abroad in a Spanish-speaking country. This may find an explanation, among others, in the distinction drawn between learning (that would correspond to students having learned the theory of Spanish modality) and acquisition (that would correspond to students not being able to accurately produce Spanish modality when performing language tasks). According to Krashen's monitor theory, 'learning constitutes a conscious and intentional process of studying a language, while acquisition involves unconscious processes of which the learner is not aware' (1982:10). Aligned with this is the debate in SLA about what constitutes linguistic knowledge, more specifically, the relationship between implicit and explicit knowledge. A similar distinction is proposed by Skehan's dual-mode system. According to Skehan (1998:54) two systems coexist, a rule-based analytic and a formulaic exemplar-based. In this sense, a correlation between the rule-based analytic system proposed by Skehan and the concept of explicit knowledge, on the one hand, and the exemplar-based formulaic system and implicit knowledge, on the other hand, could be established. Additionally, because learners' capacity to process information is limited, they will resort to using explicit or implicit knowledge depending on their

specific needs. In this sense, the exemplar-based or implicit knowledge is used when learners need to communicate rapidly and fluently, whereas the rule-based or explicit knowledge is accessed when accuracy of constructions or complexity of ideas are the focus. For Skehan both systems are necessary and can be developed by manipulating the conditions under which learners are required to use the L2, for example, if learners have more time available to plan before they perform the task. Thus, more time available would allow learners to draw on their rule-based knowledge, but if the task has to be performed straight off, they will use their exemplar-based knowledge. Skehan (2009:512) further suggested that post-task conditions such as working on the transcript of the learners' own performance could contribute to more accuracy.

On the other hand, Ellis (2015:267) defines explicit knowledge as 'the ideas and concepts, which are the result of conscious learning, and implicit knowledge as information that has been acquired without awareness. Explicit knowledge is usually facilitated by explicit instruction (providing the learners with specific rules and information about the target language) and implicit knowledge occurs through implicit instruction, that is, an instruction that prompts incidental learning' (Ellis, 2015:241). Similarly, Suzuki and DeKeyser (2017:748) argue that:

'Both implicit knowledge and automatized explicit knowledge involve rapid access to linguistic knowledge, but they are still distinguished by the awareness criterion, that is, attention to linguistic forms. Using automatized explicit knowledge involves consciousness about linguistic forms even if the access is rapid or automatic, whereas using implicit knowledge requires no awareness'.

According to Ellis (2005:143), 'there is broad consensus that the acquisition of an L2 entails the development of implicit knowledge. However there is no consensus on how this is achieved; nor is there consensus on the role played by explicit knowledge' although 'there is wide acceptance that explicit knowledge can contribute to performance' (Ellis, 2005: 144).

The interaction between implicit and explicit knowledge is also supported by evidence about the taxonomy of the brain, in which there is an explicit or declarative memory and an implicit non-declarative or procedural memory. The declarative

memory stores events and information consciously, whereas the implicit memory is formed by habit and emotional conditioning, among other factors, and is not accessed consciously (Schumann, Crowell, and Jones, 2004:4-5). According to this, it could be presumed that students would store in their declarative memory information obtained from explicit instruction or conscious learning of rules, while repeated exposure to input in the form of spending time in contact with L1 speakers or highly proficient users of the target language, and extensive practice and repetition of the same task, would contribute to their implicit knowledge, which would be in turn, stored in their procedural memory. According to all this, it seems that acquisition of an L2 would imply the following stages in the first instance:

Stage 1: Learning of explicit knowledge or storage of knowledge in the declarative memory.

Stage 2: Creation of procedural knowledge or acquisition.

In the context of this research, it is being considered that students' learning or explicit knowledge has been developed through explicit instruction of grammar rules over years of studying Spanish in different educational contexts (Primary school, Secondary school, University, etc.), while the acquisition or implicit knowledge has been the result of their exposure to the target language, at least during their term or year abroad, in addition to any other experiences of exposure to L2 -through language exchanges, occasional trips to regions where the target language is spoken or even in the classroom during formal instruction-, which might have triggered an unconscious, more passive knowledge of the target language.

However, when applying this two steps model of learning and acquisition to the group of participants object of this research, a gap is observed between the assumed declarative knowledge that students are supposed to have accumulated after years of explicit instruction in Spanish (rules on how to use indicative and subjunctive), and the procedural knowledge (actual and accurate production of indicative and subjunctive modes), since they still make the recurrent error of not using these modes effectively. Learners have been explained the theory of Spanish modality explicitly in class, however, their language performance and output when using Spanish does not respond to the explicit instruction or L2 rules, but rather to L1 structures. This poses

the question of whether it is possible at all to go from stage 1 to stage 2, that is, whether explicit knowledge can be transformed into implicit knowledge. The next section addresses such question.

2.1.1 Learning vs. Acquisition: The interface between implicit and explicit

According to Ellis (2015:261), there are three positions as far as the conversion of explicit knowledge in implicit knowledge is concerned:

-Non-interface position: Those who argue that explicit knowledge cannot be transformed into acquisition. Krashen (1982:83), for example, said that ‘learning does not turn into acquisition’.

-Weak interface position: Explicit knowledge can be transformed into implicit knowledge under certain circumstances.

-Strong interface position: Explicit and implicit knowledge can be connected. Skill-acquisition theory (Anderson, 1982; 1993) also proposes a distinction between declarative knowledge (the representation of facts), and procedural knowledge (the representation of actions in particular situations). However, such relationship between them is different from other approaches since skill-learning theory contemplates the possibility of transforming declarative knowledge into procedural knowledge through practice (DeKeyser, 2007). Ellis further argues that ‘Learners can first learn a rule as a declarative fact and then, by dint of practice, can convert it into an implicit representation, although this need not entail the loss of the original explicit representation’ (Ellis, 2015:144). DeKeyser (1998:49) further develops this approach when stating that ‘proceduralization is achieved by engaging in the target behaviour while temporarily leaning on declarative crutches. Once this step has been reached, strengthening, fine-tuning and automatization of newly acquired procedural knowledge depends on practice’. According to DeKeyser (2007:3), automatization in its broadest sense refers to ‘the transformation of the knowledge presented in declarative format to the final stage of fully spontaneous, effortless, fast and errorless use of that rule, and often without being aware of it anymore’.

Supporting this strong interface position, recent research carried out by Suzuki and DeKeyser (2017:781), exploring the interface between explicit and implicit knowledge indicates that ‘automatized explicit knowledge, fostered by explicit learning mechanisms, influences the acquisition of implicit knowledge’. This means that even if we assume that learners have differentiated explicit and implicit knowledge of the L2, there is a way of connecting both through explicit instruction.

Thus, a strong interface approach to SLA would add a third and final stage to complete the acquisition process:

Stage 3: Automatization of procedural knowledge through practice.

This is, in turn, aligned with skill learning theory, which establishes several steps to move from explicit to fully automatized implicit knowledge according to Suzuki and DeKeyser (2017:782):

As a first step, acquiring solid declarative knowledge is essential for further systematic practice leading up to proceduralization and partial automatization. Through more extensive practice, full automatization and implicit knowledge can eventually be attainable for some structures.

In addition to what has been discussed so far, the strong interface position seems to be supported by recent research about the neurobiology of the brain. From a neurobiological point of view, such a connection between declarative and procedural knowledge is possible thanks to brain plasticity, and there is research showing how procedural memory ‘is not fixed but subject to change from other components in the brain’ (Schumann, Crowell, and Jones, 2004:70), and the interaction with the environment (Bueno, 2019:1-2).

Accordingly, this research subscribes to the strong interface position and considers the possibility for learners to turn explicit knowledge into implicit knowledge by proposing a sequence of tasks that would facilitate such process. In summary, and according to the main concepts discussed in this section, the process that would

arguably lead from learning into acquisition or proceduralization of explicit knowledge, consists of three main stages according to a strong interface approach:

Stage 1: Learning of explicit knowledge or storage of knowledge in the declarative memory.

Stage 2: Creation of procedural knowledge or acquisition through practice.

Stage 3: Automatization of procedural knowledge through extensive practice.

In summary, since the present research takes a neurobiological perspective of learning into account, a neurobiological conceptualization of what constitutes learning could shed some light into the above-mentioned phenomenon of students failing to perform accurate L2 structures. Moreover, it could also contribute to understand how re-learning of such structures would be possible. Thus, the next section specifically elaborates on how learning is conceived according to neuroscience, and how this approach aligns with some SLA theories.

2.2 How learning occurs from a neurobiological point of view

According to Bueno (2019:2), ‘the cellular basis of learning, is defined as the ability of the brain to build and rebuild the map of neural connection’. In this same sense, Lödvén, et al. (2013:2302) argue that ‘mature neural networks are formed from an initial overproduction of a pool of connections that are then modified over years of development by experience, so that some are selectively stabilized and other are limited’. In the light of this, and with regards to students’ inability to perform accurate L2 forms, it could be hypothesized that learners have automatized the production of the recurrent error due to the initial overproduction of neural connections, which did not correspond to accurate production of L2 rules. Those initial wrong connections could have been influenced on the one hand, by the L1 structures, which were already established in the brain due to L1 acquisition, and which function as strange attractors (Larsen-Freeman, 1997:152), and, on the other hand, due to being exposed to the wrong rule explanation (as stated in section 1.2). Aligned with this, Bueno (2021:85) underscores the importance of providing students with accurate explanations of the contents because ‘once the neural connections are established (even if these are wrong as in the indicative-subjunctive scenario), such connections are very difficult to re-

establish or relearn’. In fact, according to Bueno, and following this neurobiological perspective, ‘the neural pathways leading to the wrong connections will never be completely erased, meaning, that any new information related to the same area of knowledge will be built on the basis of those wrong connections’.

This neurobiological perspective aligns with Ellis’ explanation of variability in learner language and how SLA is understood according to complexity theory. According to Ellis (2015:10) ‘Sometimes they [learners] will make errors and at other times they will use the target language form [...] variability also occurs because learners do not abandon old forms when they acquire new ones’. In this same sense, Larsen-Freeman’s complexity theory (1997) also provides an explanation to the variability experienced by learners’ language. According to complexity theory, L2 constitutes a complex system, and complex systems are open and dynamic, and constantly changing. Complex systems are also always in flux and never reach complete equilibrium, although there might be periods of relative stability. Thus, it seems that a neurobiological perspective of how learning occurs is aligned with some SLA theories such as skill-acquisition theory and complexity theory. The three approaches reinforce the idea that a connection between explicit and implicit knowledge is possible as discussed in the previous section.

Additionally, and according to Bueno (2021:85-86), what is needed for learning to occur is not only repetition and experience to broaden, expand and to build the correct connections, but also:

Reflection, reasoning and emotions are required so that new connections bypass the old ones, and the brain finds it more relevant to use the new connections instead of the old ones.

Reflection and reasoning could be related to and activated by explicit instruction, whereby learners reflect and try to make sense of the explicit theory learned about Spanish modality. In this sense, Llopis-García, Real-Espinosa and Ruiz-Campillo also argue that the application of logic and meaning attached to form instead of simple memorization of forms in the teaching of grammar ‘is a formal first step to get to feel the meaning of the forms (not to *remember* the forms) so that the creation of meaning

through form is automatized’ (2012:50-51). On the other hand, emotions could be related to motivation. Lee et al. (2009, cited in DFG, 2026:28) argue that ‘learning is an emotionally driven process, one that requires that learners are motivated to participate with others in specific contexts’.

Thus, it seems that for students to unlearn the already automatized recurrent error, a new pool of neural connections overriding the already existing wrong connections, and creating pathways directed at the L2 accurate uses of indicative/subjunctive modes needs to be facilitated. Therefore, to do so, and according to what Bueno (2021) and DeKeyser (2007) pointed out, several elements can be identified, which would potentially contribute to such relearning or self-repair:

-Providing students with accurate explanations or clear explicit knowledge: This should be provided by the language teacher in the classroom and following a cognitive grammar approach, as argued in previous sections of this study.

-Reflection, reasoning, and emotions: These should be activated by the learners.

-Repetition and experience: The opportunities for repetition and experience should be facilitated by the language teacher, and the practice of repetition and experience would be performed by the learner.

Accordingly, it seems that a tool aimed at facilitating relearning should include all or, at least, some of the above-mentioned factors. Thus, since the main object of this research is to propose a tool for students’ relearning in the form of self-repair, the following sections explore how such relearning and self-repair could be provided according to some of the factors included in the three main categories identified before. Table 2 summarizes how the neurobiological factors pointed out by Bueno relate to concepts from SLA theories and, ultimately, to the design of this study, and the following subsections of this research proposal:

Neurobiological factors according to Bueno (2019)	Conditions for relearning/self-repair underpinning the design of the study
---	--

Accurate explanations	Explicit instruction: Making sure students get the difference between indicative and subjunctive modes from the point of view of a cognitive grammar.
Reflection, reasoning, and emotions	Noticing and the creation of cognitive dissonance: Reflection and reasoning is understood in the context of this research as learners being able to identify cognitive dissonance or notice an error when applying the explicit rule, to which they have been exposed through explicit instruction. Also, learners' ability to connect form and meaning, as proposed by a cognitive grammar point of view. Emotions could be related to learners' motivation.
Repetition and experience	Practice and automatization: Repetition of a task and experience over time would be linked to the concepts of practice and automatization.

Table 2 Correlation between neurobiological factors and SLA concepts underpinning the design of the study.

The following sections discuss, firstly, how the factors included in Table 2 are linked to the re-learning of modality in Spanish in the form of self-repair. Secondly, the nature and types of self-repair is conceptualized.

2.3 Self-repair (SR) and self-initiated self-repair (SISR)

Self-repair is a type of modified output first discussed by Swain (1985, cited in Smith, 2008:85-86) and occurs 'when the speaker identifies that the output produced is faulty and executes a self-correction'. According to Swain's comprehensible output hypothesis, 'learner's output is a key element in promoting noticing of learner's own errors, and it provides with opportunities for using the target language in context, meaningfully'. Moreover, according to Swain (1985; 2005, cited in Smith, 2008:86) 'learner's output serves to test hypothesis about L2, and allows the learner to move

from a semantic analysis of the language to a syntactic one'. Although the concept of modified or pushed output refers to the corrections that the L2 learner performs after receiving feedback from an interlocutor or also referred to as self-repair (SR), there are other types of self-repair. More specifically, Foster and Ohta (2005, cited in Smith, 2008:85) define self-initiated self-repair (SISR), as 'self-correction that the learner performs without being elicited by an interlocutor. SISR is similar to modified output in the sense that provides opportunities to test hypothesis about the target language and encourages the learner's ability to solve problems while expanding the learner's resources'. Therefore, according to Kormos (1999, cited in Smith, 2008:86) self-repair plays a crucial role in SLA.

Accordingly, in the context of this research, SR is defined as the repair performed by the learner, after the error has been elicited or signalled by another interlocutor. That other interlocutor could be a tutor or another peer or participant in the text-based online discussion. On the other hand, SISR is considered as the repair initiated by the learner without being previously warned by any other interlocutor, that is, a repair that is the product of learners' own noticing of their own error. According to research on self-repair, 'language learners prefer self-repair over other types of repairs, L2 speakers self-correct themselves more often than L1 speakers of a language, and self-repair more often leads to modified output than other-initiated repair' (Smith, 2008:86). Additionally, according to Panova and Lyster (2002, cited in Sauro, 2009:97) 'corrective feedback which does not contain a full reformulation but instead requires that learners attempt self-repair or output modification may require deeper processing and thereby enhance control of already internalized L2 forms'. This idea is relevant when addressing the repair of already internalized errors, such as the ones proposed in this research. Also, corrective feedback that facilitates deeper processing may contribute to the restructuring of the already existing wrong neural connections, which, as already mentioned in a previous section, requires more effort than the creation of new connections between knowledge that was not previously established or learned.

Therefore, in this research it is hypothesized that in SCMC text-based online chat, self-repair that it is prompted by, either the tutor, another participant or the learner making the mistake will contribute to more awareness on the modified output than

other types of repairs such as providing the correct form without giving the learner the opportunity to self-repair. Accordingly, since one of the main objectives of this study is that participants are able to identify their own errors also in FTF oral debates in which no feedback whatsoever is provided by tutors or peers until the debate is finished, this study will focus on identifying instances of SISR, that is self-repair that is initiated by learners themselves, although instances of SR initiated by the tutor or other peers will also be included in the analysis of data.

Since one of the main aims of this research is to facilitate students' SISR, the next subsections focus on the conditions that would elicit it according to table 2 in section 2.2, namely:

1. Explicit instruction.
2. Noticing and cognitive dissonance.
3. Practice, modified output, and automatization of modified output.

2.3.1 Conditions for SISR: Explicit instruction

As mentioned in a previous section, DeKeyser (2007:6) argues that 'there is a problem when trying to teach procedural knowledge without an adequate declarative base', meaning that without a clear declarative knowledge no proceduralization of the information is possible. Why learners do not see indicative and subjunctive modes as semantically relevant or why their declarative knowledge is not solid is partly due to lack of clear instruction. Section 1.2 of this research already discussed how Llopis-García, Real-Espinosa and Ruiz-Campillo identify the use of traditional approaches to grammar teaching as the reason why instruction is not clear while suggesting that a cognitive approach to grammar teaching should be adopted.

In this respect, learners' perception of the effectiveness of the cognitive over the traditional approach to the teaching of the indicative and subjunctive modes has been already explored by Molina-Vidal (2019). Accordingly, a first step in the provision of semantic relevance to the indicative and subjunctive modes would be to present learners with a grammar rule and activities designed from the point of view of a cognitive grammar, and which demand from learners to make decisions according to

the semantic values of indicative and subjunctive. Such an activity has been already proposed by Molina-Vidal (2020). In this sense, new information and a connection between the form and the meaning with regards to the indicative/subjunctive modes might contribute to establishing a clear declarative base, which (as mentioned before) is a key condition for transforming explicit knowledge into implicit knowledge.

2.3.2 Conditions for SISR: Attention, Noticing and Cognitive Dissonance

One of the reasons for the strong influence of L1 could be related to the concept of salience and semantic redundancy. According to Ellis (2015:152), ‘features of the L2 that are not attached to a meaning are not salient or noticed by learners’. In the case of indicative/subjunctive modes, since such a difference does not exist in English, learners do not attach a meaning to it because they do not think such a distinction is necessary to understand the meaning of the utterance, and hence the lack of salience. Additionally, the minimal morphological difference between indicative (*cant-a*) and subjunctive (*cant-e*) would also have contributed to such lack of salience. Finally, traditional approaches to grammar teaching would have contributed to make the rules difficult to understand or even confusing for learners.

From a neurobiological point of view the declarative memory will send a signal whenever a sentence that has been produced is against the learned and stored rule. Such a signal has the function of preventing connections between neurons that would reinforce the idea that such sentence was correct (Schumann, Crowell, and Jones, 2004). Thus, SISR could be understood from a neurobiological point of view as the ability of the declarative memory to trigger a signal whenever the output contradicts the learned rule. When considering the principles of CDST, repair, and hence, re-learning could be regarded as avoidance of the strange attractor of the L1, which is the rule that has been internalized, and the creation of a new output in the form of the accurate use of the indicative and subjunctive forms. However, if the learner has not a clear idea of what exactly the rule entails (for example when different and even contradictory explanations of indicative and subjunctive have been provided over the years) and it is not meaningfully nor visually salient (the difference between indicative (*hablo*) and subjunctive (*hable*) is morphologically minimal), it is very unlikely that the error is identified or that the declarative memory sends the above-mentioned signal, thus explaining the persistence of the error.

In addition to this, how the learners may identify errors is related to the concept of attention. According to Schmidt (2001:23) there is little or even no learning if there is no attention. Attention is regarded as a process, which takes place in working memory whereby information received from the input relates to information stored in long-term memory thus linking old and new knowledge. Schmidt also underlines the need to consider attention in any explanation of how SLA occurs including, among other aspects, interlanguage development, variability in learner language, L1 transfer or the role of individual differences. Schmidt also identified six key characteristics of attention (Schmidt, 2001:12-16), which are:

-Attention is limited: Attention takes places in working memory, which is limited in capacity. That is, only limited amounts of information can be processed at one time.

-Attention is selective: Because capacity is limited, it is necessary to allocate attention strategically. For example, if the learners' attention is focused on the meaning, it may be difficult for them to simultaneously focus on the form (VanPatten, 1990:287).

-Attention is subject to voluntary control: Learners can decide what to focus their attention on. Voluntary attention is top-down and directed at outside events. However, there is also involuntary attention, which is experience driven; learners can attend to elements of the output without having any intention to do so.

-Attention controls access to consciousness: The role of attention is to bring stimuli or thoughts into awareness. The process of focusing attention on specific stimuli or thoughts gives rise to the subjective feeling of awareness (i.e., consciousness).

-Attention is essential for the control of action: Novice behaviour requires controlled processing; expert behaviour can make use of automatic processing. Less attention is required for automatic than for controlled processing.

-Attention is essential for learning: Attention is the mechanism that makes input available for further processing. However, not everything attended to, enters long-term memory. Thus, attention is essential for learning but does not guarantee it.

Schmidt (2001) further distinguishes between perception and noticing through the Noticing Hypothesis (1990). According to this distinction while perception does not need to be conscious, noticing necessarily implies consciousness, and the occurrence of new forms should be preceded by noticing the input (Schmidt, 1990:140-141). Although Schmidt (1990, cited in Ellis, 2015:14) did not rule out that ‘some learning might be possible without conscious attention (i.e., noticing), the more the learners notice, the more they learn’.

Similarly, Tomlin and Villa’s theory of attention (1994, cited in Ellis, 2015:183) includes three different processes, namely, alertness, orientation, and detection:

-Alertness is related to how ready is the learner to address stimuli received from the input and might be influenced by the learner’s affective/motivational state.

-Orientation is related to the allocation of attention to specific types of information, for example, focusing on form rather than meaning. In this sense, Tomlin and Villa emphasize that attention is unlikely to happen if learners are not alerted to attend. If they are not interested in becoming more grammatically correct, and they rely on using existing linguistic resources, they will not attend to grammatical information. In relation to this, Hayes (2012:372-373) also emphasizes the role of motivation in revision processes when writing. If writers are strongly motivated to produce high-quality texts, they will be more prone to edit the language produced than writers who are less motivated.

-Detection involves the cognitive processing in working memory of the stimuli received from the input.

However, while for Tomlin and Villa all these processes may not involve awareness and involve shallow processing, for Schmidt (2001, cited in Ellis, 2015:185), noticing requires executive control processes, which allow the formation of form-meaning mapping, symbolic formation and understanding. Moreover, for Schmidt, there is no acquisition without conscious attention.

Robinson (2003, cited in Ellis, 2015:185-186) further contributes to the role played by aware and unaware detection of information through the concept of rehearsal processes. According to Robinson, unaware detection processes connecting short-term

memory and long-term memory may contribute to consolidate already existing categories but do not lead to modification of those categories. It is only when information is subject to further processing in working memory when changes in long-term memory may occur, and such processing is possible through what Robinson called rehearsal processes. Rehearsal processes were classified in two main categories, namely, maintenance rehearsal and elaborative rehearsal processes. Maintenance processes entail the comparison of a chunk stored in working memory (for example, 'made me go') with a pre-existing chunk from long-term memory (for example, 'made me to go') for the learner to notice-the-gap. Thus, by noticing the difference, the prior association created in long-term memory ('made me to go') can be weakened, and a new connection ('made me go' without the 'to') is created. This would constitute learning according to Robinson (2003, cited in Ellis, 2015:186).

On the other hand, elaborative rehearsal is not just identifying the difference between 'made me to go' and 'made me go', but it requires the activation of symbolic knowledge for the learner to understand that the verb 'make' does not need to be followed by a 'to infinitive'. Aligned with this is the concept of cognitive dissonance, which Festinger (1975, cited in Moon, 2004:18) regards as 'the conflict that arises when new knowledge is confronted with already existing ideas, thus prompting the learners to reassess what they thought they knew'. Robinson and Gass (1995, 1997, cited in Chun and Zhao, 2006:103) provide a more specific definition of what constitutes noticing and argue that 'not only detection but also activation of attention resources and the production of output that is modified from the input are required'. This is in line with Swain's Comprehensive Output Hypothesis (1985:249) according to which, 'it is possible for learners to comprehend input without having to process it linguistically (for example, they could use context to guess the meaning), but in order to produce concise and comprehensible output they had to engage in syntactical processing'. This means that whenever learners are producing output they need to engage in syntactical processing and, therefore, more opportunities for noticing or creating cognitive dissonance.

Many studies consider noticing as a key factor for SLA (Chun and Zhao, 2006:103). Therefore, and for the purposes of this study, it seems that for learners to be able to

repair their automatized output, they need to notice that error and create cognitive dissonance.

In this sense, SISR would entail not only the identification of a conflict between existing knowledge (maintenance and elaborative rehearsal processes), but also the ability to create output that responds to the correct form of L2. Aligned with these ideas, Kormos (1999, cited in Smith, 2008:85) argues that self-repair is regarded by many as evidence of noticing, and thus, prove that the learner is applying some strategy to monitor their own production or has noticed an error. In summary, SLA has accepted that noticing is facilitative of acquisition and conscious attention (orientation) is seen as the key mechanism that connects input into acquisition (Ellis, 2015:167-169).

Accordingly, it seems that any intervention aimed at promoting SISR in learners of Spanish in relation to indicative and subjunctive modes needs to include the following features:

- 1) Facilitate noticing through orientation. Since attention is subject to voluntary control, learners' attention could be directed to focus specifically in the noticing of indicative-subjunctive forms. This feature seems crucial since indicative-subjunctive modes are particularly non-salient for students. As Ellis (2015:188) argues, if learners are given corrective feedback, which includes negative evidence, they will pay attention to forms that would be otherwise unnoticed.
- 2) Facilitate cognitive dissonance of the grammatical rule at the semantic level, so that learners perceive indicative-subjunctive modes as semantically relevant and, on the other hand, at a morphological level, so that they can visualize the minimal but meaningful morphological traits. Explicit instruction of the indicative-subjunctive rule would contribute to this.
- 3) Give opportunities for creating modified output in the form of SISR of the recurrent error.

Accurate explicit instruction as explained in section 2.3.1 would provide the basis for creating the necessary cognitive dissonance for noticing and SISR to happen. On the

other hand, giving learners opportunities for producing modified output in the form of SISR of the recurrent error would be provided by continuous practice and output, which is the topic of the next subsection 2.3.3.

2.3.3 Conditions for SISR: From declarative to procedural. The nature of practice

According to DeKeyser (1998) and the strong interface position, practice can lead to the transformation of declarative knowledge into procedural knowledge. Practice is understood here in a broader sense as specific activities in the second language, which are systematically and deliberately aimed at developing knowledge and skill in the second language (DeKeyser, 2007:1). Such activities will provide opportunities for the learner to create modified output, which, as mentioned in a previous section, is a condition for noticing and self-repair to occur. DeKeyser (2007:292) further defines good practice to develop procedural knowledge as:

- a) Involving real operating conditions, that is, the comprehension and expression of real thoughts.
- b) Cognitive operation in the practice should match those in a natural communicative context.

This conception of good practice as involving a natural communicative context would be related to sociocultural conceptions of SLA whereby learning not only occurs through interaction (as postulated by the interaction hypothesis), but also and mainly while interacting or ‘in’ interaction (Ellis, 2015:21).

From the point of view of cognitive psychology, studies on the acquisition of a skill agree on the fact that reaction time and decrease of error rate are achieved through practice with a given task (DeKeyser, 2007), and learning a language is like learning any other skill (Ellis, 2015:22). In relation to how the brain works, each time a task is practiced the brain will assign more neurons to that activity until the eventual formation of new connections between those neurons (Brizendine, 2006).

Thus, and taking all this into account, it seems that reparation of the persistent error or a new connection between declarative and procedural memory could be achieved under the following conditions:

-Step 1 Instruction: Ensuring that declarative knowledge is clear and fully understood by the learner, meaning that the declarative base is clearly established.

-Step 2 Noticing: Ensuring that the declarative memory will trigger a signal whenever the output contradicts the learned rule (noticing/cognitive dissonance) so that no more neural connections between the new declarative knowledge, and the incorrect already proceduralized knowledge are created.

-Step 3 Self-repair: Ensuring that, after noticing, an output in the form of self-repair is performed by the learner. From a neurobiological point of view, such self-repair would represent the creation of a new connection between neurons, that is, a connection between the new declarative knowledge and the accurate L2 form.

According to Ellis (2005:144), those who advocate for the strong interface position still disagree on whether such practice ‘is mechanical or needs to be communicative in nature’. In this sense, the factors discussed in previous sections as leading to SISR, such as the importance of a clear declarative base of what modality entails, or the need for noticing to create cognitive dissonance, seem to be rather linked to communicative intentions than to mechanical processes. The forms of indicative and subjunctive need to be connected to a meaning, and such meaning is provided by the context of communication, and the communicative intention of the speaker/writer. Accordingly, this research takes a communicative approach as far as the concept of practice is concerned and proposes a communicative task for practice of SISR.

Once the concept of practice has been established, the next section explains how to move from procedural knowledge to automatization.

2.3.4 Conditions for SISR: From proceduralization to automatization

DeKeyser (2007:3) states that if procedural knowledge has been established, then it is possible to automatize it, which seems to explain why incorrect L2 procedural knowledge has been automatized. In this same sense, Schumann, Crowell, and Jones (2004:60) argue that ‘students are not fluent because they do not have enough opportunities to automatize knowledge and store it in the procedural memory’. This means that the more opportunities students have for practice, the higher the possibilities to automatize procedural knowledge. Accordingly, in addition to the three steps mentioned in the previous section leading to proceduralization, a fourth step linking proceduralization to automatization needs to be included:

-Step 4 Automatization: Ensuring that the new procedural knowledge or self-repair output is practiced repeatedly. Learners need continuous practice for creating a habit or automatizing the procedural information, meaning that the neurological path created by the attraction of the L1 structure is controlled, and more neural connections are being created between the new declarative knowledge and the accurate form of L2.

In the context of this research, automatization would be possible, if any, through constant and regular practice in both text-based online chat, and FTF oral debates over a maximum of 10 weeks during semester 2.

In summary, clear explicit instruction (step 1), noticing (step 2), self-repair of the recurrent error (step 3), and practice of the modified output or self-repair for automatization purposes (step 4) are key elements to revert the learning situation. The next subsections explain how SCMC can bridge the gap at a cognitive level between declarative and procedural memory through noticing and repair, while also providing opportunities for practice and automatization.

2.4 The medium: Affordances of SCMC text-based online chat for SLA

The previous section was aimed at identifying those factors that interfere in learners’ acquisition of Spanish modes indicative and subjunctive, as well as the conditions for transforming declarative knowledge into procedural knowledge. Once those factors

have been discussed, this section explains how SCMC in the form of text-based online chat could arguably bridge the gap between declarative and procedural knowledge by promoting the re-learning or self-repair of those recurrent errors along with practice and automatization.

2.4.1 Time and visualization for noticing and SISR

SCMC is a hybrid form of communication, whereby the written mode is used but the discourse interaction is similar to that of an oral conversation (González-Lloret, 2009). The uniqueness of this tool provides a window of opportunity to design tasks that would promote second language acquisition. In this sense, the benefits of SCMC have been highlighted for some time now. In comparison to oral interaction, Muñoz-Basols and Fuertes Gutiérrez (2024:208) have found that there is higher participation and more spontaneity among advanced students of Spanish through the use of the text chat than orally when different options of synchronous communication are available in the virtual classroom. Additionally, and more specifically, according to Warschauer (1997, cited in Sotillo, 2010:351), SCMC amplifies students' attention to linguistic form. More specifically, Chun and Zhao (2006) conducted a study on the use of text-based online chat for noticing, and in comparison to FTF conversations with learners of English. The study used stimulated recall to identify examples of noticing and concluded that text-based online chat enhances students' noticing of their own mistakes more than FTF conversations. Ziegler (2016) also reports the effectiveness of SCMC interaction over FTF oral interaction in promoting overall L2 learning outcomes. However, the nature or type of errors that are noticed according to different studies may vary. While Salaberry (2000) reports on the benefits of text chat for the development of past tense Spanish verb endings, Fiori (2005) showed how learners' raised their awareness on the distinction between Spanish prepositions *por/para* and Spanish verbs *ser/estar* during text-chat when they were instructed to focus on form and not only meaning. In addition to this, Sotillo (2009) reports increased noticing in linguistic forms in text-based chat in comparison to voice chats in language related episodes (LREs), in which learners and tutors negotiate work. However, Lee (2009) argues that semantic or lexical problems are more prone to be resolved by learners than syntactic errors, and this is likely to happen because syntactic errors contain less

communicative value. Smith (2012) also argues that morphological errors are the least likely to be noticed, and Blake (2000) also supports this idea by concluding that the contribution of SCMC to grammatical development is still questionable. However, the idea that syntactic or morphological errors are less likely to be noticed supports the need for clear instruction in the grammar rule, and the creation of a solid declarative base, as proposed in a previous section.

Independent from the type of noticing shown in previous studies, what these researchers underscore is that text-based online chat, as a particular form of SCMC involving written oral-like conversation, has the great potential of increasing noticing for two main reasons (Chun and Zhao, 2006:102):

1. Time: It allows conversation to flow at a slower pace compared to FTF conversation, thus giving the "speakers" longer processing time in receiving and producing the target language.
2. Visualization of the text: It saves texts in such a manner that users can access previous messages quite easily.

‘The visual salience of written discourse and the self-paced setting offered by SCMC increase learners’ opportunities to take notice of errors and make output modifications’ (Lee, 2009:130). This idea is aligned with Skehan’s (2009) proposal discussed in a previous section, that more time available before the task would allow learners to draw on their rule-based knowledge, thus implying that online written chat would allow learners to access their explicit knowledge, assess what they know (creation of cognitive dissonance) and, arguably, introduce appropriate changes.

In relation to time availability, De Smet et al. (2018) conducted research on the benefits of slowing the pace when writing in relation to reading to evaluate. Reading to evaluate involves the proofreading of a text not only at the very end of the writing process but also during writing. Through the use of eye-tracking data, this research concluded that participants produced more fixations and regressions (when writers move their eyes back to a previous point in the text) when writing less fluently (slow pace writing) in combination with being instructed to revise their performance. More time available has also implications in terms of working-memory capacity. Payne and

Ross (2005, cited in Blake, 2009:228) found a relationship between working memory capacity, and language production in the chat room with low-capacity participants generating a higher ratio of words per session than the high-capacity students. The authors suggest that the chat room may offer compensatory benefits for low-working-memory-capacity students by providing them with more time for processing and responding to conversational tasks. Additionally, from the point of view of cognitive neuroscience, the importance of time for bilingual language processing has been highlighted by Rodriguez-Fornells, De Diego Balaguer and Münte when stating that ‘switching between languages will require changing the previous inhibitory status of the non-target language, a process that will require time’ (2006:140).

On the other hand, as far as visualization and review of their own performance is concerned, revision quality has been proven better with a page-by-page presentation than with a scrolling presentation. Furthermore, Haas and Hayes (1986, cited in Olive and Passerault, 2012:333) compared the effects of computer screen versus hardcopy presentation when reordering a scrambled text, and they observed that reordering was faster in the hardcopy condition than in the computer screen one, meaning that the transcript of an online conversation would add opportunities for noticing and detection of errors. In this sense, the opportunity to print and read the transcript of the conversation after the online discussion is finished but before the FTF oral debate provides a window of more time available for the learner to prepare.

In relation to what has been said before, further affordances of reading the transcript or visualizing other participants’ messages would be related to socio-cultural approaches to learning, and the creation of a zone of proximal development (ZPD). According to Vygotsky (1978:86), when two people or two learners with different levels of language knowledge interact, they create a ZPD whereby the learner who has less knowledge would be able to produce an L2 output, which would have been impossible without the assistance of the more proficient learner. Thus, the time and visualization allowed by the possibility of reading the transcript of the online conversation would, arguably, enable the learner to identify grammatical constructions used by more proficient participants accurately and, consequently, improve learner’s grammatical accuracy before the FTF oral debate. In fact, previous studies in this sense have found that text chat promotes syntactic alignment of

nominal-clause in Spanish L2 interactions (Collentine and Collentine, 2013) and alignment with a partners' input, especially if that partner was a L1 speaker or the language tutor (Michel and O'Rourke, 2019). Michel and O'Rourke (2019:53), following Michel and Smith's definition (2018), understood alignment, more specifically lexical alignment, as 'the reuse of a partner's lexical choices of three or more consecutive words'. In relation to alignment of Spanish subjunctive mood (Michel and Stiefenhöfer, 2019) also report minimal but positive results of using SCMC to promote priming between learners of Spanish.

Finally, more time availability and the lack of turn taking could reduce the levels of anxiety in participants and, thus, potentially facilitate more noticing and self-repair. According to Okon-Singer, Hendler, Pessoa and Shackman (2015) there is a link between cognition and emotion. Anxiety may interfere in cognitive control and usually leads to attention avoidance, that is, avoidance of the source of distress (Pessoa and Shackman, 2015:4). This concept applied to the context of this research would imply, that learners may decide not to participate in a FTF oral discussion due to the anxiety triggered by the need to compete for the turn. In this same sense, a study conducted by Meunier on personality and motivation in computer-mediated foreign language communication (CMFLC) shows that most of the participants felt comfortable in the computer-mediated environment and their levels of anxiety were also reduced (Meunier, 1997:160), while Suler (2004) mentions the disinhibition effect that the online environment promotes. Satar and Özdener (2008, cited in Bárkányi, 2024:164) also argue that CMC tools reduce the level of anxiety in participants, especially when interactions occur through the written chat tool.

In summary, Table 3 shows the affordances of SCMC for promoting noticing and self-repair. Such affordances arising from online interaction and reading of the transcript would be, in turn, related to both learning 'in' interaction and 'through' interaction as mentioned in a previous section in relation to good practice.

Affordances of SCMC (text-based online chat)	
Time	More time available to access explicit knowledge and focus attention resources to detecting recurrent errors, hence noticing.

	Lack of turn-taking and more time available would increase opportunities to create output.
	Lack of turn-taking and more time available would reduce anxiety that could interfere in cognitive processes, and in the motivation to participate.
	More time available at the end of the online session, and before the FTF oral debate to read the transcript would promote more noticing of the learner's own errors.
	More time available at the end of the online session, and before the FTF oral debate to read the transcript would promote the creation of a ZPD, and identification of structures used by other participants accurately.
Visualization	Visualization of the participant's own text while performing the task, would promote noticing of the learner's own errors.
	Visualization of other participants' text while performing the task (possibility of scrolling up and down the conversation), would promote the creation of ZPD and the noticing of the learner's own errors. The learner would be able to create cognitive dissonance by comparison of the learner's own production and the accurate output of other participants using the same or similar structures.
	Visualization of the whole conversation through the reading of the transcript of the text-based online chat, would promote noticing of the learner's own errors recorded on the transcript. Also, the creation of cognitive dissonance and ZPDs by comparison of the learner's own production and the accurate output of other participants using the same or similar structures.

Table 3 Affordances of SMC text-based online chat: Time and Visualization.

2.4.2 Creating a habit: Practice and automaticity

In addition to noticing and self-repair, continuous practice that leads to automatization has been previously identified as one of the essential conditions to bridge the gap between declarative and procedural memory. The implicit or procedural memory has been described in a previous section as the product of habit and emotional conditioning according to Schumann, Crowell, and Jones (2004:4-5). According to

these researchers (2004:43-44), the use of morphosyntax and phonology in the L2 requires an automaticity whereby linguistic information of the TL is proceduralized through neural structures that are embedded deep in the brain, and not through an innate grammar. This automatization process occurs through a domain-general learning mechanism in the brain that is used not only for language but also for motor, and other cognitive skill learning, and is acquired through the repeated execution of a task. This conception of automatization from a neurological point of view aligns with Abrams’s claim that ‘It is possible that long-term use of CMC (over several semesters or years)—with the increased opportunities for interaction this medium provides—may indeed prove to have significant benefits for the development of oral communicative competence’ (2003:165). Abram’s reference to a continuous period of use is connected to the idea of repetition, creation of a habit or automatization, and seems to be a requirement for both linguistic development and change in brain structure.

Table 4 summarizes the contribution of SCMC text-based online chat to automatization:

Affordances of SCMC (text-based online chat)	
Practice and Automaticity	Repeated or continuous practice using SCMC would promote the acquisition of the habit of noticing errors, self-repairing them and, eventually, facilitate acquisition of the correct uses of indicative and subjunctive modes.

Table 4 Affordances of SCMC text-based online chat: Practice and Automaticity.

2.5 Writing for speaking: Transferring knowledge from the online to the FTF context

Comparisons between written CMC, SCMC and FTF performance of the same tasks have already been reported (Kern, 1995; Warschauer, 1996; Beauvois 1997; Payne and Whitney, 2002; Blake 2009). Kern’s study on learners of French compares the same participants using the local area computer application *Interchange* as SCMC tool, and their oral performance while discussing the same topic. The study found that participants’ language output was of a higher level of sophistication (range of

morphosyntactic features and variety of discourse functions) when using the SCMC tool *Interchange* than in the oral discussion. However, grammatical accuracy was compromised, since ‘they produced many errors in *Interchange*, and were exposed to faulty French’ (Kern, 1995:472). Kern concludes that *Interchange* is not well suited to facilitate formal accuracy, although the researcher also claims that ‘language educators must decide for themselves whether and how *Interchange* might be judiciously used in their particular settings to further particular instructional goals’, and that ‘other institutions will find their own unique purposes and uses’ (Kern, 1995:470).

In this same sense, Warschauer’s study (1996) also shows that language produced in SCMC was more formal and more complex (higher number of subordinate clauses) than in the FTF oral discussions. Warschauer also concludes in that study that ‘electronic discussion might be used effectively as a prelude to oral discussion. Students could first generate many ideas and then look them over and discuss or debate them orally. In addition, the formality and complexity of language in electronic discussion suggests that it might be an excellent medium for prewriting work since it could serve as a bridge from spoken interaction to written composition. In other words, FTF and electronic discussions could be combined in different ways to highlight the advantages of each’ (Warschauer, 1996:16).

In studies conducted by Beauvois (1997) and Blake (2009), participants in the experimental group using SCMC outperformed in oral tests those in the control group, who did not use SCMC. However, Beauvois’ pilot study does not specify which type of elements were transferred from the written mode to the oral performance, while Blake’s study focused on fluency, and did not identify any improvements in terms of linguistic, morphological, or lexical elements.

Additionally, a study conducted in 1990 by Smith with learners of Spanish using a computer conferencing system called *CoSy* showed that the use of this early form of SCMC improved participants’ written skills, and their ability to carry on conversations (1990:81). However, no specific data of which aspects or elements of the written or oral performance were particularly improved (linguistic, lexical, morphological, fluency, etc.) are available.

In another study conducted with German students, Abrams (2003) found out that, students who participated in SCMC outperformed those in the control group (who did not participate in SCMC) in terms of the quantity of output but not as far as the quality of their language is concerned (lexical richness, diversity, and syntactic complexity). Several studies conducted by Sotillo (2009; 2010) also support the argument that SCMC text-based online chat seems to be more beneficial for noticing than voice chats. However, some of those studies did not include post-tests to assess learners' internalization of what was noticed, so it cannot be claimed that SCMC noticing leads to L2 learning (Sotillo, 2009) or the incorporation of the linguistic form (Sotillo, 2010).

More recent research in this field conducted by Korvesi and Michel (2022) shows that using written computer-mediated communication functions as a bridge into oral performance. Their study proved that peer chatting had a significant positive impact in most of the linguistic measures of complexity, accuracy, and fluency, thus supporting the hypothesis that there is a direct transfer of language experiences across modalities (2022:276).

However, although some of these studies seem to indicate that using SCMC contributes to the development of oral skills, some of these authors also emphasize the need for more research supporting these findings and showing the benefits of CMC as facilitating the oral acquisition (Beauvois, 1997:94) or oral fluency development (Blake, 2009:227).

On the other hand, none of these studies addressed how SCMC may facilitate self-initiated self-repair or the accurate use of Spanish indicative-subjunctive modes in oral communication. Thus, how SCMC may, if any, facilitate the connection between noticing and incorporation of the linguistic form or transformation of declarative into procedural knowledge in the specific case of Spanish modality remains a question to be answered. Thus, the next section discusses how writing can contribute to speaking, and how comparison of the same task in two different modes and environments could serve as a tool to assess whether declarative knowledge has been transformed into procedural knowledge not only in writing but also in speaking.

2.5.1 Retrieval of knowledge

How knowledge and the skill of self-repair that learners might have developed during SCMC text-based online chat could be reproduced in the FTF oral context might find an explanation in the concept of retrieval.

Both Kellogg (1994) and Arnold et al. (2017) define retrieval as the recalling or copying of information from memory and without access to other materials such as books or one's notes. Arnold et al. (2017:116) also report that:

A lot of studies have proven that retrieval of information boosts retention and transfer of knowledge. Retrieval is more than simple re-exposure to the material since retrieval enhances learning and memory over and above restudying, an effect that is especially robust on delayed tests.

On the other hand, DeKeyser (2007) and Kellogg (1994) argue that transfer of knowledge or retrieval is more likely to occur when the cognitive operations involved in the new context include or overlap those included in the initial learning context or memory encoding. This means that if the task performed in the online environment and the FTF setting is the same, the opportunities for retrieval will be increased.

According to this, two main conditions in the initial learning setting (SCMC text-based online chat) for retrieval to occur in the new context (FTF oral discussion) can be identified:

- 1) The initial learning context should promote memory encoding and facilitate access to that memory in the new context.
- 2) The initial learning context should include or overlap the cognitive processes involved in the new context.

The following subsections explain how these conditions could be met through the use of SCMC text-based online chat, as proposed in this research.

2.5.1.1 Conditions for retrieval: The visual-spatial nature of writing

Olive and Passerault (2012) explored the benefits that the visual-spatial nature of writing has for learning. In this regard, the writing trace has a permanence (Ellis and Beattie, 1986:200) that the speaking is not providing, and it has been hypothesized that the written trace affects the cognitive demands of writing in two ways (Olive and Passerault, 2012:331):

-It helps the writer to control the transcription of the text, thus reducing the cost of graphomotor processes.

-It serves as an external memory supporting the high-level writing processes (planning, linguistic formulation, revision) because ‘writing becomes a more effective tool for recalling information than speaking, since writers do not need to memorize the text that has been already transcribed and, thus, they can handle more blocks of information than speakers. This shows the superiority of writing over speaking when recalling information’ as stated by Grabowski (2007, cited in Olive and Passerault, 2012:332).

In relation to the detection of errors, the affordances of the visual-spatial nature of writing have also been reported by Chenoweth and Hayes (2003, cited in Olive and Passerault, 2012:337), who argue, firstly, that error detection may also engage visual-spatial working memory in adult writers, and, secondly, that error detection does not totally cease when the text is no longer visible, since writers presumably have constructed a mental representation of their text, as argued by Olive and Piolat (2002, cited in Olive and Passerault, 2012:332). This idea is key for explaining the possibility of transferring error detection from the SCMC task to the oral task due to the permanence of such error detection even in the absence of the text.

Finally, there are also some benefits of the visual-spatial nature of writing for the location and retrieval of information. ‘Memory for the location of a word or piece of information may be based on a representation of textual content, but it may also rely on a visual-spatial representation of the text’ (Olive and Passerault, 2012:333).

Consequently, Le Bigot et al. (2011, cited in Olive and Passerault, 2012:333) argued that:

Like readers, writers construct visual-spatial representations of their texts, which they can then access to retrieve word locations.

In relation to the current research, this idea would support the hypothesis that writing contributes to memorisation/retention of information, which is visually represented by the learner for potential subsequent accessibility, and retrieval during the oral task.

2.5.1.2 Conditions for retrieval: The nature of the task

As mentioned in a previous section, transfer of knowledge or retrieval is more likely to occur when the cognitive operations involved in the new context include or overlap those included in the initial learning context or memory encoding (DeKeyser, 2007; Kellogg, 1994). When discussing task complexity, Skehan (1998, cited in Tavakoli, 2014:219) defines cognitive complexity as twofold: Cognitive familiarity and cognitive processing. Cognitive familiarity refers to the extent to which the learner is acquainted with the topic, the discourse genre, and the task. In this respect, research on oral performance has shown that accuracy and fluency increase when learners talk about well-known information. On the other hand, cognitive processing is related to the inherent task structure. As far as this aspect is concerned, studies on the impact of task structure on oral performance suggest that ‘a task with no problem-solution structure, without a clear timeline underlying the events, or with an arbitrary sequence of events resulted in less accurate and fluent performance’ (Tavakoli, 2014:221).

According to this, if the task performed in the initial learning context (SCMC text-based online chat) has the same structure, and is about the same topic as the task in the new context (FTF oral discussion), it is likely not only that similar cognitive processes are involved, but it is also likely to lead to more accuracy and fluency in the new context, thus, promoting retrieval. In the context of this research both the online and the FTF tasks have the same structure and address the same topics, meaning that both these conditions are met.

Table 5 shows how SCMC text-based online chat would promote retrieval and hence the transferring of knowledge to the FTF oral context:

Affordances of SCMC (text-based online chat) for the retrieval of knowledge	
Visualization	The visual-spatial nature of writing promotes location of information, detection of errors and retrieval of information through longer retention in the visual-spatial memory.
The nature of the task	The same structure and topic of the task both in the online environment and the FTF setting will involve similar cognitive processes and trigger retrieval of knowledge.

Table 5 Affordances of SCMC text-based online chat for the retrieval of knowledge.

The discussion and consideration of the literature review conducted so far has led to some research questions, which are proposed in the following section.

2.6 Implications of the literature review and research questions

The literature review has informed the design of the present research in the following aspects:

a) Even if the learning and acquisition processes are regarded as separate entities, both the interface position advocated by some SLA theorists, and studies about the neurobiology of the brain, support the idea that learning/explicit/declarative knowledge can be transformed into acquisition/implicit/procedural knowledge thanks to brain plasticity, and the ability of the brain to relearn by creating new neural connections.

b) In order for the relearning/repair of previously established knowledge to occur, there are several conditions that need to be facilitated:

- A solid and clear declarative base needs to be established.
- The learners need to notice and/or identify cognitive dissonance of the recurrent error.

-In addition to noticing, the production of modified output in the form of SR, and more preferably SISR, is necessary to prove that the old knowledge/old neural connection is being replaced or bypassed by the new knowledge/new neural connection.

-Constant practice and multiple opportunities to produce modified output could lead to the final automatization of the new knowledge.

c) SCMC text-based online chat shows some features that would arguably contribute to the above conditions:

-More time available and less pressure to participate would facilitate the allocation of attention resources to focus on form, that is, to thinking about the grammar, to using declarative knowledge to create cognitive dissonance, and to the noticing of errors.

-The visual-spatial dimension afforded by the text-based online chat would promote the noticing of errors.

-Practice with SCMC text-based online chat, and the possibility for participants to use * (* understood as the symbol usually used on text-messaging by participants to signal that an amendment of a prior error is in place) to self-repair their own posts in the chat would lead to the creation of modified output in the form of self-repair.

-Continuous practice with SCMC text-based online chat, and the possibility for participants to use * to self-repair in their own posts in the chat on a regular basis would lead to automatization of the habit of self-repairing and, ultimately, to correction of the recurrent error.

All these considerations lead to two of the research questions, which are object of this study:

1. How, if at all, can SCMC text-based online chat facilitate noticing and SISR/SR?

However, as mentioned before, noticing and self-repair are not enough to prove that the learner has internalized the knowledge. In order to transform the declarative into

fully proceduralized knowledge, the creation of a habit in the form of automaticity is necessary. Therefore, a second question that this study investigates is:

2. How, if at all, can practice over time with SCMC text-based online chat facilitate automaticity of SISR/SR?

Additionally, the literature review has also explored the specific features of SCMC text-based online chat that would arguably contribute to transfer knowledge from the written online setting to the oral FTF context. The implications of such features are:

a) Visualization of the text contributes to retention of information in the visual-spatial memory. Such information could be accessed later in the oral FTF setting.

b) The similarity between the online written chat task and the oral FTF task contributes to the retrieval of information since some of the conditions of the written online setting (the nature of the topic, the dialogic format of the discussion, the requirement of using a wide range of constructions with accuracy) are the same in the oral FTF setting.

All these considerations lead to the third question object of this study:

3. How, if at all, can SCMC text-based online chat facilitate the transfer of knowledge and abilities from the text-based online setting to the FTF oral situation?

Table 6 summarizes the stages that will potentially, if at all, lead to SISR when speaking. The columns display the different stages of the learning-acquisition process, the conditions that are created at each stage, and the tool or task that is used to promote such learning-acquisition process.

Stage	Elements elicited	Tool/Task
1. Establishing declarative knowledge.	Attach meaning and morphological value to indicative-subjunctive modes.	Classroom workshop

2. From declarative to procedural.	Noticing, self-repair, practice, and automatization.	Practice with SCMC text-based online chat prior to FTF oral debates.
3. Retrieval of procedural knowledge in a new setting.	Retrieval of information and automaticity	FTF oral discussion following practice with SCMC text-based online chat.

Table 6 Stages potentially leading to SISR in speaking.

These research questions thus contribute to fill several research gaps pointed out by Smith and González-Lloret (2021) in relation to technology-mediated task-based language learning, and Ziegler (2016) when exploring the advantages of SCMC for structural salience and complexity.

Once the theoretical framework and the research questions underpinning this research have been explained, the next section describes the methodology and collection of data selected to respond to those questions.

Chapter 3: The research design

3.1 Overall study design

This section presents the methodology applied to this study as well as the tools selected for data collection, and how these are relevant to the aim of the research. The design of the study consists of two main stages: Pre-intervention stage (carried out during Semester 1/beginning of Semester 2 2021-2022), and Intervention stage (carried out during Semester 2 2021-2022).

The pre-intervention stage consisted of participation in face-to-face oral debates about topics of current interest in Spanish-speaking countries. Feedback sheets of participants performance were collected for analysis and identification of accurate or inaccurate use of indicative-subjunctive-related structures.

The intervention stage consisted of participation in a SCMC text-based online chat followed by a face-to-face oral debate about the same topic. The time lapse between the SCMC text-based online chat and the face-to-face oral debate was of seven days at the most. Transcripts of the online conversation and feedback sheets of the oral debates were collected for individual participants. Comparison of individual participants' oral performance after the intervention and prior to the intervention was carried out to find out how (if any) the SCMC text-based online chat had influenced participants' use of indicative-subjunctive-related structures.

Figure 3 shows the overall design of the study and the link between post-intervention data and pre-intervention data comparison:

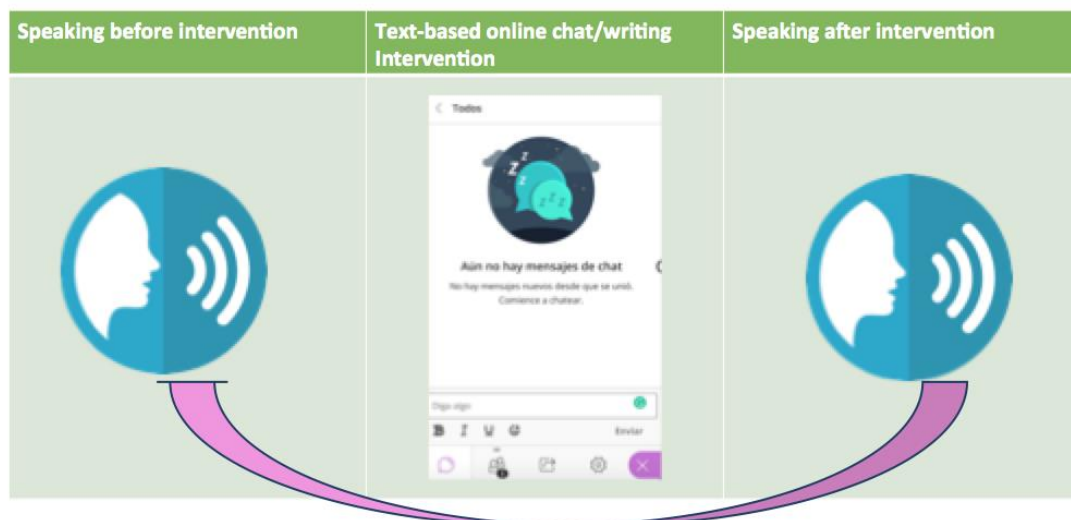


Figure 3 Overall study design.

3.2 Participants

All students taking the final-year compulsory Spanish module SPPO3010 had the opportunity of participating in the five formative-assessed FTF oral debates as part of their seminars during semester one 2021-2022.

Those specific students who had been identified by tutors during semester one (through analysis of feedback sheets) as making recurrent errors in the use of indicative/subjunctive were encouraged by their respective tutors to take part in the

study. Such advice was provided either by tutors giving information about this in the individual feedback sheet, for example, ‘in order to further practice the difference between indicative/subjunctive I advise you to participate in an online activity that will be offered in semester two’, or by informing them about this option when providing them with further feedback during office hours.

However, for ethical reasons related to not putting students in a disadvantaged position, the option to participate in the text-based online chat was offered to all students in the module, irrespective of whether they made such mistakes or not. Thus, all students enrolled in the module were sent an email including an information sheet explaining what the study entailed. They were also reminded via email each week of the possibility of participating in the text-based online chat for further optional practice. Confirmation of attendance to the text-based online session was required because participants interested in taking part in the study were sent a written consent form prior to entering the online chat session.

Participants were able to access the chat room via the VLE Minerva from the University of Leeds by using their student ID, or if they preferred to participate anonymously, they were allocated a randomized number, and they were able to access the room by following a guest link. In the FTF oral debates, there were no roles or characters, but students participated with their own opinions. Accordingly, they were advised to participate in the online written chat according to the ideas, opinions, and arguments they had prepared for that debate in order to remain as close as possible to the actual situation of the assessed FTF oral debate in S2, and in order to facilitate transfer or retrieval of information.

Students were able to participate any week they wanted to, and they were allowed to withdraw from the study at any time they wished. However, continuous practice was advised since this could lead to students’ automatization of SISR, and ultimately, correction of the recurrent error in the form of accurate output.

Comparison of students’ individual performances both in the text-based online chat and the FTF oral debate was possible because to access the online chat they either used their actual name or the assigned code, which was previously registered by the

researcher in order to keep a record of consent forms and reflective logs, and which allowed identification of the participants. On the other hand, feedback sheets provided by tutors in the oral debates included the individual student's name and in the audio recording students introduced themselves with their actual names. However, all of this information was anonymised for the presentation of results in this thesis.

3.3 Criteria for the selection of participants

A total number of 132 students taking part in the module Practical Language Skills in Spanish 3 were invited to participate in this study. The study consists of two stages and five tasks. However, since participation was voluntary, not all students took part in all five tasks. While most of them participated in tasks one and four involving formative and summative assessment through FTF oral presentations and debates in seminars during semesters one (formative assessment) and two (summative assessment) respectively, not all of them participated in tasks two, three and five: The grammar workshop, the text-based online chat task and the completion of the reflective log, which were not components of either the formative nor the summative assessment of the module, but are key tasks in the design of this study. In addition to this, there were some students who even though they contacted the researcher expressing their interest in participating in the text-based online chat, they did not attend any of the sessions although they were already assigned a code for anonymity purposes. Table 7 summarizes the results regarding overall participation in tasks two, three and five of this research, and the total number of consent forms collected:

Task	No. Of attendees
Attendance to grammar workshop	26
Expressions of interest in participating in text-based online chat	41
Actual participation in at least one text-based online chat	34
Completion of reflective log	20
Consent forms signed	34

Table 7 Overall results of participation in this research.

Table 8 shows a summary of overall participation of individual students during semester two according to the number of sessions they attended:

No. Of text-based online chat sessions	No. Of participants
Participation in 1 session	16
Participation in 2 sessions	9
Participation in 3 sessions	6
Participation in 4 sessions	1
Participation in 5 sessions	1
Participation in 6 sessions	0
Participation in 7 sessions	0
Participation in 8 sessions	0
Participation in 9 sessions	1
Participation in 10 sessions	0
Total No. Of participants	34

Table 8 No. Of text-based online sessions attended by individual participants.

Since participation in the different tasks was uneven, and not all tasks are relevant to respond the RQs, some criteria needed to be put in place to select the data that would be analyzed. In this sense, the criteria to respond to RQs one and three, namely, whether SCMC in the form of text-based online chat would facilitate SISR/SR of indicative-subjunctive-related structures, and whether SCMC would facilitate the transfer of information from the written context to the oral one included:

1. Participation in all or at least some of the FTF oral debates during semester one to identify potential issues in the use of indicative-subjunctive modes or lack of use of such modes, which may need SISR/SR through the SCMC tool proposed in this study.
2. Participation in all or at least one text-based online chat during semester two.
3. Participation in all or at least 1 FTF oral debate during semester two, preferably, the debate related to the same topic as the text-based online chat for a better comparison of individual participants' performances.

4. Consent form signed and sent to the researcher.

Table 9 shows the selection of participants that met such criteria and whose data will be, therefore, analyzed to answer research questions one and three.

Participant	Consent form	Weeks of oral feedback sheet S1	Weeks of participation in text-based online chat	Weeks of FTF oral feedback sheet S2
ChatW1/1	CF	4,6,8,9,10	1,2,3,4,6,7,8,9,10	1,2,3,4,6,7,8,9,10
ChatW1/4	CF	4,6,8,9	1,3	1,3
ChatW1/5	CF	4,6,8,9,10	2,4	2,4
Chat W1/6	CF	4,8	1,2,3,9	1,2,3,9
Chat W2/7	CF	4	2,3,5	2,3,5
Chat W2/9	CF	4,6,8,9	5	5
Chat W2/10	CF	4,6,8,9	2,3,4,6,8	2,3,4,6,8
Chat W2/11	CF	6	2,5	2,5
Chat W2/13	CF	4,8,9	2,5	2,5
Chat W2/15	CF	4	2,3,5	2,3,5
Chat W2/16	CF	6	2	2
Chat W3/18	CF	4,6,9	3,6,8	3,6,8
Chat W3/19	CF	9	3,7	3,7
Chat W3/20	CF	8	3	3
Chat W3/21	CF	9,10	3,6,7	3
Chat W3/22	CF	6,10	3,7	3
Chat W3/23	CF	4,6,9,10	3,5	3,5
Chat W3/25	CF	6	3,5,7	3,5,7
Chat W4/28	CF	6	4,5,7	4,5,7
Chat W4/29	CF	6,9	5	5
Chat W4/31	CF	8	4	4
Chat W6/35	CF	6,9	6	6
Chat W7/38	CF	10	7,8	7,8
Chat W7/39	CF	4	7,8	7,8

Chat W9/41	CF	4,6,8,9	9	9
Total No of participants	25			

Table 9 Participants meeting the criteria to respond to RQs 1 and 3.

Those students who, despite expressing their interest in participating in the text-based online chat task, did not actually join any of the sessions, students who did not send the consent form, or students whose oral feedback sheets either from semesters one or two were not available for collection have been excluded from the sample to be analyzed. Thus, a total number of 25 students as shown in Table 9 were included for analysis of data to respond to RQs one and three of this study.

Answering RQ2, that is, how SCMC would, if at all, facilitate automaticity, required from participants to have been involved in extensive practice of text-based online chat to be able to transform declarative knowledge into procedural knowledge as stated in a previous section (Suzuki and DeKeyser, 2017). In this sense, a criterion was established, that those students who participated at least four times or more out of 10 in text-based online sessions and the corresponding FTF oral debates, will be selected for an in-depth analysis of results. This does not mean that participants taking part in three or less text-based online chats are not going to be considered, but the results of such cases will not be relevant to respond to RQ2 since there is no consistency of participation over time, which will hypothetically lead to automatization. Instead, such cases where participation is low will be used to respond to RQs one and three, as well as to pinpoint how the SCMC text-based online chat tool is used for SISR/SR, and which instances are more prone to be the object of repair: Indicative or subjunctive, lexical items, conjugation of verbs, genre of nouns, etc. Although this study and the research questions are focused on the indicative-subjunctive dichotomy, any other instances of SISR/SR identified in the transcripts of the online chat will contribute to further understanding of how this tool is used by participants, and ultimately, to the design of further studies in this respect.

Table 10 shows participants meeting the criteria to respond to RQ2:

Participant	Consent form	Weeks of oral feedback sheet S1	Weeks of participation in text-based online chat	Weeks of oral feedback sheet S2
ChatW1/1	CF	4,6,8,9,10	1,2,3,4,6,7,8,9	1,2,3,4,6,7,8,9
ChatW1/6	CF	4,8	1,2,3,9	1,2,3,9
ChatW2/10	CF	4,6,8,9	2,3,4,6,8	2,3,4,6,8

Table 10 Participants meeting the criteria to answer to RQ2.

As can be seen in Table 10 only three participants took part in four or more text-based online sessions. Therefore, RQ2 will be answered by focusing on the data analysis of those three participants. According to information displayed in Table 10 those participants correspond and will be referred to as: ChatW1/1 (nine weeks of participation), ChatW1/6 (four weeks of participation), and ChatW2/10 (five weeks of participation).

Participation in the workshop about the uses of indicative and subjunctive modes, and completion of the reflective log have not been considered required tasks for the inclusion of that individual participant's data in the analysis of results but are desirable data. Although one of the aims of the workshop is to clarify the difference between indicative and subjunctive modes, such difference is already explained and practiced with students in several lectures during S1 and S2. In this sense, even though some of the students may have not attended the workshop included as a task in this study, it has been assumed that they know about the uses of these modes either through attendance to lectures in this module or learning of Spanish in previous years during the degree or at high school. In addition to this, they are also supposed to know or be aware of having issues using these modes through the feedback provided by their respective tutors during S1. This means that, even if they did not attend the workshop at the beginning of S2, they should have been aware of their need to improve the use of indicative and subjunctive, and have decided to participate in other tasks, which are more relevant to the main research question such as participation in the text-based online chat, and subsequent FTF oral debates.

Accordingly, the main aim of the data collected from the workshop included in this study is to add more information on how effective is to teach Spanish indicative and subjunctive modes from the point of view of a cognitive grammar, and whether participants attending that workshop show more awareness of such difference and uses than those participants who did not attend it.

On the other hand, the main aim of the reflective log is to provide more qualitative data about participants' perception of how useful, if at all, the text-based online chat task was to improve their language performance, and in which ways was this tool used. In this sense, completion and submission of the reflective log is not expected to respond directly to any of the three main research questions, but it will help to identify affordances and constraints of using this tool that could be explored and be the topic of further research.

Several sources of data collection have been used in each stage, and they are explained more in depth in the following sections.

3.4 Stages of the study: Tasks and data collection tools

3.4.1 Pre-intervention stage. Task 1: S1 FTF oral debates

Task 1. Data collection tool: S1 oral feedback sheets

All students taking part in the Module SPPO3010 Practical Language Skills in Spanish 3 at the University of Leeds were offered to participate in five non-assessed formative FTF oral debates in the seminars during semester one. These debates are designed as a preparation and formative practice for assessed FTF oral debates in semester two, and students received detailed written feedback of their participations. Prior to these FTF debates students were informed of the assessment criteria ([Appendix 1](#)). More specifically, and for the purposes of this research, module tutors explained to students that the notion of 'Range and accuracy of grammatical constructions' refers to the correct use, among other, of subordinate sentences, such as the ones which are usually followed by indicative and subjunctive. Such clarification is necessary not only so that students know what is expected from them but also, and

more relevant to this study, to increase their motivation and promote their interest to be proficient in those structures, since accurate use of those structures will have an impact in their final mark in semester two.

Tutors teaching in this module were asked to specifically account in their respective students' feedback sheets for any instances of not using indicative and subjunctive modes correctly. They were also instructed in providing the correct form to the student if errors were detected and highlight those specific structures to encourage students' awareness of their own errors. This type of feedback was provided by dividing the space devoted to comments in the feedback sheet in two columns: Positive feedback (+) and negative feedback (-). The positive feedback column collected instances of structures that were used accurately, while the negative feedback column or 'needs to be improved' section displays instances of errors when using indicative/subjunctive modes (among others), and provides the correct answer. [Appendix 1](#) shows an empty sample of the oral feedback sheet. Figure 4 shows an example of a participant's feedback sheet from week four of S1. The participant was assigned ID code chatW1/1, and the structure 'evitar que + indicative' (to prevent that + indicative) has been identified as the one that needs to be repaired, since it should be followed by subjunctive and not indicative.

Student	chatW1/1	Fall	Third	2:2	2:1	First
Si W4 ¿Puede la música ser peligrosa?		0-39	40-49	50-59	61-69	70-100
GRAMMATICAL AND LEXICAL STRUCTURES						
Range & Accuracy of Grammatical Constructions					•	
Range and control of vocabulary					•	
ORAL PRODUCTION						
Phonology (pronunciation and intonation)						•
Fluency and communicative effectiveness						•
Interaction					•	
Appropriateness and flexibility						•
CONTENT						
Relevance of contributions to the debate						•
Sophistication and relevance of ideas						•
Comments which justify the mark:						
(+) Es necesario que protejamos ✓ Si no protegemos... vamos a ver	(-) son en contra de estar rebelia = rebeldía evitar que escuchan = escuchen a los niños = para anónimos = anónimos	Mark (0-100): 65	Mark (0-100): 65	Mark (0-100): 65	Mark (0-100): 65	Mark (0-100): 65

DEBATE: Si W4 ¿Puede la música ser peligrosa?

STUDENT: chatW1/1

Necesita mejorar:

- Concordancias
- Tiempos del pasado
- Oraciones condicionales
- Precisión léxica
- Conjunciones
- Variedad léxica
- Variedad de construcciones
- Concordancia subjuntivos
- Contenido
- Contribución
- Entonación
- Segmentación
- Interacción

Tus puntos fuertes:

- Buena pronunciación
- Buena entonación
-

Desarrolla un poco más tus ideas.

Figure 4 S1W4 feedback sheet chatW1/1.

The feedback sheets were scanned and uploaded by individual tutors to a folder shared in the University of Leeds drive for the module SPPO3010 or emailed directly to the researcher.

Task 1. Analysis of data 1: S1 oral feedback sheets

The feedback sheets that students received after participation in a FTF debate were analyzed by the researcher and the other five tutors teaching the seminars in this module. The analysis consisted in identifying those students making recurrent errors in the use of indicative and subjunctive modes, and who may potentially benefit from using the SCMC task designed and proposed in this research. However, although these students were the focus of the present research, for ethical reasons, all students taking the module were invited to participate in up to 10 non-assessed text-based online chat sessions prior to the 10 assessed FTF oral debates, which took place during S2. In doing this, all students, and not only those who are the object of this study, had access to the potential benefits, if at all, of using SCMC to improve language performance, thus eliminating any possibility of placing students not participating in the online chats in a disadvantaged position.

3.4.2 Task 2: Indicative/Subjunctive workshop

Task 2. Data collection tool: Questionnaires

Prior to the text-based online sessions in S2, all students taking the module were invited by the researcher via email to a one-hour workshop to review and reflect on the uses of indicative and subjunctive modes from the point of view of a cognitive grammar. The main aim of this workshop was to make sure that all participants attach semantic value to the indicative and subjunctive modes as well as raising awareness on the morphological difference between them. In doing so, a solid declarative base is being established, and the possibility of learners not benefiting from the SCMC task due to lack of explicit knowledge of the rule was ruled out. Another reason underpinning the design and implementation of this workshop was the creation of ‘cognitive dissonance’, discussed in a previous section of this research and according to Festinger’s definition (1975, cited in Moon, 2004:18). Accordingly, it was

hypothesized that the workshop would potentially trigger the ‘cognitive dissonance’ in learners which, in turn, could contribute to more awareness and self-detection of errors in the subsequent text-based online chat practice. The instruction and tasks presented in the workshop followed the ‘declaration-statement/non-declaration-non-statement’ explanation proposed by Llopis-García, Real-Espinosa and Ruiz-Campillo (2012) for indicative-subjunctive modes.

At the beginning of the workshop participants completed a brief questionnaire ([Appendix 2](#)) related to the topic of the workshop. The main aim of the questionnaire was to gather information about how students had learned in the past the difference between indicative and subjunctive, and whether they found such learning challenging or, conversely, whether they had a clear idea about the difference. The questionnaire included two main questions:

1. Have you learned the difference between indicative and subjunctive modes in previous years of instruction? Yes/No
2. If you have answered ‘yes’ to question 1 which rule, have you learned to make such distinction?

After completion of the questionnaire, the workshop invited students to reflect on the difference between the use of indicative and subjunctive in Spanish from the point of view of a cognitive grammar. At the end of the workshop participants practiced those uses with an interactive online activity in which students must make decisions according to the communicative intentions reflected by indicative and subjunctive modes. Such an activity and its impact on students had already been proposed and discussed by Molina-Vidal (2020). A sample of the activity is included in [Appendix 3](#). At the end of the session, students also completed a brief post-workshop questionnaire ([Appendix 4](#)) aimed at finding out whether their understanding of the indicative-subjunctive rule was clear after attendance to this workshop, and whether the interactive online activity had been effective in teaching such difference.

The questionnaires were designed, and data was digitally collected using the digital tool *SurveyMonkey*.

To summarize, the main tools of data collection and the type of information collected at this pre-intervention stage are summarized in Table 11:

Data collection tool	Procedure	Type of data
Oral performance feedback sheet of individual students during S1	-Analysis of feedback sheets of oral discussions of all students. -Identification of students making a recurrent error in the use of indicative-subjunctive-related structures.	Qualitative: Examples of oral output showing errors in the use of indicative-subjunctive-related structures. Quantitative: Number of instances in which indicative-subjunctive-related structures were used inaccurately.
Workshop Questionnaires	-Pre-workshop questionnaire about learner's previous knowledge on the use of indicative-subjunctive modes. -Post-workshop questionnaire about participants' understanding of the use of indicative-subjunctive modes.	Qualitative: Information related to experiences learning the rule of indicative and subjunctive to find out how explicit or declarative knowledge has been previously established. Quantitative: -Number of students having previously learned the rule of use of indicative-subjunctive modes according to a cognitive grammar approach or not. -Number of students having understood the rule after attendance to the workshop.

Table 11 Data collection tools at pre-intervention stage.

3.4.3 Intervention stage. Task 3 SCMC text-based online chat

Task 3. Data collection tool: Transcript of the SCMC text-based online chat conversation

As already discussed in prior sections, SCMC in the form of text-based online chat has been chosen as the main tool of intervention in this research because it shows some features which would potentially promote awareness, noticing, and SISR/SR of recurrent errors. Some of these features include:

- More time available for participants to build sentences and think about modality, that is, the use of indicative or subjunctive modes.
- Visualization of the text as opposed to oral performance (in which the output cannot be seen), would promote the noticing of errors.
- Lack of turn taking in the online setting would promote the use of * for SISR since interruptions of students' participations are different than in the oral setting.
- The reading of the transcript would provide both more time and visualization of language performance, thus leading to more noticing and, arguably, more SISR in the oral FTF context.
- Regular use of the SCMC text-based online chat for SISR/SR could lead to automatization of SISR due to repetition over time.
- The slower pace (in comparison to oral FTF conversation) provided by SCMC text-based online chat could facilitate transfer of information and skills from the online setting to the oral FTF one. If students realize that the slow pace of the online setting allows them more time for SISR, they might as well try to talk a little bit slower, and to think more about modality choices to be able to SISR, if necessary, in the FTF oral debates.

Accordingly, a text-based online chat session was held every week over the second semester and prior to the assessed FTF oral debate in the seminar. The online session took place either on a Thursday between 3pm and 4pm or on a Friday between 1pm and 2pm, which are the days and times when all lectures of the module SPPO3010 have been already taught, meaning that all students have the same amount of information about the topic to be discussed in the debate.

The topic discussed in the text-based online chat and in the FTF oral debate was the same. However, the online discussion was not assessed -it was only aimed at providing extra practice that would facilitate learners' awareness of mistakes in the use of indicative-subjunctive-related structures, and, potentially, lead to students repairing those errors.

The text-based online chat used the University of Leeds online platform *Blackboard CollaborateUltra*, which is easy and safe for students to access via the VLE Minerva, and with which they are already familiar.

Prior to starting the text-based online chat, participants were given the following information and basic instructions on how the session was going to be conducted, and how to use the written chat tool for discussion:

- 1) The topic of discussion in today's session is...
- 2) Remember to participate according to your own views and ideas about the topic of this debate.
- 3) The session will last 60 min. You will have more or less 55 min. to discuss, and the last 5 min. will be for final statements and conclusions.
- 4) You can use * to self-correct and amend any written participation that you have already posted in the chat.
- 5) After the session is finished you will receive via email a transcript of the whole conversation. If you have any questions regarding the transcript do not hesitate to contact the researcher via email or at her office hours.
- 6) Remember to include your thoughts, experiences, and observations about this session in your reflective log.

The researcher was present at the text-based online chat session, and she only participated when the number of participants was low to prompt further discussion or

to provide feedback. Also, the researcher did not provide any direct feedback or repair of any mistakes made by participants regarding the use of indicative and subjunctive modes but prompted reflection on those specific mistakes to elicit participants SR, while trying to activate explicit knowledge. This is aligned with the idea, as already stated in previous sections of this study, that learners prefer self-repair over other type of repair (Smith, 2008:86). Another motivation for doing this was to assess the role of explicit instruction to create cognitive dissonance and, in general, its role in SLA (Ellis, 2015). Such elicitation followed the explanation of indicative-subjunctive modes presented at the grammar workshop. Consequently, whenever the tutor wanted to elicit repair of an indicative-subjunctive-related error, the participant was asked to reflect on whether they were making a statement/declaration (indicative) or a non-statement/non-declaration (subjunctive). An example of such elicitation with the English translation of the conversation is shown in fig.5:

<p>Chat W1/6</p> <p>13:50 sí claro, los primeros pasos es que el gobierno que espana tiene hoy en dia actua de manera democratica, justa y recuperar a las victimas</p> <p>Isabel Molina-Vidal</p> <p>13:51 Chat W1/6: "actua" es una declaración de que eso está pasando? o no estás declarando?</p> <p>Chat W1/6</p> <p>13:51 no seria tantos casos unsolved</p> <p>actue **</p>	<p>ChatW1/6</p> <p>Yes, of course, the first step is that the government that Spain has nowadays acts (indicative) democratically, with fairness and recover the victims.</p> <p>Isabel Molina-Vidal</p> <p>ChatW1/6: 'acts' (indicative) are you stating that, that is happening? Or you are not stating that, that is happening?</p> <p>ChatW1/6</p> <p>There would not be so many unsolved cases</p> <p>Acts** (subjunctive)</p>
--	---

Figure 5 Wording of tutor's elicitation for indicative-subjunctive-related errors.

The tutor also provided positive feedback to participants whenever they were using indicative-subjunctive-related structures accurately. Sometimes such feedback also

included the use of emojis of clapping hands or thumbs up. The aim in doing this was: On the one hand, to clarify to learners what constitutes a complex structure, since use of these is included but not clearly defined in the marking criteria. On the other hand, to draw attention on these structures and encourage their use. Finally, to create a relaxed environment and to raise the participants' confidence. Fig. 6 shows an example of such positive feedback. The question marks at the end of the tutor's feedback correspond to two emojis, which could not be captured in their original form when copying the transcript in a word document.

<p>Chat W1/1</p> <p>3:26 PM</p> <p>Aunque un referendum sea la solución mas democrática, opino que la mejor situación para la Sahara Occidental es unirse con Maurruecos para que pueda recibir inversiones en infraestructura y empleo</p> <p>Isabel Molina-Vidal</p> <p>3:27 PM</p> <p>ChatW1/1: excelente uso de "aunque + subjuntivo) 🙌👏</p>	<p>ChatW1/1</p> <p>Although a referendum is (subjunctive) the most democratic solution [...]</p> <p>Isabel Molina-Vidal</p> <p>ChatW1/1:</p> <p>Excellent use of 'although + subjunctive) [2 emojis of clapping hands]</p>
--	--

Figure 6 Positive feedback provided by the tutor.

Once the online session was finished, the researcher made a copy of all online discussions every week on a word document, and the transcript was sent to participants for further reading and working. Use of the transcript was at the learner's discretion, but a question regarding the use of it was included in the reflective log to assess the potential benefits of the transcript as a learning tool. As already discussed in a previous section, revision quality has been proven better with a page-by-page presentation than with a scrolling presentation. Additionally, it helps the writer to control the transcription of the text, thus reducing the cost of graphomotor processes, and, finally, it serves as an external memory supporting the high-level writing processes (planning, linguistic formulation, revision). This is all related to the visual-spatial nature of the written text, which leads to hypothesized that using the transcript would allow learners to notice more errors and to SISR.

Accordingly, it was expected that information related to how students used or not the transcript of the online chat conversation would shed light into the specific features, if any, that make SCMC text-based online chat more beneficial for noticing and SISR than the oral FTF setting. In other words, how the written mode may constitute a scaffolding mechanism for speaking.

Task 3. Analysis of data 1: Transcript of the text-based online chat conversation

Although the effectiveness of using chat logs as the only source of collecting data instead of using screen capture as well has been questioned (Smith, 2008), as results based on printed chat logs seem not to show many instances of self-correction by learners, Smith also mentions a study conducted by Yuan (2003) in (Smith, 2008:96) in which the use of printed transcripts of the chat interaction yielded similar results than those presented in Smith's study using screen capture. Accordingly, the methodology used in both these studies did not significantly affect the amount and type of self-repair initiated by learners. With regards to the present research, it must be noted that, in addition to the transcripts of the chat conversation, feedback notes and audio recordings of oral performance were also used to identify instances of SISR, which could have been missed in the oral feedback sheets. In this sense the design of this research has combined different forms of data collection or mixed methods to corroborate findings following Campbell, Goodman-Williams, Feeney and Fehler-Cabral's (2020:126-127) definition of methodological triangulation.

Accordingly, the transcripts of these online discussions were analyzed to identify instances of use of * to signal SISR/SR, as well as instances of SISR/SR in which the * was not used, but SISR/SR was provided by the participant. A colour coding system has been used to classify the different types of SISR/SR found in the transcripts, and to facilitate the location of the specific example in the corresponding transcript. The code identifies the week of the transcript (W) the group transcript (T) followed by a colour depending on the type of SISR/SR and, finally, a serial number in that specific colour category. The colour coding system identifies uses of SISR/SR not only in indicative-subjunctive-related instances, but also in other grammatical or lexical categories. In doing so, which type of errors are more likely to be noticed and, hence,

subject to SISR/SR by participants will be easier to identify. Additionally, not only instances of accurate use of SISR/SR, but also instances of inaccurate/unnecessary use of it or missing/non-use of it have been collected and classified. Such information was relevant to see whether the same structures were subject to different types of SISR/SR (accurate, non-accurate/unnecessary or lack of necessary SISR/SR), which is an indicator of adjustments being made in individual participant's linguistic development.

[Appendix 5](#) shows an example of a transcript of a text-based online chat with the code colours highlighted according to different categories. The colours used for coding the instances correspond to the following categories:

Green: Accurate indicative/subjunctive related SISR/SR: Participant uses * and provides the correct form of indicative or subjunctive modes through SISR/SR.

Yellow: Inaccurate indicative/subjunctive related SISR/SR: Participant uses * and provides a form of indicative or subjunctive modes that is not correct through SISR/SR.

Blue: Accurate other than indicative/subjunctive related SISR/SR: Participant uses * and provides accurate output related to vocabulary, spelling, prepositions, past forms, a missing word or unfinished sentence, reformulation of their own words, etc. through SISR/SR.

Pink: Inaccurate other than indicative/subjunctive related SISR/SR: Participant uses * and provides a non-accurate output related to vocabulary, spelling, prepositions, past forms, a missing word or unfinished sentence, reformulation of their own words, etc. through SISR/SR.

Red: Unnecessary SISR: Participant uses * to self-initiate self-repair but there was no mistake, and provides a form or repair that is equally correct.

Dark Blue: Participant uses * followed by a question mark and asks the tutor for feedback or elicitation.

Figure 7 shows how examples from transcripts have been coded. In this case, the example has been coded as W2T3Green1, that is, week 2, transcript 3 (group 3), Green (SISR/SR of an indicative-subjunctive-related structure), example 1 (first instance identified in all participants and in all transcripts). The green category corresponds to the focus of this research. In this example participant ChatW2/11 has used the structure ‘*para asegurar que este problema termina* (indicative)’ (to ensure that this problem is (indicative) over). However, this structure should be followed by subjunctive ‘*termine* (subjunctive)’ as signalled in the SISR.

Chat W2/11

13:29

Es inaceptable que haya dos generaciones de saharauis en exilio dado que los primeros niños que nacieron en los campos ahora tienen cerca de 38 años. Debe ser la responsabilidad de la ONU y España **para asegurar que este problema termina** lo antes posible porque hay personas atrapadas en los campos sin un futuro.

• 13:29

***termine**

Figure 7 Colour code for SISR/SR in text-based online transcripts.

If the SISR/SR appears in a different participant’s post from the one including the error, the second post showing the SISR/SR has been assigned the serial number of the first post plus .1. For example, W1T2Green4 and W1T2Green4.1 would correspond to week 1, transcript 2 Green (participant self-corrects accurately an indicative-subjunctive-related structure after researcher/tutor’s elicitation) example number 4 (showing the post where the mistake has been made), and example 4.1 (post showing tutor’s elicitation and the participant’s self-repair of the previous error). In the example shown below, participant ChatW1/6 has used the structure ‘*los primeros pasos es que el gobierno que tiene espana hoy en dia actua* (indicative)’ (the first steps is that the government that Spain (misspelled by the participant) has nowadays act (indicative) in a democratic way’). However, this structure should be followed by subjunctive ‘*actúe*’ (subjunctive)’, and therefore, the tutor’s request for participant’s reflection and noticing: “*actua*” es una declaración de que eso está pasando? o no estás declarando? (‘actua’ is a statement of that happening or you are not stating that

that is happening?). Participant's response to tutor's elicitation shows an amendment of the previous post providing the subjunctive form 'actue' and signalling it with *.

Figures 8 and 9 show such an example:

Chat W1/6

13:50

si claro, los primeros pasos es que el gobierno que espana tiene hoy en dia **actua** de manera democratica, justa y recuperar a las victimas

Figure 8 Colour code for instances of SISR/SR shown in different posts:

W1T2Green4.

Isabel Molina-Vidal

13:51

Chat W1/6: **"actua"** es una declaración de que eso está pasando? o no estás declarando?

Chat W1/6

13:51

no seria tantos casos unsolved

actue ** |

• 13:52

Figure 9 Colour code for instances of SISR/SR shown in different posts:

W1T2Green4.1.

Figures 10 to 14 show examples of the other colour categories according to which the use of * for SISR/SR has been codified:

Chat W1/6

3:15 PM

Y posiblemente, una de las maneras de combatir este conflicto es que los poderes internacionales, como la ONU **asumir** la responsabilidad para que protejamos estas comunidades

Isabel Molina-Vidal

3:19 PM

Chat W1/6: "asumir" no lo has conjugado. Cuidado.

Chat W1/6

3:20 PM

como la ONU **asume** la responsabilidad *

Figure 10 Example of colour coded yellow use of * W2T1Yellow1, Yellow1.1 & Yellow 1.2.

Figure 10 shows an example coded as yellow, that is, inaccurate indicative/subjunctive related SISR/SR. In this case, participant ChatW1/6 has used the structure '*una de las maneras de combatir este conflicto es que los poderes internacionales como la ONU **asumir** (infinitive) la responsabilidad*' (one of the ways to solve this conflict is that the international powers, like the UN to assume (to infinitive) the responsibility) followed by infinitive (asumir) instead of subjunctive. However, even when prompted by the tutor to think about the tense of the verb '*asumir no lo has conjugado. Cuidado*' (You have not used a conjugated form of the verb to assume. Careful), the participant provided self-repair that is not correct because it is an indicative form (*asume*) instead of a subjunctive one (*asuma*), which would be the accurate one.

Chat W2/7

13:55

en algun caso, lo más importante para mi es la dignidad de todas **las mujeres involucrados** y también el feto, creo que la maternidad subrogada puede funcionar en condiciones dignas y con motivos altruistas pero dadas las complicaciones del tema, es difícil decir cómo se podría hacer esto sin desafíos.

Chat W2/7

***involucradas**

• 13:56

Figure 11 Example of colour coded blue use of * W5T3Blue29 and W5T3Blue29.1.

Figure 11 shows an example coded as blue, that is, accurate other than indicative/subjunctive related SISR/SR. In this case, participant ChatW2/7 has posted '*las mujeres* (feminine) *involucrados* (masculine)' (**the women involved**). The participant has then used the * to SISR and provide the same adjective in the feminine form '*involucradas*' (**involved-feminine**) in agreement with '*las mujeres*' (**the women**), thus providing the correct form of the adjective.

Chat W1/5

13:42

Es decir, no creo que sea útil enseñar a los saauris la historia de españa y el lenguaje castellano, es mejor ayudarles **entender su historia indígena**

Chat W1/5

13:42

***entender a**

Figure 12 Example of colour coded pink use of * W2T2Pink1 and W2T2Pink1.1.

Figure 12 shows an example coded as pink, that is, inaccurate other than indicative/subjunctive related SISR/SR. In this case, participant ChatW1/5 has posted '*entender su historia indígena*' (**to understand their indigenous history**). The participant has then used the * to SISR by including the preposition '*a/to*' before the direct object '*su historia indígena/their indigenous history*'. However, such self-repair is incorrect, since the preposition '*a*' is used in Spanish before direct object, which refers to a person, which is not this case. The first post without the preposition was correct.

Chat W1/6

13:29

Es una pregunta difícil, dado que de mirar atrás a la historia, obviamente las van a aparecer, pero simultáneamente, no cree que los que fallecieron y estaban afectados personalmente gracias a la dictadura **necesitan** obligar a la Iglesia o el Estado por ejemplo de darse cuenta lo que hicieron

Chat W1/6

13:30

necesitan *

Figure 13 Example of colour coded red use of * W1T2Red1 and W1T2Red1.1.

Figure 13 shows an example coded as red, that is, unnecessary SISR. In this case, participant ChatW1/6 has used an accurate tense *'no cree que los que fallecieron [...]* **necesitan obligar a la iglesia'** (Do not you think that those who died [...] need (indicative) to force the church). The participant has then used the * to SISR of the verb *'necesitan/they need'*, however, no SISR was necessary since the sentence was accurate. In addition to this, the option provided in the SISR is the same, as the one used in the first sentence, not an alternative one.

ChatW1/1

15:38

Si. La lengua es una forma de organizar los sociedades. En este sentido, nuestro sociedad esta cada vez más diverso y evolucionando sexualmente y en genero, entonces, sería fundamental que la lengua cambie con **el sociedad**

• 15:38

***la sociedad o el?**

Figure 14 Example of colour coded dark blue use of * W10T1DarkBlue1.

Figure 14 shows an example coded as dark blue, that is, participant uses * but does not provide repair. Instead, both options are included, and the tutor is asked for feedback or elicitation. In this case, participant ChatW1/1 is not sure if the word *'sociedad' 'society'* is masculine and should be preceded by *'el'* or feminine and should be preceded by *'la'*.

Further analysis of the 22 transcripts by the researcher also found some instances in the following categories:

- SISR was necessary but was not provided by the participant.
- SISR was performed by the participant, but it was not signalled with the *.
- Instances in which participants are hesitant about SISR, and ask the tutor for direct feedback, but do not signal with * the specific structure or word.

Accordingly, additional colour codes were assigned for such instances, which were considered relevant to answer RQ1, since they could account for the non-noticing of indicative-subjunctive-related errors (coded Dark Red), noticing but not signalling * of errors (Grey) or noticing but waiting for tutor's confirmation to proceed with the self-repair (Black).

Dark Red: Indicative/subjunctive-related error not noticed by the participant and necessary SISR/SR not provided by the participant with or without researcher/tutor's elicitation.

Grey: Accurate indicative/subjunctive related or other SISR/SR after researcher/tutor's elicitation without using * to signal such repair.

Black: Participant asks for tutor's direct feedback on their participations, and proceed to self-repair or not, but they do not use * to signal the element that poses the question.

Figures 15, 16 and 17 show instances of these categories:

ChatW2/15

1:19 PM

es difícil también porque **hay la posibilidad que los padres quieren** que el niño trabaje pero que el niño no quiere trabajar y en este caso que pasa? Qué pensáis del ejemplo de un niño trabajando en la tienda de sus padres? Es algo muy diferente que trabajar en las minas por ejemplo, ¿no? Hay matices en esta cuestión.

Figure 15 Example coded W3T3DarkRed12.

In this example, participant ChatW2/15 has used the structure '*hay la posibilidad que los padres quieren* (indicative)', (There is the possibility that parents want (indicative)), but this structure requires subjunctive instead '*quieran*'. However, the participant has not produced that type of repair.

Chat W7/38

13:35

aunque es importante que México **recibiére** un perdón por el rey, también necesita mostrar un cambio en su mentalidad hacia su pasado para que reconozcan y enfrenten sus errores. Por lo tanto, es necesario que haya un cambio de las actitudes hacia la conquista. No se debería visto como un punto de orgullo, pero una parte de su historia.

Isabel Molina-Vidal

13:36

Chat W7/38: es importante ¿es una declaración o una valoración?

Chat W7/38|

13:37

es subjuntivo, así que es reciba

Figure 16 Example coded W7T2Grey18 & 18.1.

In this example, participant ChatW7/38 has used the structure '*es importante que México recibiére* (future subjunctive) *un perdón*' (It is important that Mexico gets an apology), but this structure requires present subjunctive instead '*reciba*', and therefore, the tutor's request for participant's reflection and noticing: "*es importante*" ¿es una declaración o una valoración? ('It is important' Are you making a statement or making a judgement?). Participant's response to tutor's elicitation shows an

amendment of the previous post providing the subjunctive form ‘*reciba*’ without using * to signal the repair.

ChatW9/41

15:42

Es vital que ellos saben or sepan?

Figure 17 Example coded W9T1Black7.1.

In this example, participant ChatW9/41 uses the structure ‘*es vital que ellos saben* (indicative) or *sepan* (subjunctive)’ (It is vital that they know (indicative)/should know (subjunctive)) and asks for tutor’s direct feedback because they are not sure whether the structure is followed by indicative or subjunctive. However, they do not use * to signal the noticing of the potential mistake.

Finally, further analysis of the 22 transcripts also identified accurate use of indicative-subjunctive-related structures without resorting to SISR/SR. An account of all these instances was carried out and colour coded with purple. Identification of such examples was then compared with examples of SISR/SR or non-SISR/SR of those same structures in the FTF oral debates both in S1 and in S2. Such comparison was used to shed some light into participants’ use of the time available in the text-based online chat for careful planning of indicative-subjunctive-related structures without the need to resort to SISR/SR.

Figure 18 shows an example of this category:

ChatW3/21

15:27

Creo que una mesa redonda entre los dos países, sería la mejor manera de proceder en cuanto a la pesca y las perforaciones petrolíferas, ya que **no creo que un referéndum de la población abarque** este tema

Figure 18 Example coded W6T1Purple92.

In this example, participant ChatW3/21 uses the structure ‘*no creo que un referéndum de la población abarque* (subjunctive) *este tema*’ (I do not think that a referendum of the population would cover (subjunctive) this issue) accurately, since ‘no creo que’ (I

do not think that) is followed by subjunctive in this specific context of not making a statement.

Task 3. Analysis of data 2: Comparison of S1 FTF oral feedback sheets and text-based online chat transcripts

Since the focus of this research is the use of SISR/SR to amend errors in indicative/subjunctive-related structures, any reference to accurate, inaccurate/unnecessary, or missing SISR/SR in the following sections and subsections of this chapter, will only refer to indicative-subjunctive-related structures, and not to other types of errors.

Accordingly, only the instances of SISR/SR which involved indicative-subjunctive-related structures in text-based online chat were compared to the oral feedback sheets from the same participants in S1. Identification of the same structures, which were used inaccurately in S1, but subject to accurate SISR/SR in the online chat, was regarded as evidence that SCMC in the form of text-based online chat contributes to noticing and self-repair of the error.

For the purposes of this study, it must be clarified that, by ‘the same structure’, it has been considered the use of the same verb and connector as in “pienso que + indicative”, or just the connector introducing the subordinate clause, such as in “para que + subjunctive”. It has not been considered the same structure, the use of verbs with the same meaning and the same use of indicative or subjunctive modes, but which are not the same as in ‘pienso que’ + indicative and ‘creo que’ + indicative. In these cases, even though both verbs introduce a statement or ‘*declaración*’ as explained in the grammar workshop, and they are both similar in meaning ‘I think that’ and ‘I believe that’ respectively, they have been considered different structures. This is because there are many cases in which small differences in the sentence construction and in the use of similar verbs or combinations of verbs in Spanish will determine the use of indicative and subjunctive, and that is precisely why the use of these modes is often confusing for learners. For example, ‘*Me parece que*’ (it seems

to me that...) on its own will be followed by indicative but '*Me parece bien que*' (It seems good to me that...) would be followed by subjunctive.

However, and although the primary focus of this study is the accurate use of SISR/SR in indicative-subjunctive-related structures used inaccurately during S1, other variables in the comparison of data have also been considered for more consistency of results. Those variables are related to the two following aspects:

1) How SISR/SR was used: Since SISR/SR in the text-based online chat could also be used inaccurately/unnecessarily or even not used at all, when necessary, additional information in those categories was also collected. Accurate use of indicative-subjunctive-related structures during S1 was also recorded for two main purposes:

-To differentiate those structures which needed repair from those which did not.

-To monitor whether structures used accurately during S1 were consistently used accurately in the text-based online chat over time or not, since fluctuations and adjustments in learners' linguistic development are likely to happen.

2) The type of structures subject to SISR/SR: In addition to those structures identified as being used inaccurately in S1 and in need of repair (S1NR), also structures used accurately in S1, and new structures, which were not recorded as being used in S1 have been included in the comparison of data. The inclusion of any other indicative-subjunctive-related structures, whether used accurately by participants in S1 (S1A) or new (New) is relevant to provide additional information on the following aspects:

-How, if any, practice with text-based online chat is contributing to participants' consolidation of already accurately used structures or to the incorporation of new structures, which were not used before but were noticed by participants during practice in text-based online chats.

-If the type and number of indicative-subjunctive-related structures used in S1 and S2 are the same or different will also shed some light on the potential positive contribution of the grammar workshop on indicative-subjunctive-related structures

and how, if any, attendance to this workshop might have facilitated the noticing of a wider range of indicative-subjunctive-related structures.

By including all this data, this study is providing more reliable and nuanced results of how, if any, was SCMC text-based online chat contributing or not to SISR/SR of indicative-subjunctive-related structures.

Table 12 shows a template of how data resulting from S1 oral feedback sheets has been collected.

S1 FTF Oral debates feedback sheets	
Instances that need repair in S1 (S1NR)	Instances of accurate use in S1 (S1A)

Table 12 Template showing how data from S1 FTF oral debates feedback sheets has been collected.

The template shown in Table 12 includes two types of results (displayed in the results chapter of this research): On the one hand, the total amount of instances of inaccurate use of an indicative-subjunctive-related structure, which will need to be repaired in the form of SISR/SR in the SCMC text-based online chat practice. On the other hand, an account of all instances of accurate use of an indicative-subjunctive-related structure during S1 has also been included to see if any of the instances subject to SISR/SR in the text-based online chat corresponds to a structure used accurately during S1. Such instances were relevant to identify which structures are already proceduralized or used consistently with accuracy, and which ones are still hesitant and, hence, in the process of being incorporated accurately to the learner’s linguistic repertoire.

Table 13 shows a template of how data resulting from analysis of the text-based online chat transcripts has been collected.

Accurate SISR/SR			Inaccurate/Unnecessary SISR/SR			Missing SISR/SR		
S1NR	S1A	New	S1NR	S1A	New	S1NR	S1A	New
SISR		SR	SISR		SR	SISR		SR

Table 13 Template showing how data from text-based online chat transcripts has been collected.

This table (displayed in the results chapter of this research) includes the account of SISR/SR produced by individual participants with regards to three different instances:

-Accurate noticing and repair of indicative-subjunctive-related structure through either SISR/SR.

-Non-accurate noticing and repair or unnecessary repair of indicative-subjunctive related structure through either SISR/SR.

- Missing noticing and repair of indicative-subjunctive-related structure through either SISR/SR.

These three categories are further divided into columns specifying whether those instances correspond to structures which were used in S1, or they correspond to new structures not used by the participant before. In the case of instances corresponding to structures used in S1, further identification with A (accurately) or NR (needs repair) was conducted to identify those structures which were used accurately and those which needed repair in S1. Additionally, when repair was provided, a distinction between the types of repairs used by the participant, namely, SISR (initiated by the participant themselves) or SR (elicited by the tutor) has also been included. This distinction is relevant to identify whether the noticing of the error is initiated by the participant, or whether it is the tutor, who is facilitating the noticing of the error to the participant.

All these data (displayed in the results chapter of this research) will be used to respond to RQ1 of this study, that is, how, if at all, can SCMC text-based online chat facilitate noticing and SISR/SR of indicative-subjunctive-related structures.

Task 3. Analysis of data 3: Comparison of S1 FTF oral feedback sheets and text-based online chat transcripts over time

Transcripts of 3 participants who took part in at least four text-based online chats were analyzed. Such analysis consisted in identifying instances of regular use of SISR/SR to repair a recurrent error over time, and which could indicate automatization/proceduralization of self-correction.

As explained in the previous section, information regarding the inaccurate/unnecessary use of SISR/SR or missing use of it was additionally collected to provide more comprehensive and reliable results.

Such data (displayed in the results chapter of this research) will be used to respond to RQ2 proposed in this study, that is, how, if at all, can SCMC text-based online chat facilitate automaticity of SISR/SR of indicative-subjunctive-related structures.

3.4.4 Task 4: S2 FTF oral debates

Task 4. Data collection tools: S2 Feedback sheets and audio recordings

The week immediately after practice with SCMC text-based online chat, students discussed the same topic orally and FTF in their respective seminar groups (up to 8-10 students). Tutors gathered information about students' performance on the feedback sheets, and students received detailed feedback after the debate. The whole session was audio recorded for moderation purposes as established in the module. Additionally, those recordings were also used for the purposes of this research, for the collection of information that might have been missed in the feedback sheets.

Task 4. Analysis of data 1: Comparison of S2 FTF oral debates feedback sheets with text-based online chat transcripts

Other tutors in addition to the researcher collected the feedback sheets of the FTF oral debate in the seminar of students participating in the study. The feedback sheets were scanned and uploaded by individual tutors to a folder shared in the University of Leeds drive for the module SPPO3010.

The researcher analyzed and compared participation of individual students in the SCMC text-based online chat (analysis of the transcript of the conversation), and participation of those same students in the FTF oral debate at the seminar (analysis of individual students' feedback sheet and recordings of the debates) to look for instances of repair/non-repair of indicative-subjunctive recurrent errors. Participants' performance was compared individually and not between each other or as a group to avoid that differences in language level, personal motivation or individual psychological factors (anxiety, low self-esteem) might influence results. This is also in line with Larsen-Freeman's idea that future research in SLA should be 'more person-centred, and the acknowledgement that individuals show different paths of development'. 'Learners are not universal and SLA research should also explore the ways in which language learning may contribute to changing the self' (Larsen-Freeman, 2018:60). In this same line of thought, Larsen-Freeman advocates for self-referential assessment of formative language, meaning that a learner's progress should be measured in relation to what that learner could or could not do at an earlier point in time (Larsen-Freeman, 2018:63).

Consequently, and to respond to RQ3 (How, if at all, can SCMC text-based online chat facilitate the transfer of knowledge and abilities from the writing online setting to the FTF speaking context?), instances of accurate SISR/SR of the same structures in both the online and the FTF context for individual participants were identified. Structures which were used inaccurately in semester 1 but were subject to self-repair both in the text-based online chat, and in the FTF oral debate related to the same topic, were thus considered as transfer of knowledge from the online setting to the FTF oral one.

Table 14 shows a template of how such data has been collected:

	Text-based online chat			FTF oral debate S2		
Total No. of instances	Accurate SISR/SR			Accurate SISR		
	S1NR	S1A	New	S1NR	S1A	New
	SISR		SR	SISR		
Total No. of matching structures						
	SR			SISR		

Table 14 Table used for comparison of accurate SISR/SR in text-based online chat and accurate SISR in FTF oral debates in S2.

The table (displayed in the results chapter of this research) includes the total amount of instances of accurate use of SISR/SR in both the online and the FTF context, irrespective of whether those instances correspond to the same structure or not. Such instances will be further categorized as S1NR/S1A/New, to clarify whether the repair affects a structure used in S1 and identified as needing repair (S1NR), whether the structure was used in S1 but accurately (S1A), or whether it is a new structure not recorded in the feedback sheets during S1 as being used by the participant (New). These instances have been further labelled with SISR/SR to specify the type of repair performed by the participant, and thus, establish whether SISR or SR was the preferred form of providing repair. In this regard, it must be noted that the category of SR (self-repair not initiated by the participant but provided only after tutor's elicitation) is only present in the text-based online chat results' column, since the tutor was not able to interfere, interrupt, and therefore provide any type of feedback during the FTF oral debate.

Additionally, collection of data shows the number of matching structures subject to SISR/SR in both contexts. At this point, it is worth clarifying that the total amount of matching structures, which were collected in both settings, refers to the total amount of instances of use of an indicative-subjunctive-related structure in the FTF oral

debate, which was used previously in the text-based online chat. Those instances recorded in the S2 FTF oral feedback sheets may correspond to different structures used in the text-based online chat, for example, ‘no pienso que + subj. (I do not think that + subjunctive) and ‘A pesar de que + subj.’ (In spite of the fact that + subjunctive), or they may correspond to just one and the same structure used in the text-based online chat but used multiple times in the FTF oral debate. For example, if there is one instance of use of the structure (I do not think that + subjunctive) in the text-based online chat, but that same structure has been used four times in the FTF oral debate, the table will record that data as four instances of matching structures. Those matching structures could have been used in the same week, and while discussing the same topic in both contexts, or in different weeks. For instance, the structure (I do not think that + subjunctive) might have been used one time in week 4 in the text-based online chat but four times (two in week 4, one in week 5, and one in week 9) in the FTF oral debate.

Finally, information related to the type of structures (S1 needs repair, S1NR; S1 used accurately S1A; New structure not used during S1, New) is included in Appendixes 10 and 11.

However, since there are multiple combinations in which the same structure might have been subject to accurate, inaccurate, or missing self-repair in the online context but subject to different types of repairs or lack of it in the FTF oral debate, additional data in these different categories has been included in this study. Collection and comparison of such data will allow a deeper understanding of how noticing and repair are effectively occurring, are occurring with hesitancy and inaccuracy, or are not occurring at all in both the text-based online context and the FTF oral context. Such data correspond to the following categories:

-Accurate SISR/SR in the text-based online chat but inaccurate or unnecessary SISR in the FTF oral debate. This category of results addresses whether accurate use of SISR/SR in the text-based online chat is not leading to an equally accurate use of SISR in the FTF oral debate but to an inaccurate or unnecessary use of SISR, meaning that, while some noticing might occur in the FTF oral debate, the repair provided is

not efficient nor accurate, and both noticing and repair are only efficient in the online context.

-Accurate SISR/SR in the text-based online chat but missing SISR in the FTF oral debate. This category of results shows whether accurate use of SISR/SR in the text-based online chat is not replicated in the FTF oral debate, meaning that the noticing, and subsequent SISR/SR is only occurring in the online setting.

-Inaccurate or unnecessary SISR/SR in the text-based online chat but accurate SISR in the FTF oral debate. This category of results provides information on whether inaccurate or unnecessary SISR /SR in the online context, despite being not accurate, is still used accurately in the FTF oral debate. This information is relevant not only to prove that some noticing and attempts at repair are occurring in the online context, but also to hypothesize that the participant might have worked further on the transcript of the online chat to provide an output that is accurate in the FTF oral debate.

-Inaccurate or unnecessary SISR/SR in both the text-based online chat and the FTF oral debate. These results shed light on the potential inefficiency of the use of SISR/SR in both the online and the FTF oral settings for noticing and repair.

-Inaccurate or unnecessary SISR/SR in the text-based online chat and missing SISR in the FTF oral debate. This category of results contributes to explain whether some noticing and attempts at repair are happening in the online chat, however inaccurate or unnecessary, while no noticing or repair is happening in the FTF oral situation.

-Missing SISR/SR in the text-based online chat but accurate SISR in the FTF oral debate. This category of results provides information on whether lack of use of SISR/SR is not necessarily leading to an equally lack of use of SISR in the FTF oral situation but, on the contrary, to accurate SISR in the FTF oral debate. This information is relevant to hypothesize, that the participant might have worked further on the transcript of the online chat to provide an output that is accurate in the FTF oral debate.

-Missing SISR/SR in the text-based online chat and inaccurate or unnecessary SISR in the FTF oral debate. This category of results provides information on whether lack of use of SISR/SR correlated to an inaccurate or unnecessary use of SISR in the FTF oral debate. This information shows how even though no noticing or attempts at repair in the online context are happening, practice with text-based online chat may still contribute to some noticing and attempts at repair, however inaccurate or unnecessary, in the FTF oral debate.

-Missing SISR/SR in both the text-based online chat and in the FTF oral debate. This category of results provides information on whether lack of use of SISR/SR leads to an equally lack of use of SISR in the FTF oral debate. This information shows how neither the noticing nor the repair of errors is efficient in the online context and in the FTF oral debate.

A table like Table 14 has been used for the collection and comparison of data in each one of the above-mentioned categories.

Finally, since affordances provided by the online setting, such as careful planning of grammatical structures, could lead to the output of accurate structures without resorting to SISR/SR, such information had also been collected. In this respect, comparison of data in the following categories has been conducted:

-All instances of accurate SISR/SR in the text-based online chat and accurate use of indicative-subjunctive-related structures without resorting to SISR in the FTF oral debate. This category of results accounts for how accurate and effective use of SISR/SR in the online context will contribute to effective and accurate production of those sentences without even the need for the participant to resort to SISR in the FTF oral debate. Such results will, in turn, show how noticing and repair are occurring in the online context, while such noticing and repair have been hypothetically proceduralized in the FTF oral debate, as shown by accurate production of such structures without resorting to SISR.

-All instances of inaccurate or unnecessary SISR/SR in the text-based online chat but accurate use of indicative-subjunctive-related structures without resorting to SISR in

the FTF oral debate. This category of results provides information on whether inaccurate or unnecessary SISR/SR in the online context, despite being not accurate, is corresponded with accurate output in the FTF oral debate without even resorting to SISR. This information is relevant not only to prove that some noticing and attempts at repair are occurring in the online context, but also to hypothesize, that the participant might have worked further on the transcript of the online chat to provide an output that is accurate in the FTF oral debate.

-All instances of missing SISR/SR in the text-based online chat but accurate use of indicative-subjunctive-related structures without resorting to SISR in the FTF oral debate. This category of results provides information on whether lack of use of SISR/SR is not necessarily leading to an equally lack of use of SISR in the FTF oral situation but, on the contrary, to accurate output in the FTF oral debate without even resorting to SISR. This information is relevant to hypothesize, that the participant might have worked further on the transcript of the online chat to provide an output that is accurate in the FTF oral debate. Sometimes, even if the participant did not respond to tutor's elicitation to repair an error during the online conversation, such elicitation by the tutor is recorded in the transcript of the conversation and could be spotted later on by the participant when working on it.

-All indicative-subjunctive-related structures used accurately both in the text-based online chat and the FTF oral debate without resorting to SISR/SR. This category of results provides information on whether accurate production of indicative-subjunctive-related structures, which were used inaccurately during S1, are accurately produced both in the online chat and in the FTF oral situation, but without resorting to SISR/SR. This information is relevant to hypothesize, that careful planning of grammar structures and prior practice of those structures through the text-based online chat, and without the use of SISR/SR, may lead to a consolidation of accurate production of those structures also in the FTF oral debate.

Such differentiation in the data collected is necessary since the production of accurate indicative-subjunctive-related structures without resorting to SISR in the FTF oral debate could be the result of the following different factors:

- Prior accurate use of SISR/SR in the text-based online discussion.
- Previous careful preparation of those structures, which were used accurately in the text-based online chat, and hence, they were also used accurately in the FTF oral debate.

Finally, inclusion of information regarding the inaccurate or unnecessary use or missing use of SISR/SR contributes to find out whether the existing gap between non-accurate use SISR/SR in the text-based online chat and the accurate production in the FTF oral debate could be the result of participants reading and analysis of the transcripts of the text-based online chat.

A table like Table 10 has been used for the collection and comparison of data in each one of the above-mentioned categories.

Task 4. Analysis of data 2: Analysis of audio recordings

All tutors were asked to audio record all seminars in which oral debates were taking place with an audio recorder. Those recordings were uploaded by individual tutors to a folder shared in the University of Leeds drive for the module SPPO3010. However, and due to industrial action occurring during S2 of the academic year 2021-2022, some of the seminars did not take place at all or took place at a different time from the one scheduled and with a different tutor. Additionally, some of the tutors' specific contractual circumstances also affected the collection of this data. Some teaching staff in this module were on hourly-paid contracts and hence in negotiations about their corresponding workloads. Consequently, those tutors, when not participating in industrial action, provided data on written feedback of the oral debates but did not audio record the seminars, since they regarded the time devoted to this part of the assessment as not included in their hourly-paid contract. Thus, some audio recordings for specific participants and for specific weeks are not available for analysis.

Those recordings were analyzed by the researcher with the main of completing information provided by individual tutors in the oral feedback sheet. Seminar groups in the module SPPO3010 consist of 8 to 10 students. Therefore, the collection of

detailed feedback by tutors from 8 to 10 students participating and interacting during the 1-hour FTF oral debate poses a challenge. Although tutors were asked to focus on the accurate or non-accurate performance of indicative-subjunctive-related structures, as well as instances of self-repair or self-correction, time pressure factors might have hindered the collection of more comprehensive feedback.

Accordingly, listening of audio recordings by the researcher revealed that, in some instances, the accurate or non-accurate use of a structure by participants was performed with hesitancy, and this had not been noted in the feedback sheet by the corresponding tutor. This information was considered relevant to determine the degree of noticing and awareness that the participant was experiencing with that specific structure. On the other hand, some instances of self-repair have been identified in the audio recordings, which had not been noted as such in the feedback sheets by the corresponding tutor. Finally, additional instances of accurate or non-accurate use of indicative-subjunctive-related structures were identified in the audio recordings.

3.4.5 Task 5: Reflective log

Task 5. Data collection tool: Reflective log

In addition to participation in the text-based online chat, participants in the study were asked to complete a reflective log. A general definition of reflection given by Moon (2004:73) argues that ‘reflection is a process whereby knowledge and emotional orientations are reorganized to achieve further insights’. In this sense, the use of a reflective log would provide the researcher with specific and more detailed information about learners’ perceptions of the task object of this study, and how this may or may not contribute to their learning. The reflective log did not require any specific number of entries or extension but included some questions to help participants organize their thoughts. The main aim of this reflective log is twofold: On the one hand, to facilitate learners’ recollection of ideas and impressions on the use of the online text-based chat to raise their awareness on their own learning process, and, on the other hand, to provide the researcher with additional data about the use of the

SCMC text-based online chat tool. The reflective log consists of six questions divided in two sections as follows:

Section 1. After participation in online chat

1. How did you feel about participating in the online chat? Can you identify any advantages or disadvantages of using this mode?
2. Have you used the * during the chat session to self-repair any of your posts. What specific aspects have you amended using this resource?
3. Do you think the written chat has contributed to improve your use of indicative and subjunctive modes? If yes, how?

These questions are designed to prompt reflection on participation in the SCMC text-based online chat and should be ideally answered after participating in the online chat.

Section 2. After participation in FTF oral debate

1. Did you read the transcript of the online chat prior to the face-to-face debate?
2. Do you think prior participation in online text-based debate helped you with the use of indicative and subjunctive modes in the face-to-face debate? Why? How?
3. Have you observed any other improvements of using the online text-based tool for your face-to-face oral debates? Which ones?

These questions are linked to preparation and participation in the FTF oral debates after having discussed the same topic previously in the online chat and should be ideally answered after participation in a FTF oral debate.

A sample of the reflective log form as emailed to participants is shown in [Appendix 6](#).

Task 5. Analysis of data 1: Reflective log

Analysis of these reflective logs conducted by the researcher provides both general and specific information about how, if any, using SCMC text-based online contributes

to overall oral performance, and more specifically to SISR of errors in indicative-subjunctive-related structures in oral performance.

Question 2 of section 1, namely, ‘Have you used the * during the chat session to self-repair any of your posts. What specific aspects have you amended using this resource?’ is related to research question 1, which is whether SCMC text-based online chat promotes noticing and SISR/SR. Also, in case participants did not use * to signal SISR/SR in the online chat, this question would shed some light on the reasons why this did not happen and will inform on how to further improve the design of the study.

Question 3 of section 1, namely, ‘Do you think the written chat has contributed to improve your use of indicative and subjunctive modes? If yes, how?’ is linked to research question 1 and how participants perceive the use of SCMC text-based online chat in connection to improving the uses of indicative/subjunctive modes when writing. Reflections on this question also provide specific information on how or why participants found the online chat useful or not.

Question 1 of section 2, that is, ‘Did you read the transcript of the online chat prior to the face-to-face debate?’, is related to research question 3 and whether the use of SCMC text-based online chat promotes the transfer of information from writing to speaking through analysis and preparation of indicative-subjunctive-related structures. In this same sense, question 2 of section 2, namely, ‘Do you think prior participation in online text-based debate helped you with the use of indicative and subjunctive modes in the face-to-face debate? Why? How?’ would also be related to research question 3, and participants’ perceptions on how the online chat has contributed or not to oral performance in the FTF debates with respect to the indicative/subjunctive modes.

Finally, question 1 of section 1 and question 3 of section 2 of the reflective log, that is, ‘How did you feel about participating in the online chat? Can you identify any advantages or disadvantages of using this mode?’ and, ‘Have you observed any other improvements of using the online text-based tool for your face-to-face oral debates? Which ones?’ provide more general information about the potential affordances of using SCMC text-based online chat for general language performance when writing

and speaking. This type of information is relevant to identify aspects offered by the SCMC text-based online tool (for example, relaxed atmosphere, less pressured environment, increased self-confidence) that could be the object of further studies.

The researcher collected the reflective logs at the end of the semester. These were then analyzed to identify the potential benefits, if at all, of using the text-based online chat as a tool to improve oral performance in a FTF oral context.

No personal data was held but an allocated randomized number that allowed the researcher to identify the student's reflective log without the need to hold their personal info. Participants in the SCMC text-based online chat sent an email to the researcher to confirm participation. The researcher responded to that email by providing the participant with the randomized number that was used in the reflective log, so that a link between ideas included in the reflective log and the specific participant's performance in the different tasks could be made.

In summary, the main tools of data collection used, and the type of information gathered at the intervention stage of the research are summarized in Table 15:

Data collection tool	Procedure	Type of data
Transcript of text-based online chat and S2 FTF oral feedback sheet of individual students	-Individual students' participation in text-based online chat was compared to S2 FTF oral feedback sheets of those same participants to identify instances of use or non-use of SISR/SR in indicative-subjunctive-related structures.	Qualitative: Specific examples of SISR/SR or absence of it when using indicative-subjunctive-related structures in the online chat and in the oral FTF debate. Quantitative: Numerical account of use or non-use of SISR/SR in indicative-subjunctive-related structures in the online chat and in the oral FTF debate.
Audio recordings	-Transcripts of text-based	Qualitative: Specific

	online chat were compared to the recordings of oral debates to identify instances of SISR of indicative-subjunctive-related structures.	examples of SISR or absence of it in the oral FTF debate when using indicative-subjunctive-related structures. Quantitative: Numerical account of use or non-use of SISR when using indicative-subjunctive-related structures in the oral FTF debate.
Reflective logs	Analysis of participants' comments and reflections upon using the text-based online chat, and its impact in oral debates.	Qualitative: Accounts of potential benefits, if any, of using text-based online chat. Identification of the specific features of SCMC that might be beneficial for SLA.

Table 15 Data collection tools at intervention stage.

In summary, the methodology underpinning this research is aimed at the collection of both quantitative and qualitative data. Additionally, to obtain more consistency of findings and results, the sources of data collection involved different people (other module tutors completing participants' oral feedback sheets) and different times (text-based online chat transcripts, feedback sheets of FTF oral debates and reflective logs will be collected at different times).

The appendixes include a template of the feedback sheet used to assess students' oral production ([Appendix 1](#)), the pre-workshop's questionnaire ([Appendix 2](#)), a sample of the online activity proposed at the workshop to establish a solid declarative knowledge ([Appendix 3](#)), the post-workshop questionnaire ([Appendix 4](#)), the transcript of one text-based online chat ([Appendix 5](#)), and a blank sample of the reflective log ([Appendix 6](#)). [Appendix 7](#) shows ethical approval received for this research project.

3.5 Ethical implications of the study

The design of this study had taken into account the following ethical considerations.

Firstly, all learners of Spanish taking the final-year compulsory module SPPO3010 were invited to take part in the study. This was necessary so that all students could benefit from the potential advantages of using SCMC text-based online chat for speaking, if there were any. In doing so, the researcher was making sure that no student was put in a disadvantaged position.

Secondly, the fact that the researcher was also one of the tutors teaching in the module made it necessary to consider further ethical aspects. On the one hand, the participants were informed of all the options of taking part in the study. They could not participate at all if they did not wish to, they could participate any week and as many times as they wanted, and they could withdraw from the study at any time and without the need to inform the researcher. The researcher emphasized in the informative emails that the SCMC text-based online task was being offered as an additional hour of extra practice in Spanish but was not compulsory nor part of the expected contact hours for this module. In doing so, the researcher was making sure that participants did not feel pressured to take part in the study due to the position of authority they could perceive from the researcher/tutor.

On the other hand, any data regarding marks assigned to participants in the face-to-face oral debates, which were assessed in semester two and following the practice with SCMC text-based online chat were ruled out as data collection tool. This was decided to avoid that the researcher/tutor could be biased when assessing participants' oral performance, especially those who took part in the research. Finally, not only the researcher but other tutors were also providing feedback to participants on their face-to-face oral debates after practice with SCMC text-based online chat. In doing so, the researcher was making sure that not all data collected was produced and gathered by the same person, namely, the researcher and, thus, avoiding a biased collection of data.

Once the design of the study, the participants, the data collection tools and the ethical implications have been explained, the following subsections present the results of the study according to each one of the stages, and the different tasks involved.

Chapter 4: Results

This chapter presents the results of this study, which was carried out at the University of Leeds during the academic year 2021-2022. The sections show results of the different tasks involved, and according to the three RQs proposed in this study. Thus, section 4.1 shows results that answer RQ1, namely, how, if at all, can SCMC text-based online chat facilitate noticing and SISR/SR of indicative-subjunctive-related errors. Section 4.2 presents results that answer RQ2, that is, how, if at all, can practice over time with SCMC text-based online chat facilitate automatization/proceduralization of SISR/SR of indicative-subjunctive-related errors. Section 4.3 presents results that answer RQ3, that is, how, if at all, can SCMC text-based online chat facilitate the transfer of knowledge and abilities from the text-based online setting to the FTF oral situation.

4.1 Results for answering research question 1.

This section presents the results relevant to answer RQ1, that is, how, if at all, can SCMC text-based online chat facilitate noticing and SISR/SR of indicative-subjunctive-related errors in the online context. Accordingly, four different types of results from four different data collection tools are shown:

-Analysis of FTF oral feedback sheets from S1 from individual participants. These results establish a benchmark to compare use of indicative-subjunctive-related structures prior to the use of SCMC text-based online chat and after its use.

-Analysis of transcripts of SCMC text-based online chat of 25 participants to identify instances of noticing and subsequent, if any, SISR/SR of indicative-subjunctive-related structures.

-Comparison of FTF oral feedback sheets from S1 from individual participants and transcripts of their participation in SCMC text-based online chat. Such comparison enables identification of errors in indicative-subjunctive-related structures during S1, which were amended or not through practice with the text-based online chat.

-Results from the grammar workshop questionnaires. Such analysis sheds light on the role played by explicit instruction in facilitating noticing and SISR/SR of errors in indicative-subjunctive-related structures. Additionally, such analysis also contributes to understand whether a cognitive approach to explaining modality in Spanish improves awareness and use of these modes.

-Analysis of reflective logs after participation in SCMC text-based online chat. Such results contribute to clarify how participants perceive the use of text-based online chat, and its alleged contribution to improve language accuracy.

4.1.1 Analysis of FTF oral feedback sheets from S1

FTF oral feedback sheets from S1 from the 25 participants were collected and analyzed. Instances of use of indicative-subjunctive-related structures were classified in two categories, namely, those instances that need repair and instances of accurate use of those structures. Table 16 shows these instances for all 25 participants. [Appendix 8](#) shows specific instances for individual participants.

S1 Oral debates feedback sheets			
Instances that need repair (S1NR)		Instances of accurate use (S1A)	
71		115	
Participants		Participants	
19		22	
ChatW1/1	ChatW3/19	ChatW1/1	ChatW3/19
ChatW1/4	ChatW3/21	ChatW1/4	ChatW3/20
ChatW1/5	ChatW3/22	ChatW1/5	ChatW3/21
ChatW1/6	ChatW3/25	ChatW1/6	ChatW3/22
ChatW2/7	ChatW4/28	ChatW2/7	ChatW3/23
ChatW2/9	ChatW4/29	ChatW2/9	ChatW3/25
ChatW2/10	ChatW6/35	ChatW2/10	ChatW4/28
ChatW2/11	ChatW7/39	ChatW2/11	ChatW6/35
ChatW2/16	ChatW9/41	ChatW2/13	ChatW7/38
ChatW3/18		ChatW2/16	ChatW7/39
		ChatW3/18	ChatW9/41

Table 16 Use of indicative-subjunctive-related structures in S1.

According to results displayed in Table 16, 19 out of 25 participants used inaccurately an indicative-subjunctive-related structure during S1. Overall, 71 of these instances have been recorded for all 19 participants. On the other hand, 22 out of 25 participants have used accurately indicative-subjunctive-related structures during S1. Overall, 115 of these instances have been recorded for all 22 participants. This data indicates that most participants produced more instances of accurate use of indicative-subjunctive-related structures than errors in those structures during oral debates in S1 although the difference is not significant. Moreover, there are only two participants out of 25 who did not use any indicative-subjunctive-related structure either inaccurately or accurately. Anyhow, this data indicates the relevance that participants attach to the use of these structures in the oral debates. This is, in turn, aligned with the marking criteria for this task.

4.1.2 Analysis of transcripts of SCMC text-based online chats

A total number of 22 transcripts of SCMC text-based online chat were collected. Those transcripts are distributed per week, groups and number of participants as shown in Table 17:

Week	Topic	No. Groups	Total No. Of Participants	Transcripts collected
1	Stolen children during Franco's dictatorship	2	3	2
2	The conflict of Western Sahara	3	12	3
3	The law allowing child labour in Bolivia	4	16	4
4	What constitutes art?	2	6	2
5	The regulation of surrogacy in Spain	3	9	3
6	The conflict of the Falkland Islands	2	7	2
7	Must Spain apologize for the colonization of Mexico?	2	8	2

8	What should be done with the symbols of the Franco period?	2	5	2
9	The rights of the Mapuche community and their language	1	3	1
10	Inclusive language	1	1	1
Total No.		22	70	22

Table 17 Participants, groups and SCMC text-based online chat transcripts.

As displayed in Table 17, a total number of 70 participants took part in the ten-weeks text-based online chat. Some of those participants joined the sessions more than once, that is, they participated in different weeks. In the case of week 1 (group/session 2) and week 10, in which there was only 1 participant, the online discussion took place between that one participant and the tutor/researcher. Participation across the semester is uneven. Weeks 2 to 7 show the highest concentration of participants, while week 1 and the last three weeks of the semester (weeks 8, 9 and 10) show a decrease in participation. Finally, a total number of 22 groups were organized for the different online discussions, and all corresponding 22 transcripts were collected for analysis.

SISR/SR signalled by *

The 22 transcripts have been analyzed to identify instances of participants using * for SISR/SR as well as instances of SISR/SR in which the option of signalling the repair with * was not used but repair in the form of SISR/SR was provided.

Table 18 shows overall amounts of use of * according to the colour code presented in the methodology section of this study, and depending on whether the repair was self-initiated by the participant (SISR) or elicited by the tutor (SR). Instances in which the tutor used * have not been included. The categories referring to other than indicative-subjunctive-related structures have been further classified in morphological-related and other-related. Previous studies (Smith, 2012) mentioned in section 2.4.1 of this study have concluded that morphological errors are less subject to self-repair than other types of errors. Consequently, and since indicative-subjunctive-related errors constitute morphological errors, an account of this specific category seems relevant to confirm or refute such previous results. The classification of other-related errors has

followed Liu's (2008:70) categorization of marking errors, which is also the one followed by Smith (2012). Such classification facilitates the comparison of results. The categories for error classification are defined as follows:

Morphological errors: All errors in verb tense or form; plural or possessive ending incorrect, omitted, or unnecessary; subject-verb agreement errors; article or other determiner incorrect, omitted, or unnecessary.

Semantic errors: errors in word choice, including preposition and pronoun errors; omitted words or phrases, unnecessary words, or phrases. Spelling errors included only if the (apparent) misspelling resulted in an actual English word (for the purposes of this study, an actual Spanish word).

Syntactic errors: errors in sentence/clause boundaries (run-ons, fragments, comma splices), word order, other ungrammatical sentence constructions.

Since this classification does not include spelling errors resulting in a non-Spanish actual word, the researcher has considered the additional category of lexical errors. Even though spelling errors might be the result of typographical mistakes due to the fast-typing pace required by participants to keep up with the written conversation, self-repair of those errors is evidence of noticing, and should be considered in the study.

Lexical errors: spelling errors that do not result in an actual Spanish word.

According to Levelt (1983) and Van Hest (1996b) some utterances are not necessarily wrong, but speakers want to repair them because they consider them inappropriate or not specific enough (1996b:41). For the purposes of this research, all those instances in which amended word choice or rephrasing/addition of information has been provided by the participants for conceptualization or clarification purposes will be considered in the category of semantic repairs.

[Appendix 9](#) shows the specific instances of other than indicative-subjunctive-related instances in all the categories shown in Table 18. [Appendix 10](#) shows the specific

instances corresponding to indicative-subjunctive-related repairs for all categories shown in Table 18.

Colour	Type of repair SISR/SR			Total No.
Green	Accurate Indic./Subj. SISR/SR	SISR	5	17
		SR	12	
Yellow	Non-accurate Indic./Subj. SISR/SR	SISR	1	4
		SR	3	
Blue	Accurate other than Indic./Subj. SISR/SR	Morphological-related SISR	13	60
		Morphological-related SR	11	
		Other-related SISR	34	
		Other-related SR	2	
Pink	Non-accurate other than Indic./Subj. SISR/SR	Morphological-related SISR	0	3
		Morphological-related SR	0	
		Other-related SISR	2	
		Other-related SR	1	
Red	Unnecessary Indic./Subj. SISR/SR	SISR	2	3
		SR	1	
	Unnecessary Other than Indic./Subj. SISR/SR	Morphological-related SISR	0	
		Morphological-related SR	0	
		Other-related SISR	0	
		Other-related SR	0	
Dark Blue	Participants use * and ask for the tutor's feedback before proceeding to SR	Indic./subj. related	0	1
Other than Indic./Subj. related.		1		
Linguistic-related				
Overall No.				88

Table 18 Total amount of SISR/SR signalled with *.

According to the data included in Table 18, there are 88 instances in which * was used by participants to signal SISR/SR. There was one instance which had to be ruled out because the transcription was not complete and the SISR could not be linked to

that participant's prior error. Additionally, 17 out of those 88 instances correspond to the type of repair object of this study, that is, accurate indicative-subjunctive-related repair. Conversely, the instances in which SISR/SR were mostly used and signalled by * were those corresponding to other than indicative/subjunctive structures (60). This seems to indicate that there is less noticing and subsequent use of SISR/SR in indicative-subjunctive-related errors than in other types of errors. Additionally, the amount of SR is higher (12) than the amount of SISR (5) for indicative-subjunctive-related errors. This means that tutor's elicitation is still needed to notice such errors. Additionally, the fact that 3 participants have included a question mark after providing SR (see specific instances in [Appendix 10](#)), emphasizes the need for tutor's elicitation, and the lack of clarity when applying the rule by participants. In relation to tutor's elicitation, there is an interesting example, in which the wording of the elicitation by the tutor might have caused confusion when the participant was providing the repair. Figure 19 shows this instance. The topic of discussion was What constitutes art? A translation of the main parts of the conversation is provided on the right column. This specific instance is also recorded in [Appendix 10](#).

<p>Chat W1/5 3:24 PM</p> <p>Aunque sea difícil gestionar, el museo podía organizar un equipo de regularización de contenido ofensivo para que una familia cristiana no encuentra la exposición</p>	<p>ChatW1/5</p> <p>Although it is difficult to manage, the museum could organize a team to regulate offensive content so that a Christian family does not find (present indicative) the exhibition</p> <p>Isabel Molina-Vidal</p> <p>ChatW1/5: so that the family does not find: it is referring to the future indicative or subjunctive?</p> <p>ChatW1/5</p>
---	---

<p>Isabel Molina-Vidal</p> <p>3:27 PM</p> <p>Chat W1/5: para que la familia no encuentra. se refiere al futuro indicativo o subjuntivo?</p> <p>ChatW1/5</p> <p>3:28 PM</p> <p>Pero, con lo inteligente que son los equipos del museo, no conocerán que es siempre ofensivo o no ofensivo</p> <p>*no encontrara?</p> <p>ah pedron</p> <p>encontraré? Creí que 'para que' siempre necesita subjuntivo</p> <p>Isabel Molina-Vidal 3:29 PM</p> <p>ChatW1/5: sí, siempre subjuntivo "encuentra" no es subjuntivo.</p> <p>Chat W1/5</p> <p>3:30 PM</p> <p>*no encuentre, lo siento</p>	<p>*did not find (past subjunctive)?</p> <p>oh sorry</p> <p><u>I will find?</u> (future indicative) I thought that 'para que'/'in order to' always required subjunctive</p> <p>Isabel Molina-Vidal</p> <p>ChatW1/5: yes, always subjunctive 'encuentra/does not find' is not subjunctive</p> <p>ChatW1/5</p> <p>*does not find (present subjunctive), sorry</p>
---	---

Figure 19 Tutor's elicitation leading to participant's accurate and inaccurate self-repair.

In this case, the participant has provided an accurate SR (**encontrara*/past subjunctive). Soon after that, another non-accurate repair (*encontraré*/future indicative) is provided, but this is not signalled by *. It seems that this repair has been provided following the tutor's elicitation/reference to the action happening in the future. At this point, the participant justifies the decision of the first repair provided, while asking the tutor for further clarification. Finally, after a second elicitation, the participant provides another accurate repair (**encuentre*/present subjunctive). In this example, it seems that not using the 'statement/declaration and non-statement/non-declaration' concept linked to indicative/subjunctive use might have confused the participant, thus leading to providing an inaccurate repair (*encontraré*/future indicative), while the use of subjunctive was correct. Such an example of the negotiation of the repair elicited by the tutor shows how important is for the tutor to be consistent in the wording of such elicitation to facilitate the appropriate cognitive dissonance in the participant.

On the other hand, 24 out of the 60 instances, which are not indicative-subjunctive-related, correspond to morphological-related errors, while 36 correspond to other-related errors. This seems to support previous research in which morphological errors

were less noticed than semantic or syntactic errors. However, an account of both indicative-subjunctive-related repair (Green category, 17) and morphological-related repair (Blue category, 24) shows a total amount of 41 instances, thus questioning previous studies in this respect.

Also, and contrary to what happens with indicative-subjunctive-related errors, the amount of SISR in these categories is higher (47) than the number of repairs elicited by the tutor (13). This could be due, on the one hand, to tutor's elicitation being primarily focused on indicative-subjunctive-related structures, rather than other types of errors. However, the significant difference in the numbers of SISR could also indicate how participants are more prone to notice, and more confident to SISR those errors related to tenses (other than indicative-subjunctive), gender agreement, spelling, or word choice than errors in the use of indicative and subjunctive modes.

With regard to the inaccurate/unnecessary use of SISR/SR, only seven instances (Yellow and Red categories) out of 88 correspond to indicative-subjunctive structures. This number is lower than the number of instances of accurate use of SISR/SR, thus supporting the idea that text-based online chat benefits the accurate repair of these structures. However, most of the instances are the result of SR (4) rather than to SISR (3), which means that either for better (accurate repair) or for worse (inaccurate or unnecessary repair), noticing of indicative-subjunctive-related errors is still low in comparison to other types of errors, and needs to be prompted by the tutor.

Another relevant way of looking into these results is by considering those three instances of inaccurate/unnecessary use of SISR as evidence of some noticing happening. In this sense, even though the repair was not accurate or was unnecessary, the fact that the participants signalled those structures (without the tutor's elicitation) and stop to think how to proceed with repair or even ask the tutor for feedback, shows how text-based online chat is enhancing awareness and noticing of those structures.

Figure 20 shows an example of unnecessary SISR followed by participants' asking for tutor's feedback (signalled by two question marks (??), following the SISR), and the tutor explaining that both indicative and subjunctive could be used in the sentence with different communicative intentions: Indicative to declare/make a statement;

Subjunctive to non-declaring/non-making a statement because the information is already known). The topic of discussion was the rights of the Mapuche community and their language. A translation of the main parts of the conversation is provided on the right column. This specific instance is also recorded in [Appendix 10](#).

<p>ChatW1/6</p> <p>15:26 en estas comunidades hay mas respeto hacia al idioma y el idioma es mas respetado, posiblemente debido a que las leyes y los canales de television o radio están en su lengua materna el catalan y el gallego</p> <hr/> <p>ChatW1/6</p> <p>15:27 estén en su lengua*??</p> <p>Isabel Molina-Vidal 15:28 ChatW1/6: puede ser "están o estén" en su lengua. Depende de si quieres declarar eso (indicativo) o supones que la información ya es conocida y no lo quieres declarar (subjuntivo)</p> <p>ChatW1/6</p> <p>15:29 vale, gracias □</p>	<p>ChatW1/6</p> <p>The laws and the television channels or radio stations <u>are</u> (indicative) in their mother language</p> <p>ChatW1/6</p> <p><u>Are</u> (subjunctive) in their language*??</p> <p>Isabel Molina-Vidal</p> <p>ChatW1/6: both 'están (indicative) or estén (subjunctive) are possible. It depends on whether you want to state that (indicative) or you assume that information is already known and you do not want to state it again (subjunctive).</p> <p>ChatW1/6</p> <p>Ok, thank you</p>
---	---

Figure 20 Unnecessary SISR followed by participants' asking for tutor's feedback and tutor's explanation.

Finally, there is 1 instance out of 88 in which the * was used to signal an error and ask the tutor for feedback before providing an amended response. However, that instance does not correspond to an indicative-subjunctive-related error, meaning that participants are less prone to ask for tutor's feedback in relation to these structures. This could, in turn, mean that participants are noticing less those structures involving indicative-subjunctive uses or are not using many of such structures. On the other hand, although several instances of participants asking the tutor about modality have been recorded in the text-based online transcripts, those conversations, and negotiations, have usually been prompted by the tutor when eliciting SR. Figure 21

shows and example of such conversation when discussing the topic of the regulation of surrogacy in Spain. A translation of the main parts of the conversation is provided on the right column. This specific instance is also recorded in [Appendix 10](#).

<p>Chat W2/11</p> <p>13:41 Si estoy de acuerdo, es importante que las mujeres reciban terapia gratuita si están sufriendo de la depresión postnatal.</p> <p style="text-align: right;">• 13:43</p> <p>habéis leído sobre los países en los que los padres homosexuales no pueden pedir a una madre subrogada.</p> <p style="text-align: right;">• 13:45</p> <p>A mi modo de ver, es penoso que haya países en el mundo que todavía no permiten que las parejas homosexuales adopten o tenej su hijos biológicos.</p> <p style="text-align: right;">• 13:46</p> <p>*sus</p> <p>Isabel Molina-Vidal 13:47 ChatW2/11: el verbo "no permitir" es una declaración de que eso es así o no lo estamos declarando?</p> <p>ChatW2/11 13:47 Si la maternidad subrogada es legal en un país, es imprescindible que sea accesible para cada pareja</p> <p style="text-align: right;">• 13:47</p> <p>*no permitan? no es una declaración?</p> <p>Isabel Molina-Vidal 13:48 ChatW2/11: no es una declaración porque si negamos algo no podemos declarar que ocurre</p> <p>ChatW2/11 13:48 vale, muchas gracias.</p>	<p>ChatW2/11</p> <p>They do not allow that homosexual couples <u>adopt</u> (indicative) or <u>to have</u> (infinitive) their biological children.</p> <p>Isabel Molina-Vidal</p> <p>Chat W2/11: the verb ‘not allowing’ is a statement of that being so or we are not stating that?</p> <p>ChatW2/11</p> <p>*do not allow (permitan = subjunctive)? Is not a statement?</p> <p>Isabel Molina-Vidal</p> <p>Chat W2/11 is not a statement because if we say something is not happening we can’t state that it is happening</p> <p>ChatW2/11</p> <p>Ok, thank you very much</p>
---	--

Figure 21 Participant asking for feedback after tutor’s elicitation.

Absence of use of * for signalling SISR/SR

Further analysis of the 22 transcripts by the researcher also found some instances in the following categories:

- SISR was performed by the participant but was not signalled with the *.
- SISR was necessary but was not provided by the participant.
- Participants are hesitant about SISR and ask the tutor for direct feedback, but do not signal with * the specific structure or word.

Tables 19, 20 and 21 show the number of instances related to these categories. [Appendix 10](#) shows the specific instances corresponding to indicative-subjunctive-related repairs for all categories shown in these tables. [Appendix 9](#) shows the specific instances of other than indicative-subjunctive-related instances in all the categories shown in these tables.

Colour	Type of SISR/SR				Total No.
Grey	Accurate indic./subj. related or other SISR/SR after researcher/tutor's elicitation, but no use of * to signal such repair	Indic./Subj. related	SISR	0	18
			SR	2	
		Other than Indic./Subj.	Morphological-related SISR	1	
			Morphological-related SR	4	
			Other-related SISR	2	
			Other-related SR	9	

Table 19 Accurate indicative-subjunctive-related or other SISR/SR after researcher/tutor's elicitation but participant does not use the * to signal such repair.

As shown in Table 19, there are 18 instances in which participants use SISR/SR without using * to signal it. Two out of those 18 instances correspond to an indicative-subjunctive-related structure, thus increasing the total number of accurate SISR/SR for this category to 19 instances. Additionally, these two instances were subject to SR, meaning that the number of repairs elicited by the tutor is still higher (14) than the use of SISR (5) for these structures.

On the other hand, 16 out of the 18 instances correspond to other than indicative-subjunctive-related errors: Five instances correspond to morphological-related errors and 11 correspond to other-related errors. The amount of SR in both these categories is higher (13) than the instances of SISR (3). These results show that morphological-related errors, including indicative-subjunctive-related errors are less subject to repair

without using * than other-related errors. However, the difference is not very significant.

On the other hand, the amount of SR is higher than the amount of SISR for all types of errors. This seems to indicate that, overall, participants prefer to use * to signal and proceed to SISR, especially when it comes to other than indicative-subjunctive-related errors.

Colour	Type of SISR/SR			Total No.
Dark	Indicative/subjunctive related necessary SISR/SR not provided by the participant	SISR	25	31
Red		SR	6	

Table 20 Indicative-subjunctive-related necessary SISR not provided by the participant.

According to the results shown in Table 20, there are 31 instances in the 22 transcripts in which participants did not use SISR/SR in indicative-subjunctive-related structures. Moreover, 25 out of the 31 instances correspond to SISR. This number is higher than the amount of accurate SISR/SR, and indicates that, although there is noticing and successful repair of such errors, there are still many instances that are unnoticed by participants, and hence require the tutor's elicitation.

Colour	Type of SISR/SR			Total No.
Black	Participants ask for tutor's direct feedback on their participations and proceed to self-repair or not. Indic/ subj. related		2	7
		Morphological -related	0	
	Participants ask for tutor's direct feedback on their participations and proceed to self-repair or not. Other than Indic./Subj. related	Other-related	5	

Table 21 Participant asks for tutor's direct feedback on their participations and before proceeding with self-repair.

According to data shown in Table 21, there are seven instances in which participants ask the tutor for feedback. However, asking for tutor's feedback did not necessarily

mean that those participants used self-repair. Two out of those seven instances correspond to indicative-subjunctive-related structures, while 5 are non-indicative-subjunctive-related.

Finally, overall, the number of SISR/SR signalled with * is higher than the number of SISR/SR not signalled with * by participants in all categories. This seems to indicate that using * might contribute to the noticing of errors in general, and more specifically to the noticing and subsequent repair of indicative-subjunctive-related errors regardless of elicited by the tutor or not.

For the purposes of this research a summary of all instances of accurate SISR/SR in indicative-subjunctive-related structures, whether signalled by * (Colour code Green) or not (Colour code Grey) in the text-based online chat as well as other than indicative-subjunctive-related structures SISR/SR is shown in Table 22. [Appendix 10](#) shows the specific instances for this category.

Text-based online chat						
	Instances of accurate SISR/SR of Indic./Subj. related structures (Colour codes Green + Grey)		Instances of accurate SISR/SR other than Indic./Subj. related structures (Colour codes Blue + Grey)			
	SISR	SR	Morphological-related		Other-related	
	5	14	SISR	SR	SISR	SR
			14	15	36	11
			29		47	
Total	19		76			
	Instances of Morphological-related accurate SISR/SR (Green + Grey + Blue)		Instances of other-related accurate SISR/SR (Blue + Grey)			
	Indic/ subj. related	Non-Indic./Subj. related				
	19	29				

Total	48	47
-------	----	----

Table 22 Overall amounts of SISR/SR in SCMC text-based online chat.

Results in Table 22 show that, accurate use of SISR/SR in indicative-subjunctive-related structures is lower than accurate use of SISR/SR in other than indicative-subjunctive-related errors. However, when merging both instances of SISR/SR of indicative-subjunctive-related structures and morphological-related errors, the overall amount is slightly higher than the number of SISR/SR linked to other-related errors. Although the difference is not significant, such results could question previous studies stating that morphological errors are less noticed than semantic or syntactic errors.

Accurate output without resorting to SISR/SR

Finally, an account of all instances in which participants used indicative-subjunctive-related structures successfully and without resorting to SISR/SR in the text-based online chat was carried out. Table 23 shows the total amount of instances identified in the transcripts according to this category. [Appendix 11](#) shows the specific instances for this category.

Colour	Type of SISR/SR	Total No. Of instances
Purple	Accurate use of an indicative-subjunctive-related structure without resorting to SISR/SR	304

Table 23 Accurate use of an indicative-subjunctive-related structure without resorting to SISR/SR.

Results in Table 23 show 304 instances of accurate use of indicative-subjunctive-related structures without resorting to SISR/SR. This number is higher than the number of accurate SISR/SR, inaccurate/unnecessary SISR/SR, and missing SISR/SR in these structures. Thus, such results could be an indicator of how SCMC text-based online chat might be beneficial for planning participations while reducing the number of errors and, hence, also reducing the need for SISR/SR.

After data regarding the analysis of text-based online chats has been presented, the next section will show results from the comparison of individual feedback sheets from oral debates in S1, and individual participation in text-based online chats. Such results have been used to respond to RQ1, that is, how, if at all, can SCMC text-based online chat facilitate noticing and the use of SISR/SR for indicative-subjunctive-related errors.

4.1.3 Comparison of text-based online chat and S1 oral feedback sheets

To account for the noticing/not noticing of recurrent errors in indicative-subjunctive-related structures through practice with the text-based online chat, oral feedback sheets from the 25 participants during S1 were analyzed to identify errors in those structures. Those oral feedback sheets were then compared with performance of the same 25 individual participants in the text-based online chat. The comparison consisted in identifying instances of noticing of errors in the same indicative-subjunctive-related structures inaccurately used during S1, and which were repaired or not repaired through SISR/SR in the text-based online chat.

A total number of 57 S1 oral feedback sheets and 22 transcripts of text-based online were collected and compared. Table 24 shows the collection of data according to individual participants. [Appendixes 8, 10](#) and [11](#) include the specific instances corresponding to these data.

Participant	Consent form	Weeks of oral feedback sheet S1	Weeks of participation in text-based online chat
ChatW1/1	CF	4,6,8,9,10	1,2,3,4,6,7,8,9,10
ChatW1/4	CF	4,6,8,9	1,3
ChatW1/5	CF	4,6,8,9,10	2,4
Chat W1/6	CF	4,8	1,2,3,9
Chat W2/7	CF	4	2,3,5
Chat W2/9	CF	4,6,8,9	5
Chat W2/10	CF	4,6,8,9	2,3,4,6,8

Chat W2/11	CF	6	2,5
Chat W2/13	CF	4,8,9	2,5
Chat W2/15	CF	4	2,3,5
Chat W2/16	CF	6	2
Chat W3/18	CF	4,6,9	3,6,8
Chat W3/19	CF	9	3,7
Chat W3/20	CF	8	3
Chat W3/21	CF	9,10	3,6,7
Chat W3/22	CF	6,10	3,7
Chat W3/23	CF	4,6,9,10	3,5
Chat W3/25	CF	6	3,5,7
Chat W4/28	CF	6	4,5,7
Chat W4/29	CF	6,9	5
Chat W4/31	CF	8	4
Chat W6/35	CF	6,9	6
Chat W7/38	CF	10	7,8
Chat W7/39	CF	4	7,8
Chat W9/41	CF	4,6,8,9	9
Total No. of data		57	22
Total No. of participants		25	

Table 24 S1 Oral feedback sheets and text-based online chat transcripts collected by individual participants.

Table 24 shows overall results of comparing oral feedback sheets from S1, and participation in SCMC text-based online chat for the 25 participants in this study. The table shows, on the one hand, data from S1 oral feedback with regards to inaccurate and accurate use of indicative-subjunctive-related structures. On the other hand, instances of accurate, inaccurate/unnecessary, or missing SISR/SR in the text-based online chat have also been collected. Those instances are further classified according to the type of repair (SISR/SR), and according to the type of structure, which have been classified as follows:

-Indicative-subjunctive-related structures used inaccurately in S1, and which need repair (S1NR).

-Indicative-subjunctive-related structures used accurately in S1 (S1A).

-Indicative-subjunctive-related structures not used in S1 (New).

[Appendix 10](#) shows specific instances collected from SCMC text-based online transcripts for individual participants.

S1 Oral debates feedback sheets														
Instances that need repair (S1NR)							Instances of accurate use (S1A)							
71							115							
SCMC text-based online chat														
Accurate SISR/SR						Inaccurate/ Unnecessary SISR/SR			Missing SISR/SR					
19						7			31					
S1NR		S1A		New		S1NR	S1A	New	S1NR		S1A		New	
3		4		12				7	3		4		24	
SISR	SR	SISR	SR	SISR	SR				SISR	SR	SISR	SR	SISR	SR
1	2	1	3	3	9				3		4		18	6
SISR		SR				SISR		SR	SISR			SR		
5		14				3		4	25			6		

Table 25 Comparison of S1 oral feedback and SCMC text-based online chat participation for all participants in indicative-subjunctive-related structures.

According to the results displayed in Table 25, there is an overall amount of 19 instances of accurate SISR/SR to amend an indicative-subjunctive-related structure in the text-based online chat. Three instances correspond to S1NR, four correspond to S1A, and 12 instances correspond to New structures. As far as the type of repair is concerned, five out of the 19 instances correspond to SISR, while 14 correspond to SR. The amount of both SISR and repair elicited by the tutor (SR) mostly occurred with New structures. These results indicate less noticing and less use of SISR in S1NR, which are the object of this study, than SISR in New indicative-subjunctive-related structures. These results also show the need for tutor's elicitation to prompt repair in all types of indicative-subjunctive-structures.

On the other hand, there are also seven instances of inaccurate indicative-subjunctive-related repair. All those instances correspond to New structures, which those participants had not used before in S1. The number of SR in this category is slightly higher than in other categories, and it could be due to the fact that participants did not know or use those structures before, and hence, the need for more tutor's elicitation. Anyhow, although these instances are evidence of noticing of indicative-subjunctive-related structures taking place, it only applies to New structures and not to S1NR, which are the main structures object of this research.

Finally, there are a total of 31 instances in which SISR/SR was missing. Three instances correspond to S1NR, four to S1A, and 24 instances correspond to New structures. All instances of S1NR and S1A missed the use of SISR, while 18 out of 24 New structures missed the use of SISR, and six instances missed the use of SR. These results seem to indicate that, overall, the number of missing instances of SISR/SR is higher than accurate SISR/SR, and is also higher for SISR than for SR. Thus, it seems that noticing and subsequent repair of indicative-subjunctive-related errors in text-based online chat is timid, it mainly occurs in New structures rather than in S1NR structures, and is mainly prompted by the tutor in the form of SR.

On the other hand, as shown in the analysis of text-based online transcripts in section 4.1.1, there were also many instances of accurate use of indicative-subjunctive-related structures without the need to resort to SISR/SR. Accordingly an account of those instances has also been included for more consistency of results and reliability of data. Instances of accurate use of indicative-subjunctive-related structures without resorting to SISR/SR have been, in turn, divided in three categories:

1. Accurate use of indicative-subjunctive-related structure used inaccurately in S1 (S1NR) without resorting to SISR/SR.
2. Accurate use of indicative-subjunctive-related structure used accurately in S1 (S1A) without resorting to SISR/SR.
3. Accurate use of a new indicative-subjunctive-related structure not used in S1 (New) without resorting to SISR/SR.

Analysis of feedback sheets during S1 has also shown that some indicative-subjunctive-related structures have been used accurately and inaccurately by the same participants. In those cases, it has been considered that the structure is not clearly used accurately by the participant, probably because there are adjustments taking place in the student's process of linguistic development and, hence, the hesitations in using the structure accurately. If such structures were used accurately in the text-based online chat, and for the purposes of classifying these instances only in one category and avoiding double counting of instances, these examples have been included in category one, that is, accurate use of indicative-subjunctive-related structure used inaccurately in S1 (S1NR) without resorting to SISR/SR. Such a distinction is relevant to explore the effectiveness of text-based online chat with regards to three further aspects:

-How, if any, does text-based online chat contribute to participants' practice and provision of amended output of indicative-subjunctive-related structures, which were used inaccurately during S1 oral debates and needed repair (S1NR)?

-How, if any, does text-based online chat contribute to the consolidation of indicative-subjunctive-related structures, which are already used accurately by participants (S1A)?

- How, if any, does text-based online chat contribute to the incorporation of new indicative-subjunctive-related structures (New), and the broadening of the learners' range of grammatical structures, and hence, their linguistic repertoire.

An account of those instances for individual participants is shown in Table 26. [Appendix 8](#) shows specific structures collected from S1 Oral debates feedback sheets for individual participants. [Appendix 11](#) shows specific instances of accurate output without resorting to SISR/SR collected from SCMC text-based online transcripts for individual participants.

Participant	S1 Oral debates feedback sheets		SCMC Text-based online transcripts		
			Accurate use without resorting to SISR/SR		
	S1NR	S1A	S1NR	S1A	New
ChatW1/1	8	6	9	8	46
ChatW1/4	5	5	0	1	4

ChatW1/5	12	24	2	7	8
ChatW1/6	3	2	6	0	20
ChatW2/7	1	1	0	0	5
ChatW2/9	2	7	0	1	0
ChatW2/10	2	1	1	3	18
ChatW2/11	2	5	0	4	13
ChatW2/13	0	3	0	0	8
ChatW2/15	0	0	0	0	12
ChatW2/16	2	1	0	0	4
ChatW3/18	6	24	0	2	4
ChatW3/19	3	1	0	1	3
ChatW3/20	0	3	0	0	2
ChatW3/21	2	1	0	3	16
ChatW3/22	1	5	0	2	15
ChatW3/23	0	10	0	2	22
ChatW3/25	3	1	1	0	1
ChatW4/28	4	3	6	5	4
ChatW4/29	2	0	0	0	5
ChatW4/31	0	0	0	0	5
ChatW6/35	9	3	5	1	3
ChatW7/38	0	2	0	0	8
ChatW7/39	1	4	1	2	4
ChatW9/41	3	3	0	0	1
Total	71	115	31	42	231
Total No. Of accurate output without resorting to SISR/SR in text-based online chat	304				

Table 26 Instances of accurate use of indicative-subjunctive-related structures without resorting to SISR/SR in SCMC text-based online chat by individual participants.

Table 26 shows a total number of 304 instances of accurate output of indicative-subjunctive-related structures in the SCMC text-based online chat without resorting to

SISR/SR. This number (304) is higher than the number (115) of indicative-subjunctive-related structures used accurately during S1. Additionally, 31 out of those 304 correspond to S1NR, 42 correspond to S1A, and 231 correspond to New structures. Such results indicate that the number of instances of accurate output without resorting to SISR/SR for the types of structures S1NR and S1A is lower in the text-based online chat than in the FTF oral debates in S1. However, the number of New structures used accurately without resorting to SISR/SR in the text-based online chat is significantly higher than the amount in the other two categories, namely, S1NR and S1A. Additionally, all participants without exception created such accurate output in the text-based online chat, while fewer participants used indicative-subjunctive-related structures accurately in S1 oral debates. Although there are four participants (ChatW2/9, ChatW3/18, ChatW3/20, and ChatW9/41) who have less instances of accurate output in the text-based online chat than in S1 oral debates, overall, most participants notably increased the use and variety of these structures in the text-based online chat. This is the case, for example, of participant ChatW2/15, who did not produce any indicative-subjunctive-related structure in S1 oral debates but shows 10 instances of accurate output of these structures in the text-based online chat.

In summary, it seems that text-based online chat has, overall, enhanced the use of a wider variety of indicative-subjunctive-related structures. This could be due, among other factors, to explicit instruction at the beginning of S2 through attendance to the grammar workshop about the use of indicative-subjunctive modes, or attendance to grammar lectures over S2. Also, participants' focus on the marking criteria, which include range and sophistication of constructions, could have motivated the higher number of use of indicative-subjunctive-related structures.

Once the results from comparing S1 oral debates and text-based online chat transcripts for individual participants have been presented, the next section shows the results from participation in the grammar workshop explaining the use of indicative-subjunctive modes from a cognitive grammar point of view.

4.1.4 Grammar workshop's participation and questionnaires

At the beginning of S2, and before any assessed FTF oral debates were taking place, all students enrolled in the module SPPO3010 Practical Language Skills in Spanish 3 were invited to a workshop addressing the difference between indicative and subjunctive modes from the point of view of a cognitive grammar. In addition to attendance to this workshop, participants were also asked to complete two questionnaires: A pre-workshop questionnaire (or questionnaire 1) ([Appendix 2](#)) and a post-workshop questionnaire (or questionnaire 2) ([Appendix 4](#)).

The main aim of this workshop was twofold. Firstly, to make sure that students understood the difference between indicative and subjunctive modes, at least at a theoretical level. This was aligned with the idea of providing clear explicit instruction to avoid that results of the study could be influenced by the learners' lack of knowledge of the grammatical rule linked to the errors they were supposed to be self-repairing. Secondly, it was expected that the workshop would shed some light on how efficient is to teach the difference between indicative and subjunctive modes through a cognitive-operative grammar perspective and using an interactive online game. This approach, as already discussed in section 1.2 of this study, is based on the hypothesis that students have been taught how to use indicative-subjunctive modes according to non-clear and sometimes even contradictory rules. In this sense, it has been hypothesized that an explanation of modality based on a cognitive approach would clarify such confusion.

Accordingly, and since participation in this workshop was not compulsory, not all students taking part in this study and participating in text-based online chats attended that workshop. Therefore, the results shown in this section will not respond directly to any of the RQs proposed in this study, but they will contribute to a better understanding of how, if any, does a different approach in the teaching of grammar facilitate a better understanding of the indicative-subjunctive dichotomy. Individual responses in questionnaires were anonymously recorded but attendance to the workshop was registered, meaning that with some participants, a correlation between exposure to explicit instruction during the workshop and potential subsequent application of that instruction in text-based online chat will be possible.

26 out of 132 students enrolled in the module SPPO3010 attended the workshop. 10 out of those 26 students took part in the text-based online chats during S2 and are participants in this study.

Table 27 shows the participants in this study, who also attended the grammar workshop:

Participants attending the indicative-subjunctive grammar workshop and taking part in this study
ChatW1/1
ChatW1/4
ChatW1/5
ChatW1/6
ChatW2/9
ChatW2/11
ChatW2/16
ChatW3/21
ChatW3/22
ChatW9/41

Table 27 Participants in this study who also attended the grammar workshop.

Prior to attendance to the workshop 19 out of 26 participants completed questionnaire 1. The main aim of questionnaire 1 was twofold: On the one hand, to find out whether participants had learned the difference between indicative and subjunctive modes in previous years, and, on the other hand, to identify which rule or rules are they applying when using both modes. This data is relevant to this research because it is necessary to rule out that students will not notice and hence self-repair their errors because they lack clear knowledge of when to use indicative and subjunctive. Additionally, it has been hypothesized that clear explicit instruction of the rule would contribute to awareness and noticing of errors.

Figure 22 shows overall responses to Q1 of pre-workshop questionnaire 1:

1. Have you learnt the difference between indicative and subjunctive in previous years?

[Más detalles](#)

● Yes	19
● No	0
● Not sure	0

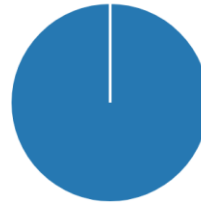


Figure 22 Overall responses to Q1 of pre-workshop questionnaire 1.

According to the results shown in Figure 22, all participants had previous experience learning the difference between indicative and subjunctive modes.

Figure 23 shows the individual responses for Q2 of pre-workshop questionnaire 1:

2. If you answered 'yes' to question 1, which main rule were you taught to distinguish between indicative and subjunctive?

1	anonymous	Likelihood
2	anonymous	Subjunctive is used when it is something that may have happened but you can't be sure or you think should happen.
3	anonymous	indicative = a declaration of something definite, subjunctive = not a declaration
4	anonymous	Level of certainty and set phrases
5	anonymous	Subjunctive is used for doubt and uncertainty. Indicative is used in cases of certainty
6	anonymous	doubt/hypothetical are subjunctive
7	anonymous	Indicative = declaration/ fact; Subjunctive = emphasising doubt
8	anonymous	If it is a declaración its indicative if it is a valoración it is subjunctive
9	anonymous	subjunctive - doubt, emotion verbs, NO creo que...
10	anonymous	Indicative is to state facts, whilst subjunctive is more conditional
11	anonymous	you need to use subjunctive if you are conveying doubt, wishes, or something that is a possibility. Also, if you are changing the subject of the sentence.
12	anonymous	The main rule which I learnt was that Subjunctive was used when expressing doubt, wishes/wants & commands. As well as when you are adding a comment to a statement that has already been affirmed, for example "es importante que (subjunctive) ..."

13	anonymous	If you are declaring something, you use the indicative.
14	anonymous	One is fact and one is prediction
15	anonymous	Probability
16	anonymous	The subjunctive is used when you are unsure or have doubts about if what you're saying is true or exists
17	anonymous	Indicative is for facts and subjunctive is for conditional situations
18	anonymous	Indicative - certainty, Subjunctive - Doubt, desires, uncertainty etc
19	anonymous	indicative is a concrete fact where as subjunctive is used for opinions/wishes/wants.

Figure 23 Individual responses to Q2 of pre-workshop questionnaire 1.

Analysis of responses shows that, most participants understand the difference between indicative and subjunctive in terms of certainty/not certainty or doubt, wishes, and opinions. This is in line with traditional views and approaches to the teaching of modality, which, as mentioned in a previous section of this research could lead to confusion, since there are instances in which subjunctive is used and there is no doubt or uncertainty (response 5), and conversely, indicative might be used after ‘no creo que’/ ‘I do not think that’ (response 9). On the other hand, the explicit rule proposed in the workshop based on an operative grammar (indicative is used to declare/making a statement and subjunctive is used to not-declare/not making a statement) has been suggested in responses 3 and 8, and only partially in response 13. These results show that most of the participants in the grammar workshop have not been previously exposed to the rule proposed in the workshop based on an operative grammar as explained in section 1.2 of this study.

After attendance to the workshop 16 out of the 26 participants completed the post-workshop questionnaire 2. The aim of questionnaire 2 was to find out whether explicit instruction provided at the workshop was perceived as effective and clear by participants. This information is relevant to make sure that students will be able notice and create cognitive dissonance, if at all, of indicative and subjunctive structures when practising in the SCMC text-based online chat. Figure 24 shows individual responses for Q1 of the post-workshop questionnaire:

-
1. After this workshop, do you think you have a more clear idea of the difference between indicative and subjunctive?

1	anonymous	yes
2	anonymous	Yes
3	anonymous	Yes
4	anonymous	Yes, I would understand the difference between a declaration and an evaluation
5	anonymous	Yes
6	anonymous	Yes, it is much clearer for me.
7	anonymous	Yes it was explained very well with clear examples.
8	anonymous	Yes

9	anonymous	Yes, clearer idea of different uses and connotations etc, and how it is important for communication
10	anonymous	Yes
11	anonymous	Yes definitely
12	anonymous	yes
13	anonymous	Yes
14	anonymous	Yes, definitely !! Before I had been taught a lot about the element of 'doubt' that requires subjunctive, but after understanding that this is not true, it is a lot easier to understand
15	anonymous	Yes
16	anonvmous	Yes and I learnt a new use for siubiunctive

Figure 24 Individual Responses to Q1 of questionnaire 2.

Analysis of responses of question 1 in questionnaire 2 shows that all participants who also completed the questionnaire understood the difference between indicative/subjunctive based on the ‘declaration-statement/non-declaration-non-statement’ explanation proposed by Llopis-García, Real-Espinosa and Ruiz-Campillo (2012). In addition to this, some of them pointed out how a previous explanation of the use of subjunctive for expressing doubt was not efficient (response 14), how they have learned new uses (response 16), and also the connection between use and communicative purposes (response 9). Such results seem to put those 16 participants in a better position to create cognitive dissonance when using the text-based online chat.

On the other hand, question 2 in questionnaire 2 was aimed at assessing participants’ perceptions of the efficiency of using an online-game activity to practice the difference between indicative/subjunctive modes following the explanation based on an operative grammar. In this sense, the relevance of this question to this research lies

in supporting the hypothesis that clear explicit instruction (in the form of an effective online-game activity) may facilitate acquisition, thus contributing to the debate around the specific role of explicit instruction in SLA discussed in section 2.1 of this research.

Figure 25 shows individual responses for Q2 in the post-workshop questionnaire 2:

2. What do you think about the online-game activity to practice indicative and subjunctive?

16 Respuestas

Id. ↑	Nombre	Respuestas
1	anonymous	was very useful as it explained why the answer was correct or why it was wrong
2	anonymous	It was a great way of furthering my understanding of when to use the subjunctive as well as being able to put it into practice
3	anonymous	Very good
4	anonymous	I had to focus heavily on the context of the situation to understand how the verb would be best received, but overall I understood the meanings behind the indicative or subjunctive statements
5	anonymous	I liked it
6	anonymous	Useful and easy to follow.
7	anonymous	this was a very helpful activity and the explanations for why it was right/wrong helped to reinforce the rules with subjunctive/indicative.
8	anonymous	It was really useful. I think more activities like this would be helpful for learning grammar.
9	anonymous	Useful to understand how it can change meaning and what to use when
10	anonymous	Very effective
11	anonymous	Really useful to help get my head around the difference in a real life context
12	anonymous	i thought it was very helpful to understand when to apply the subjunctive, though at first a little confusing
13	anonymous	I enjoyed the game. The interactive experience with different examples was very helpful
14	anonymous	It was really useful
15	anonymous	The activity was very helpful and not like anything i had done before to practice subjunctive. Having completed it I felt a lot more comfortable with using the subjunctive
16	anonymous	I thoroughly enjoyed it and found it very useful to consolidate my knowledge and new concepts learnt in class.

Figure 25 Individual responses to Q2 of questionnaire 2.

Analysis of 16 responses of question 2 in questionnaire 2 shows, that all participants found the online-game activity useful to understand the difference between indicative and subjunctive modes. Some of the responses also emphasized the effectiveness of the activity in providing explanations for what is right or wrong (responses 1 and 7), as well as the importance of considering the context and the communicative intention underlying the use of both modes (responses 4, 9 and 11). The element of originality is underlined in response 15 ‘not like anything I had done before’, while responses 13 ‘I enjoyed the game’ and 16 ‘I thoroughly enjoyed it’ point out the entertaining component of it.

Finally, Table 28 show how attendance/non-attendance to this workshop relates to participants’ performance in the SCMC text-based online chat and their use of SISR/SR or not:

Correlation attendance to grammar workshop/performance in text-based online chat					
Participants attending grammar workshop	Accurate use of SISR/SR	Inaccurate/Unnecessary SISR/SR	Missing SISR/SR	Accurate output without resorting to SISR/SR	Weeks of participation in text-based online chat
10	12	5	17	170	27
Participants not attending grammar workshop	Accurate use of SISR/SR	Inaccurate/Unnecessary SISR/SR	Missing SISR/SR	Accurate output without resorting to SISR/SR	Weeks of participation in text-based online chat
15	7	2	14	134	34

Table 28 Correlation attendance to grammar workshop/participation in text-based online chat.

The results shown in Table 28 indicate that, overall, participants attending the grammar workshop produced more instances of accurate indicative-subjunctive-related structures without resorting to SISR/SR, than instances of accurate, inaccurate/unnecessary, or missing use of SISR/SR. Additionally, participants who did not attend the grammar workshop produced more instances of accurate indicative-subjunctive-related structures without resorting to SISR/SR, than instances of accurate, inaccurate/unnecessary, or missing use of SISR/SR. However, in comparison to those participants who did attend the grammar workshop, participants not attending the grammar workshop produced less instances of accurate SISR/SR and accurate output without resorting to SISR, even though there are more weeks of participation overall among those participants who did not attend the grammar workshop. The number of inaccurate/unnecessary or missing SISR/SR is also lower, but this might be the result of less overall use of indicative-subjunctive-related structures due to lack of awareness or motivation in using such structures, since these participants did not attend the grammar workshop.

Once the results from participation in the grammar workshop have been presented, the next section shows the results from analysing the reflective logs in relation to practice in the SCMC text-based online chat.

4.1.5 Analysis of reflective logs in relation to practice with text-based online chat

This section presents the results of analysing the reflective logs. As already mentioned in a previous section, the rationale for using reflective logs as a data collection tool is to harvest more qualitative data on how the use of SISR/SR, and in general, how practice with text-based online chat is perceived by participants as contributing or not to SLA.

The reflective log consisted of two main sections: One was meant to be completed after participation in the text-based online chat, and the other after participation in the FTF oral debate. Therefore, and for the purposes of answering RQ1, only the results

of the section focusing on participation after text-based online chat will be presented in this section.

A total number of 17 reflective logs from the 25 participants in this study were collected. Although all participants in this study were sent the reflective log via email, 8 of those participants did not send the complete reflective log back to the researcher. The reflective logs, which have not been collected correspond to participants: ChatW2/7, ChatW2/9, ChatW2/15, ChatW3/19, ChatW3/20, ChatW4/29, ChatW4/31, and ChatW6/35. Thus, no further qualitative data will be available to expand on the existing links between performance in text-based online chat and FTF oral debate for those participants. [Appendix 12](#) includes a sample of two of the 17 reflective logs analyzed in this study.

The questions aimed at prompting reflection on the use of the text-based online chat were the following:

1. How did you feel about participating in the online chat? Can you identify any advantages or disadvantages of using this mode?
2. Have you used the * during the chat session to self-repair any of your posts? What specific aspects have you amended using this resource?
3. Do you think the written chat has contributed to improve your use of indicative and subjunctive modes? If yes, how?

As far as the first question is concerned, that is, how did you feel about participating in the online chat? Can you identify any advantages or disadvantages of using this mode?, three participants described the practice as ‘Extremely useful’, and overall, the number of advantages is higher than the number of disadvantages noted on those reflective logs. More specifically, the main aspects, which were often mentioned as advantages of the text-based online chat included:

-Exchange of ideas and arguments to prepare for the FTF oral debate (11 reflective logs).

-It takes the pressure away or it is a safe space to experiment with structures (Five reflective logs).

- Getting feedback from the tutor (Three reflective logs).
- More opportunities to participate, especially for those students who struggle to interact in FTF settings and in front of a group of people (Three reflective logs).
- Writing gives the opportunity to use more formal Spanish, meaning using high-level structures or practising more complex grammatical structures (Two reflective logs).
- Increase in confidence (Two reflective logs).
- More time available to construct accurate grammar (One reflective log)

On the other hand, the main disadvantages pointed out by participants in the learning logs include:

- Typing takes time, and it makes you lose track of the conversation (Five reflective logs).
- Too much reliance on the good structures used in the online chat when talking in the FTF debate might have an impact on how natural participation in the debates is (One reflective log).
- Not sure all that I type is correct because the transcript is not corrected (One reflective log).
- The conversation is slow and not all aspects of the topic are covered (One reflective log)
- It is difficult to make space in our busy final-year degree schedules for this extra practice (One reflective log).

Among these disadvantages, it is relevant to note how one of the participants links too much reliance on the text-based online chat practice with the potential lack of spontaneity in the FTF oral debate. In this sense, further clarification should be provided by the researcher on how practice over time, and automatization of those good structures could potentially lead to a more natural output. On the other hand, it could be also relevant to explore what is considered by language learners as ‘natural participation’ while emphasizing that in the process of re-learning, naturalness might need to be compromised.

In relation to the comment referring to the correction/not correction of the transcript, it must be reminded that participants were informed about the possibility of contacting

the researcher after receiving and reading the transcript, in case they had any further questions on content or language accuracy.

In relation to the second question, that is, have you used the * during the chat session to self-repair any of your posts? What specific aspects have you amended using this resource? 14 out of 17 participants answered ‘yes’ to the use of * for self-repair. The main areas subject to self-repair recorded by participants in the reflective logs include:

- Tenses (10 reflective logs)
- Typing or spelling errors (Five reflective logs)
- Masculine/feminine agreement (Two reflective logs)
- Words/vocabulary (One reflective log)

On the other hand, eight out of the 14 participants specifically indicated the use of * for the amendment of indicative-subjunctive-related structures, which are the structures object of this study. This information will contribute to assess the benefits, if any, of using * to enhance participants’ visualization and noticing of such structures. In this sense, Table 29 shows the correlation between participants admitting to having use * to signal accurate SISR/SR in indicative-subjunctive-related structures in the text-based online chat, and their actual performance according to the analysis of the transcripts. [Appendix 12](#) includes a sample of two of the 17 reflective logs.

SCMC Text-based online chat		
Participant	Use of * for SISR/SR in an Indic./Subj. related structure (Accurate/inaccurate/ unnecessary)	Accurate use of * for SISR/SR in an Indic./Subj. related structure according to the reflective log
ChatW1/1	3	No
ChatW1/4	0	No
ChatW1/5	4	Yes
ChatW1/6	1/2	No
ChatW2/10	0	No
ChatW2/11	2/1	Yes

ChatW2/13	1	No
ChatW2/16	0	No
ChatW3/18	1	No
ChatW3/21	0	No
ChatW3/22	1	Yes
ChatW3/23	1	Yes
ChatW3/25	2	Yes
ChatW4/28	1	Yes
ChatW7/38	1	Yes
ChatW7/39	1	No
ChatW9/41	1	Yes

Table 29 Correlation participation in text-based online chat and reflective log with regards to the use of * to signal SISR/SR in indicative-subjunctive-related structures.

According to the results shown in Table 29, the eight participants who admitted to having used * to amend indicative-subjunctive-related structures did produce instances of such repair in the text-based online chat. This means, that most of the participants were aware of how this function (*) provided by the text-based online chat can be used to address errors in these specific structures. Conversely, five participants (ChatW1/1, ChatW1/6, ChatW2/13, ChatW3/18, and ChatW7/39) who also used * in the text-based online chat did not specifically mention such use for indicative-subjunctive-related structures. This lack of awareness might not necessarily lead to lack of improvement in these structures. However, the potential benefits of using * might need to be reinforced and more orientated by the tutor, so that learners can make the most of the text-based online chat as a facilitating tool for noticing and, ultimately, for developing language accuracy.

As far as the third and last question to be completed after participation in the online chat is concerned, that is, do you think the written chat has contributed to improve your use of indicative and subjunctive modes? If yes, how? 15 out of 17 participants answered 'yes', one participant (ChatW9/41) was not sure due to having participated only once in the text-based online chat but admits to being more aware of the uses of subjunctive, and 1 participant (ChatW2/10) did not respond directly to the question.

Table 30 shows the correlation between participants admitting to having improved their use of indicative-subjunctive modes, and overall instances of accurate production in the text-based online chat. The number of instances includes both the accurate output of these structures using SISR/SR or without resorting to SISR/SR. This information contributes to assess whether participants' perception about the benefits of text-based online chat corresponds to their actual performance in the text-based online chat.

SCMC text-based online chat		
Participant	Instances of accurate use of an Indic./Subj. related structure by using SISR/SR or without resorting to SISR/SR	Improved used of Indic./Subj. related structures according to the reflective log
ChatW1/1	66	Yes
ChatW1/4	5	Yes
ChatW1/5	21	Yes
ChatW1/6	27	Yes
ChatW2/10	22	Does not respond directly to the question
ChatW2/11	19	Yes
ChatW2/13	9	Yes
ChatW2/16	4	Yes
ChatW3/18	7	Yes
ChatW3/21	19	Yes
ChatW3/22	18	Yes
ChatW3/23	25	Yes
ChatW3/25	4	Yes
ChatW4/28	15	Yes
ChatW7/38	9	Yes
ChatW7/39	5	Yes
ChatW9/41	2	Not sure of improvement but more aware of its use

Table 30 Correlation participation in text-based online chat and reflective log with regards to improved use of indicative-subjunctive-related structures.

According to the results shown in Table 30, there is a clear correlation between most of the participants being aware of how the text-based online chat has improved their use of indicative-subjunctive modes, and the actual accurate production of those structures. Even all those participants who were not aware of using * for amending errors related to modality (ChatW1/1, ChatW1/6, ChatW2/13, ChatW3/18, and ChatW7/39), are now aware of the overall contribution of the text-based online chat to their improved use of indicative-subjunctive modes.

With regard to the aspects of the text-based online chat that contributed to improve the use of indicative and subjunctive modes, the following categories have been recorded:

- More time to think or slower pace allowing more opportunities to use grammar (Five reflective logs)
- More awareness, understanding or confidence on when to use indicative and subjunctive (Five reflective logs)
- Having learned from other participants' contributions (Three reflective logs)
- Seeing your own errors (Two reflective logs)
- Reading your own or others' posts (Two reflective logs)
- Being corrected (Two reflective logs)
- Using new grammar structures learned in the grammar lectures and before the FTF oral debate (Two reflective logs)

Learning from other participants' contributions could be evidence of the creation of ZPDs among learners. However, no instances of use of the same structures by different participants discussing in the same text-based online chat have been identified in the transcripts of online conversations for the three participants (ChatW1/1, ChtW2/16, and ChatW7/39) who admitted to having learned from other participants in their reflective logs.

Furthermore, it is worth mentioning that one of the participants makes a direct reference to the grammar explanation for the use of indicative and subjunctive modes presented at the grammar workshop. This comment underscores how specific features of the text-based online chat may facilitate the application of the ‘statement/declaration – non-statement/non-declaration’ rule of indicative-subjunctive use.

‘I think it definitely has. The fact that you have the previous person’s answer written down in front of you means that you can constantly refer back to their answer in the subjunctive form – acknowledging their answer but not repeating or declaring it’.
(Reflective Log ChatW1/4)

This comment is very relevant, and it proposes an additional benefit of the text-based online environment, which had not been considered by the researcher before in relation to the use of the indicative/subjunctive modes. Thus, the participant shows understanding and effective application of the indicative/subjunctive rule: ‘statement/declaration – indicative vs. non-statement/non-declaration subjunctive’, whereby the participant is linking application of the rule to the visualization of other participant’s posts. In order to decide whether to use indicative (making a statement about information, which has not been stated before by any other participant in the discussion) or subjunctive (non-stating an information, which has been already said by another participant in the discussion), a recollection of what has been said or stated before or not, is necessary. Therefore, the visualization of the text through the written online discussion facilitates the identification of information already stated or not stated, and hence, makes it easier to decide whether to use indicative or subjunctive modes.

In summary, analysis of the reflective logs in relation to RQ1 of this study shows, firstly, that participants perceive text-based online chat as being beneficial for learning in general. Secondly, most participants are aware of the use of text-based online chat to address specific aspects of language accuracy, such as modality, thus grasping the strategic value of using this tool. Thirdly, there is a connection between explicit instruction of indicative-subjunctive modes and the visualization provided by the text-based online chat setting, which promotes effective use of modality. Finally,

most participants are aware of the benefits of text-based online chat to improve their use of indicative-subjunctive modes, and such perception is corroborated by their actual accurate use of those structures.

Once the results answering to RQ1 have been presented, the next section shows the results for answering RQ2, that is, how, if at all, can practice over time with SCMC text-based online chat facilitate automatization of SISR/SR of indicative-subjunctive-related errors.

4.2 Results for answering research question 2

RQ2 of this study explores to which extent does practice over time with SCMC text-based online chat contribute to automatize SISR/SR of indicative-subjunctive-related errors, and, eventually, facilitate the creation of correct output of that structure by participants. Consequently, only those participants taking part in at least four or more of the text-based online chats out of 10 have been considered for answering RQ2 since participation in only one or a couple of sessions would not provide enough data of participation over time and would not be relevant to answer this question. On the other hand, the analysis will focus and account for the recurrent or repeated use of an indicative-subjunctive-related structure by the same participant. In this sense, recurrent, or repeated use of a structure has been considered as the use of that specific structure by the same participant in half + one of the weeks of participation or the production of a number of instances of the same structures in that same amount. In doing so, not only use of the same structures across time but also concentration of use in only a few weeks will be recorded and considered. Analysis of use of such recurrent structures will be an indicator of proceduralization/automatization taking place, if any.

Additionally, a table comparing overall results of the three participants and the rest of the cohort of participants who did not take part in the text-based online chat in so many weeks is also included. This data provides additional information on whether, if any, practice over an extended period promotes proceduralization and automatization of the structures object of this study.

As shown in section 3.3 of this research, three students out of the 25 who took part in this study participated in at least four or more text-based online chats. Those participants were: ChatW1/1 (nine weeks of participation), ChatW1/6 (four weeks of participation), and ChatW2/10 (five weeks of participation). To look for instances of automaticity, individual students' participation in text-based online chat was compared through analysis of all their transcripts week per week from W1 to W10, so that progression over time and accumulated practice were taken into consideration. Such comparison was focused on identifying instances of SISR/SR in indicative-subjunctive-related structures, which appeared consistently and repeatedly over time or in several participations in the text-based online chat. However, since automaticity may also manifest itself in the form of consistent incorrect SISR/SR or lack of SISR/SR, meaning, that the mistake is still overlooked by the participant, instances of inaccurate or missing SISR/SR have also been included in the analysis.

Tables 31, 32 and 33 show overall results of analysing individual students' participation with regards to accurate, inaccurate/unnecessary, or missing use of SISR/SR in the following categories:

- Indicative-subjunctive-related structure used inaccurately in FTF oral debates during S1 and needing repair (S1NR).
- Indicative-subjunctive related structure used accurately in FTF oral debates during S1 (S1A).
- Indicative-subjunctive related structure not used in FTF oral debates during S1 (New).

Table 31 shows overall results for participant ChatW1/1. [Appendix 10](#) shows specific instances in these categories collected from analysis of text-based online transcripts for this participant.

Participant ChatW1/1				
Weeks	of	Accurate SISR/SR	Inaccurate/Unnecessary	Missing SISR/SR

participation		SISR/SR	
9	1 (S1NR/SISR) 2 (New/SR)	0	2 (S1NR/SISR) 3 (New/SISR) 2 (New/SR)
Total	3	0	7

Table 31 Accurate, inaccurate/unnecessary, or missing use of SISR/SR for participant ChatW1/1 over time.

According to results shown in Table 31, participant ChatW1/1 successfully used SISR/SR to repair an indicative-subjunctive-related structure in three instances in the text-based online chat. One of those three instances corresponds to a S1NR structure, while the two other instances correspond to New structures, which were not used in S1. SISR was used in one instance to amend the structure that needed repair, while the two New structures were amended through SR. On the other hand, there are no instances of inaccurate/unnecessary use of SISR/SR for this participant. Finally, this participant missed to repair indicative-subjunctive-related structures in seven instances. Two out of the seven instances correspond to a S1NR structure, while five out of the seven instances correspond to New structures, which were not used in S1. The use of SISR was missed in the two instances of structures used in S1 and which needed repair, as well as in three out of the five New structures. The use of SR was absent in the other two out of five New structures not used in S1.

These results seem to indicate that, even though there is some evidence of accurate SISR/SR occurring for this participant, there are still more instances of missing SISR/SR. Additionally, only 1 of the structures subject to accurate SISR corresponds to S1NR. Finally, the tutor prompts most of the instances of accurate repair, whereas most of the instances of missing repair correspond to SISR. This means that tutor's elicitation is still required for this participant to notice and accurately repair indicative-subjunctive-related errors. All these results show that for this participant, practice over time with text-based online chat does not seem to contribute to automatization of SISR/SR of indicative-subjunctive-related structures, which needed repair, and which are the object of this study.

Table 32 shows overall results for participant ChatW1/6. [Appendix 10](#) shows specific instances in these categories collected from analysis of text-based online transcripts for this participant.

Participant ChatW1/6			
Weeks of participation	Accurate SISR/SR	Inaccurate/Unnecessary SISR/SR	Missing SISR/SR
4	1 (New/SR)	1 (S1A/SISR) 1 (New/SISR) 1 (New/SR)	1 (New/SISR) 1 (New/SR)
Total	1	3	2

Table 32 Accurate, inaccurate/unnecessary, or missing use of SISR/SR for participant ChatW1/6 over time.

According to results shown in Table 32, participant ChatW1/6 successfully used SISR/SR to repair an indicative-subjunctive-related structure in one instance in the text-based online chat. That one instance corresponds to a New structure not used in S1, and was amended through SR. On the other hand, participant ChatW1/6 inaccurately/unnecessarily repaired three New structures. Two of those three instances were subject to SISR and the other to SR. Finally, there are two instances of missing SISR/SR in New structures. One of those two instances corresponds to a missed SISR, while the other corresponds to a missed SR.

These results show that the number of inaccurate/unnecessary and missing use of SISR/SR is higher than the amount of accurate SISR/SR. Moreover, all the structures subject to SISR/SR or lack of it correspond to New structures. Such data seems to indicate that for this participant, text-based online chat does not seem to contribute to automatization of SISR/SR of indicative-subjunctive-related structures, which needed repair, and which are the object of this study.

Table 33 shows overall results for participant ChatW2/10. [Appendix 10](#) shows specific instances in these categories collected from analysis of text-based online transcripts for this participant.

Participant ChatW2/10			
Weeks of participation	Accurate SISR/SR	Inaccurate/Unnecessary SISR/SR	Missing SISR/SR
5			3 (New/SISR) 1 (New/SR)
Total	0	0	4

Table 33 Accurate, inaccurate/unnecessary, or missing use of SISR/SR for participant ChatW2/10 over time.

As shown in Table 33, participant ChatW2/10 did not use SISR/SR to repair any indicative-subjunctive-related structure. However, this participant missed to repair four indicative-subjunctive related structures. All four instances correspond to a New structure not used in S1. Three out of the four structures correspond to missing SISR, while one instance out of four corresponds to missing SR.

These results show that the number of missing use of SISR/SR is higher than the amount of accurate SISR/SR. Moreover, all the structures missing SISR/SR correspond to New structures and were mostly due to lack of SISR. Such data seems to indicate that for this participant, text-based online chat does not seem to contribute to automatization of SISR/SR of any type of indicative-subjunctive-related structures including those structures, which needed repair, and which are the object of this study.

In addition to this, regular use of text-based online chat could also potentially lead to complete repair of indicative-subjunctive-related structures without resorting to either SISR/SR. In this sense, Tables 35 to 39 show overall amounts and repeated use of accurate indicative-subjunctive-related structures without resorting to SISR/SR in the text-based online chat for the three participants respectively in the following categories:

-Accurate use of an indicative-subjunctive-related structure used inaccurately in S1, and which needed repair (S1NR).

-Accurate use of an indicative-subjunctive-related structure, which was used accurately in S1 (S1A).

-Accurate use of an indicative-subjunctive-related structure not used before (New).

An account of the instances of accurate use of an indicative-subjunctive-related structure during S1 oral debate is also included for comparative purposes.

Table 34 shows results for participant ChatW1/1. [Appendix 11](#) shows specific instances in these categories collected from analysis of text-based online transcripts for this participant.

ChatW1/1				
S1 Accurately used indicative-subjunctive-related structure				Total No.
				6
SCMC text-based online chat				
Weeks of participation	Accurate use of an Indic./Subj. related structure S1NR	Accurate use of an Indic./Subj. related structure S1A	Accurate use of a Indic./Subj. related structure New	Total No.
9	9	8	46	63

Table 34 Accurate use of an indicative-subjunctive-related structure without resorting to SISR/SR by participant ChatW1/1 over time.

As illustrated in Table 34, there is a total number of 63 instances in which participant ChatW1/1 used an indicative-subjunctive-related structure in the text-based online chat without resorting to either SISR/SR. Nine out of the 63 instances correspond to a S1NR structure, eight correspond to a S1A structure, and 46 instances out of 63 correspond to a New structure. These data show, on the one hand, that this participant has produced significantly more indicative-subjunctive-related structures in the text-based online chat (63) than in S1 oral debates (6). On the other hand, there are more instances of New structures (46) than other type of indicative-subjunctive-related structures (9 S1NR; 8 S1A). This shows that text-based online chat promotes the use of a higher and wider number of indicative-subjunctive-related structures.

Additionally, there are some of these structures, which are repeatedly used over the nine weeks of participation, and which could be evidence of automatization/proceduralization taking place. For the purposes of this research, recurrent use of a structure has been considered as the use of that specific structure by the same participant in half + one of the weeks of participation or the production of instances of that same structure for that same amount or higher. For participant ChatW1/1, who participated in nine text-based online debates, recurrent use has been considered as occurrence of the same structure in at least 5.5 weeks of participation or production of that same number of instances or higher. Whenever a structure has been used more than once in the same week, this has been indicated with the number of instances of use for that specific week in brackets.

Table 35 shows overall numbers of accurate recurrent use of the same indicative-subjunctive-related structures without resorting to SISR/SR in all three types of structures (S1NR, S1A and New), and the weeks in which those structures were used. [Appendix 11](#) shows specific instances in these categories collected from analysis of text-based online transcripts for this participant.

Participant ChatW1/1		
Indicative-subjunctive-related structure	No. Of instances	Weeks
A menos que + Subj. (S1A) [Unless + Subj.]	7	1(2) 3,6,8,9,10
Aunque + Subj. (New) [Although + Subj.]	7	1(2) 2 (3) 8,9
No creo que + Subj. (New) [I do not think that + Subj.]	6	1,3,4,8,10 (2)

Table 35 Repeated use of indicative-subjunctive-related structures without resorting to SISR/SR by participant ChatW1/1.

As displayed in Table 35, there are three indicative-subjunctive-related structures, which participant ChatW1/1 has used accurately and repeatedly over the nine weeks of participation in text-based online chat. One out of the three structures corresponds to a S1A structure and has been used seven times in six different weeks. Finally, two out of those three structures correspond to New structures, which have been used seven and six times over four and five weeks of participation respectively. These results seem to indicate that this participant has automatized the use of these three

structures (*A menos que* + Subj., **unless** + Subj.; *Aunque* + Subj., **although** + Subj., and *no creo que* + Subj., **I do not think that** + Subj.) through the use of text-based online chat.

Additionally, another structure, which have been used by this participant often but not for the half + one established recurrent period is '*Es interesante que* + Subj.' '**It is interesting that** + Subj.' (four instances, New structure) ([Appendix 11](#)). This structure is worth further analysis because it has been used consistently by this participant for four weeks to respond to another speaker's post and take the turn: '*Es interesante que hayas presentado ese argumento*' '**It is interesting that you have proposed that argument**', '*Es interesante que hayas abordado un concepto...*' '**It is interesting that you have addressed a concept...**', '*Es interesante que hayas ilustrado los beneficios de la tecnología*' '**It is interesting that you have illustrated the benefits of technology**', and '*Es interesante que hayas mencionado sobre la evolución de la lengua*' '**It is interesting that you have mentioned the evolution of the language**'. These instances are relevant because they show how the participant is using the same subjunctive structure to summarize but not to state or declare (hence the use of subjunctive) what the previous speaker has said, while using it to take the turn, and to add their own thoughts and contribution to the discussion. This is one of the uses of subjunctive as non-statement/non-declaration, which were explained in the grammar workshop, and that the participant had not previously used during S1. In this sense, the use of this structure with the same discursive function in all instances (to recap, taking the turn and add something new) shows understanding of the explicit rule and actual appropriate application of the rule in the context of communication.

In relation to this specific structure and its role to organize discourse, it will be further analyzed in this study, whether it has been transferred by the participant to the FTF oral debate context and used frequently, even though it was not automatized in the text-based online chat.

Table 36 shows results corresponding to participant ChatW1/6. [Appendix 11](#) shows specific instances of accurate use of indicative-subjunctive-related structure without resorting to SISR/SR for this participant.

Participant ChatW1/6				
S1 Accurately used indicative-subjunctive-related structure				Total No.
				2
SCMC Text-based online chat				
	Accurate use of an Indic./Subj. related structure S1NR	Accurate use of an Indic./Subj. related structure S1A	Accurate use of an Indic./Subj. related structure New	Total No.
Total	6	0	20	26

Table 36 Accurate use of an indicative-subjunctive-related structure without resorting to SISR/SR by participant ChatW1/6 over time.

As shown in Table 36, participant ChatW1/6 used accurately an indicative-subjunctive-related structure in the text-based online chat without resorting to SISR/SR in 26 instances. Six out of the 26 instances correspond to a S1NR structure, while 20 instances correspond to a New structure. As in the case of the previous participant, these data show, on the one hand, that this participant has produced significantly more indicative-subjunctive-related structures in the text-based online chat (26) than in S1 oral debates (2). On the other hand, there are more instances of New structures (20) than other type of indicative-subjunctive-related structures (6 S1NR; 0 S1A). This seems to indicate that text-based online chat promotes the use of a higher and wider number of indicative-subjunctive-related structures.

Additionally, there is one structure, which is repeatedly used over all four weeks of participation, and which could be evidence of automatization/proceduralization taking place. Table 37 shows those specific instances of accurate recurrent use of the same indicative-subjunctive-related structures without resorting to SISR/SR in the category that is the main object of this study (S1NR). [Appendix 11](#) shows specific instances in this category collected from analysis of text-based online transcripts for this participant.

Participant ChatW1/6		
Indicative-subjunctive-related structure	No. Of	Weeks

	instances	
Para que + Subj. (S1NR) [In order to + Subj.]	6	1 (2) 2,3,9 (2)

Table 37 Repeated use of indicative-subjunctive-related structures without resorting to SISR/SR by participant ChatW1/6.

As shown in Table 37, the structure '*para que + Subj.*' (**In order to + Subj.**), which was used inaccurately in S1 by this participant, has been used accurately 6 times over the four weeks of participation in the text-based online chat. This seems to indicate that practice over time with text-based online chat has contributed to the automatization of accurate production of this structure for this participant.

Table 38 shows results corresponding to participant ChatW2/10. [Appendix 11](#) shows specific instances of accurate use of indicative-subjunctive-related structures without resorting to SISR/SR for this participant.

Participant ChatW2/10				
S1 Accurately used indicative-subjunctive-related structure				Total No.
				1
SCMC Text-based online chat				
	Accurate use of an Indic./Subj. related structure S1NR	Accurate use of an Indic./Subj. related structure S1A	Accurate use of an Indic./Subj. related structure New	Total
Total	1	3	18	22

Table 38 Accurate use of an indicative-subjunctive-related structure without resorting to SISR/SR by participant ChatW2/10 over time.

As shown in Table 38, there is a total number of 22 instances in which participant ChatW2/10 used accurately an indicative-subjunctive-related structure in the text-based online chat without resorting to either SISR/SR. One out of the 22 instances corresponds to a S1NR structure, three correspond to a S1A structure, and 18 instances out of 22 correspond to a New structure. The data for this participant aligns with the results of previous participants, whereby the amount of accurate output of indicative-subjunctive-related structures is notably higher in the text-based online chat

(22) than in S1 oral debates (1). Most of the instances correspond to New structures, thus supporting the idea that text-based online chat contributes to the incorporation of a higher number and a wider variety of indicative-subjunctive-related structures.

For participant ChatW2/10, who participated in five text-based online debates, recurrent use of the same structure has been considered occurrence of the same structure in at least 3.5 weeks of participation or the production of instances of that same structure for that same amount or higher. However, there are no structures, which have been used in 3.5 weeks, or which have been produced this number of times by this participant. In this respect, it seems that practice over time with text-based online chat has not contributed to the automatization of any structures for this specific participant.

Finally, all these results should also be considered in relation to attendance of these specific participants to the grammar workshop, and the answers of these participants' reflective logs. Consequently, Table 39 shows correlation of attendance to the grammar workshop and performance in text-based online chat with regards to automatization, and the three participants, who are the focus of this research question.

Correlation attendance to grammar workshop/participation in text-based online chat						
Participants attending grammar workshop	Accurate use of SISR/SR	Inaccurate/Unnecessary SISR/SR	Missing SISR/SR	Accurate output without SISR/SR	No. Of repeated structures	No. Of Weeks
ChatW1/1	3	0	7	63	3	9
ChatW1/6	1	3	2	26	1	4
Total	4	3	9	89	4	13
Participant not attending grammar workshop	Accurate use of SISR/SR	Inaccurate/Unnecessary SISR/SR	Missing SISR/SR	Accurate output without SISR/SR	No. Of repeated structures	No. Of Weeks
ChatW2/10	0	0	4	22	0	5
Total	0	0	4	22	0	5

Table 39 Correlation attendance to grammar workshop/participation in text-based online chat for all three participants.

As shown in Table 39, participants ChatW1/1 and ChatW1/6 attended the grammar workshop and produced more instances of accurate SISR/SR and of accurate output without resorting to SISR/SR than participant chat W2/10, who did not attend the grammar workshop. Conversely, participant ChatW1/6 also produced more instances of inaccurate/unnecessary SISR/SR than participant ChatW2/10, who did not attend the grammar workshop. Additionally, both participants attending the grammar workshop have produced more instances of missing SISR/SR than the participant who did not attend it. However, regardless of whether there are instances of inaccurate/unnecessary or missing use of SISR/SR, what these numbers show, is that those participants attending the grammar workshop are using more indicative-subjunctive-related structures, and thus, taking more risks in terms of accurate, inaccurate/unnecessary, or missing use of them. Such instances of inaccurate/unnecessary or missing use of SISR/SR could be regarded as attempts by the learner of opening their system to new knowledge. Consequently, these results allow us to think that participation in the grammar workshop contributes to raising awareness on the use of indicative-subjunctive-related structures and, hence, the higher occurrence of such structures in those participants who attended the workshop.

As far as the reflective logs are concerned ([Appendix 12](#), shows the reflective log by participant ChatW1/1), all three participants agree on the general benefits of using the text-based online chat when responding to question 1:

‘Very interactive and everyone who goes contributes equally. Good to know new ideas regarding the topic. Sometimes I am unsure if what I am saying is completely correct as the transcript is not corrected’. (Reflective log ChatW1/1)

‘I found these chats to be really useful in terms of formulating ideas and thinking about the debate for the class’. (Reflective log ChatW1/6)

‘No, I prefer it because I think it takes the pressure away from speaking and it means Isabel can pick up on any mistake even if its a small one’. (Reflective log ChatW2/10)

With regards to question two of the reflective log and the use of * for self-repair, only one of the participants explicitly mentioned its use for tenses and grammatical errors, although indicative-subjunctive modes are not specifically mentioned:

‘Yes, to correct typing errors and errors when reading my contribution back’.
(Reflective log ChatW1/1)

‘I did use it often, particularly when correcting tenses and grammatical aspects of my sentences’. (Reflective log ChatW1/6)

‘Usually just accent or spelling errors’. (Reflective log ChatW2/10)

Such observations indicate a lack of awareness with regards to indicative-subjunctive-related structures, even though ChatW1/1 and ChatW1/6 did use * to amend such structures. On the other hand, these perceptions also seem to align with the low use of SISR/SR in indicative-subjunctive-related structures by these participants in the text-based online chat over time.

With regards to question three of the reflective log, and how has the text-based online chat contributed to improving their use of indicative-subjunctive structures, only two of the participants specifically mentioned this aspect, while participant ChatW2/10 does not mention indicative/subjunctive uses. One of the participants, namely, ChatW1/1, also admits having learned other subjunctive uses from other participants. This latter observation highlights the potential of text-based online chat for the co-construction of knowledge, and the expansion of ZPDs advocated by Vygotsky (1978:86), and supports previous research (Michel and Stiefenhöfer, 2019) on peer alignment of Spanish subjunctive through the use of SCMC.

‘Yes definitely. It has allowed me to have more time to think when using subjunctive structures, and consolidated my knowledge on this. I have learnt other subjunctive structures from the other participants’. (Reflective log ChatW1/1)

‘I definitely think that the written chat has helped me improve my indicative and subjunctive. Especially using the lecture content in the online chats with new phrases

and grammatical structures, the chats were a good practice for me'. (Reflective log ChatW1/6)

'It significantly slows the pace down, and I like how it makes the arguments very concise and it feels like you have more opportunities to use the grammar because its slower. The in person debates are sometimes problematic because it's so hard to jump in with an argument but by using the chat it makes it so much easier. (Reflective log ChatW2/10)

These perceptions, especially those made by ChatW1/1 and ChatW1/6, correspond to actual performance of these participants in the text-based online chat with respect to indicative-subjunctive modes. All three participants produced considerably more instances of accurate output of these structures in the text-based online chat than during S1 oral debates, thus proving how practice over time has improved their performance.

Finally, Table 40 shows a comparison of performance in the text-based online for the three participants and the rest of the cohort, which was not exposed to extended practice.

	Participation in text-based online chat over an extended period				Participation in text-based online chat over a limited period			
	Accurate SISR/SR	Inaccurate/ Unnecessary SISR/SR	Missing SISR/SR	Accurate output without SISR/SR	Accurate SISR/SR	Inaccurate/ Unnecessary SISR/SR	Missing SISR/SR	Accurate output without SISR/SR
	4	3	13	111	15	4	18	193
Average	0.22	0.16	0.72	6.16	0.34	0.09	0.41	4.4
Total No. Of instances	131				230			
Average	7.2				5.3			
Total No. Of weeks	18				43			

Table 40 Comparison of participation in text-based online chat over an extended or limited period.

As shown in Table 40, the three participants who practiced with the text-based online chat over time produced fewer instances of indicative-subjunctive-related structures in all categories than those who did not participate over time. However, the number of weeks of data collection for the participants who did not practice over time with the text-based online chat (43) is considerably higher than the number of weeks of the three participants who practiced over time (18). Accordingly, on average, the three participants who practiced over time have produced, overall, more instances of indicative-subjunctive-related structures (131/7.2) than the rest of the cohort (230/5.3). Additionally, except for the category of accurate SISR/SR, in which the whole cohort has produced more instances (15/0.34 vs. 4/0.22), the three participants have a higher ratio of accurate output of structures without resorting to SISR/SR (111/6.16 vs. 193/4.4), and a lower ratio of inaccurate/unnecessary (3/0.16 vs. 4/0.09) and missing SISR/SR (13/0.72 vs. 18/0.41). All this data seems to indicate that practice over time with text-based online chat leads to a higher number and accurate use of indicative-subjunctive-related structures.

Once the results that answer RQ2 have been presented, the next section shows the results from comparing individual feedback sheets from oral debates in S2 and individual participation in text-based online chats. Such results were used to respond to RQ3, that is, how, if at all, SCMC text-based online chat might facilitate the transfer of knowledge and abilities from the text-based online setting to the FTF oral context.

4.3 Results for answering research question 3

RQ3 addresses how, if at all, can SCMC text-based online chat facilitate the transfer of knowledge and abilities from the text-based online setting to the FTF oral situation, that is, whether participants are able to notice and self-initiate self-repair the errors made when using indicative-subjunctive-related structures, not only in the text-based online context, but also when speaking in a FTF context.

Accordingly, to respond to RQ3, analysis and comparison of individual students' participation in the text-based online chat, and the subsequent FTF oral debate about the same topic in the seminar during S2 was carried out. To respond to the concept of 'transfer of knowledge', all those instances in which the exact same structures or matching structures have been used in both contexts by the same participant in the same or different weeks were recorded and analyzed.

In addition to comparison of all participants' performance in both the text-based online chat and the FTF oral debate, results from the three participants (ChatW1/1, ChatW1/6, and ChatW2/10) who practiced over time with text-based online chats is presented separately. This information is relevant to explain whether the knowledge from the text-based online chat might have been transferred to the FTF oral debate over time, thus promoting proceduralization and automatization.

Finally, responses from participants' reflective logs with respect to their performance in the FTF oral debates, after participation in SCMC text-based online chat, is also included.

In summary, the next three subsections present the results that address RQ3 in the following aspects:

- Analysis and comparison of all instances in which SISR/SR has been used or not in both the text-based online chat and the FTF oral debate for all participants.

- Analysis and comparison of all instances of accurate production of indicative-subjunctive-related structures without resorting to SISR in both the text-based online chat and the FTF oral debate for all participants.

- Responses from reflective logs for all participants.

- Analysis and comparison of all instances in which SISR/SR has been used or not, as well as accurate production of structures without resorting to SISR/SR in both contexts for the three participants who practiced over time with SCMC text-based online chat.

Each one of these categories also includes a table showing overall amounts of instances of indicative-subjunctive-related structures in both contexts. Another table displaying the matching structures, which were used both in the text-based online chat and the FTF oral debate by individual participants is also included.

4.3.1 Comparison of text-based online chat and S2 oral feedback sheets

This section presents overall results concerning the first aspect considered in RQ3, namely, whether text-based online chat contributes to participants' noticing and subsequent SISR of indicative-subjunctive-related errors in a FTF oral debate, taking place in S2, and after participation in SCMC text-based online chat. Accordingly, three sources of data collection have been used and compared for individual participants: Transcripts of SCMC text-based online chat, S2 FTF oral feedback sheets, and audio recordings of S2 FTF oral discussions. As stated in chapter three of this study, some audio recordings are not available due to industrial action.

Table 41 shows the data collected and analyzed to compare online performance and FTF oral participation for individual participants:

Participant	Text-based online chat transcript/Week	S2 FTF oral feedback sheets/Week	Audio recordings /Week
ChatW1/1	1,2,3,4,6,7,8,9,10	1,2,3,4,6,7,8,9,10	1,2,3,4,6,7,8,9,10
ChatW1/4	1,3	1,3	No recordings
ChatW1/5	2,4	2,4	2,4
Chat W1/6	1,2,3,9	1,2,3,9	9
Chat W2/7	2,3,5	2,3,5	No recordings
Chat W2/9	5	5	5
Chat W2/10	2,3,4,6,8	2,3,4,6,8	2,3,4,6,8
Chat W2/11	2,5	2,5	No recordings
Chat W2/13	2,5	2,5	2,5
Chat W2/15	2,3,5	2,3,5	5

Chat W2/16	2	2	No recording
Chat W3/18	3,6,8	3,6,8	3,6,8
Chat W3/19	3,7	3,7	7
Chat W3/20	3	3	3
Chat W3/21	3,6,7	3,6,7	7
Chat W3/22	3,7	3,7	7
Chat W3/23	3,5	3,5	No recordings
Chat W3/25	3,5,7	3,5,7	3,5,7
Chat W4/28	4,5,7	4,5,7	4,5,7
Chat W4/29	5	5	5
Chat W4/31	4	4	4
Chat W6/35	6	6	6
Chat W7/38	7,8	7,8	7,8
Chat W7/39	7,8	7,8	7,8
Chat W9/41	9	9	9

Table 41 Data collected and analyzed to compare text-based online chat performance and FTF oral participation for individual participants.

This section also includes tables showing overall amounts for all possible combinations of accurate, inaccurate/unnecessary, and missing use of SISR/SR in both contexts. In doing so, this study will yield more detailed results, whereby any fluctuations or unbalances in the use of SISR/SR for different or the same structures in both contexts will be recorded. Thus, this section presents results and comparison of both contexts in the following categories and combinations:

-Accurate SISR/SR in text-based online chat and accurate SISR/SR in FTF oral debate.

-Accurate SISR/SR in text-based online chat but inaccurate/unnecessary SISR/SR in FTF oral debate.

-Accurate SISR/SR in text-based online chat but missing SISR/SR in FTF oral debate.

-Inaccurate/Unnecessary SISR/SR in text-based online chat but accurate SISR/SR in FTF oral debate.

-Inaccurate/unnecessary SISR/SR in text-based online chat and inaccurate/unnecessary SISR/SR in FTF oral debate.

-Inaccurate/unnecessary SISR/SR in text-based online chat but missing SISR/SR in FTF oral debate.

-Missing SISR/SR in text-based online chat but accurate SISR/SR in FTF oral debate.

-Missing SISR/SR in text-based online chat but inaccurate/unnecessary SISR/SR in FTF oral debate.

-Missing SISR/SR in text-based online chat and missing SISR/SR in FTF oral debate.

Finally, for each one of these combinations, a table showing specific instances of matching structures, that is, the same structures used in both settings, will be included. It must be clarified that the concept of matching structures refers to two types of instances.

1. Structures, which use the same conjunction or verb/main verb (V1) followed by the same or a different indicative/subjunctive verb/subordinate verb (V2) in both the text-based online chat and the FTF oral debate. For example, a participant has used '*Aunque sea (subj.) caro*' '**Although it is expensive**' (Although + verb 'to be' in subj.) in the text-based online chat and has used '*Aunque España no tenga (subj.) ningún derecho*' '**Although Spain has no right**' (Although + verb 'to have' in subj.). Even though the verbs used in subjunctive form are different (to be – to have), it will be considered that the structure is the same due to the use of the same conjunction '*Aunque/Although*'.

2. Structures, which use the same conjunction or verb/main verb (V1) followed by the same indicative/subjunctive verb/subordinate verb (V2) and expressing the exact same idea. For example, a participant has used '*Es inevitable (V1) que las lenguas se extingan (V2 subj.)*' '**It is unavoidable (V1) that languages go extinct (V2 Subj.)**', in the text-based online chat, and has used the same sentence in the FTF oral debate. These instances will, thus, correspond to online discussions and FTF debates happening in the same week, and while discussing the same topics, and will be a clear indicator of transfer of knowledge.

The collection and analysis of such instances will account for the transfer/non-transfer of knowledge addressed in this RQ3. All instances will be further categorised according to the type of structures subject to repair (S1NR, S1A, New), and the type

of repair used (SISR/SR). [Appendix 10](#) shows the specific instances in Spanish corresponding to those amounts, as identified in the text-based online transcripts, the FTF oral debates feedback sheets, and the audio recordings available. In those instances, in which the subordinate verbs/V2 are the same in both contexts, those instances have been highlighted in **red** for better identification.

Table 42 shows general results for all 25 participants for accurate used of SISR/SR in both text-based online chat and FTF oral debate. Since no feedback from the tutor was available during the FTF oral debates, only the option of SISR, that is, self-repair initiated by the learners themselves is shown in the results. [Appendix 10](#) shows specific instances of accurate use of indicative-subjunctive-related structures in both the text-based online chat and the FTF oral debate.

	Text-based online chat			FTF oral debate S2		
No. Of instances	Accurate SISR/SR			Accurate SISR		
	19			13		
	S1NR	S1A	New	S1NR	S1A	New
	3	4	12	2	2	9
	SISR		SR	SISR		
	5		14	13		
No. And type of matching structures	1 (S1A)					
	SISR		SR	SISR		
	0		1	1		

Table 42 Accurate use of SISR/SR in both text-based online chat and FTF oral debate.

According to data displayed in Table 42, there is an overall amount of 19 instances of accurate use of SISR/SR in the text-based online chat: Three of those instances correspond to S1NR, 4 correspond to S1A, and 12 correspond to New structures. On the other hand, 13 instances of accurate SISR in the FTF oral debate have been identified: Two of those instances correspond to S1NR, two to a S1A, and nine instances correspond to New structures.

These results seem to indicate that text-based online chat promotes slightly more use of SISR/SR than the FTF oral debate context. However, it must be noted that in the FTF oral context, tutor’s elicitation is not possible, and that most of the repair produced in the online context was SR elicited by the tutor. This might explain why the occurrence of accurate repair is lower in the FTF oral context.

Regarding the number of matching structures used in both contexts, which will be indicative of transfer of knowledge from one context to the other taking place, Table 43 displays the structure that was used in both contexts. [Appendix 10](#) shows specific instances of accurate use of indicative-subjunctive-related structures in both the text-based online chat and the FTF oral debate.

Participant	Text-based online chat	FTF oral debate S2
	Accurate SISR/SR	Accurate SISR
ChatW1/5	Para que + Indic./*Subj. [In order to + Indic./*Subj.]	Para que + Indic./*Subj. [In order to + Indic./*Subj.]

Table 43 Matching structures subject to accurate SISR/SR in both text-based online chat and FTF oral debate.

As shown in Table 43, there is only one instance of accurate use of SR in the online chat, and accurate repair through SISR in the FTF oral debate for the same exact structure. That instance of transfer of repair corresponds to SR in the text-based online chat, that is, repair provided by the participant after the tutor’s elicitation, and it happened in the same week, and while discussing the same topic. The structure is the same, namely, ‘*para que + subj*’. (In order to + Subj.) but V2 is different (*encontrar – to find / atraer – to attract*) and the content or idea expressed is different as well [Appendix 10](#).

These results show, on the one hand, that the amount of use of the same exact structures and/or ideas in both contexts is low. On the other hand, there is some transfer of accurate repair from the online to the FTF oral context for this participant. However, the low number of instances makes it difficult to assume that there is some transfer of knowledge. Further monitoring of how this structure is used in other categories (inaccurate/unnecessary or missing use of SISR/SR) needs to be done to

see whether there are fluctuations in its use or not, and thus assume or not that transfer of knowledge is occurring.

Table 44 displays general results for accurate SISR/SR in the text-based online chat but inaccurate/unnecessary SISR in the FTF oral debate. [Appendix 10](#) shows specific instances for this comparison of categories in both the text-based online chat and the FTF oral debate.

	Text-based online chat			FTF oral debate S2		
No. Of instances	Accurate SISR/SR			Inaccurate/Unnecessary SISR		
	19			2		
	S1NR	S1A	New	S1NR	S1A	New
	3	4	12			2
	SISR		SR	SISR		
	5		14	2		
No. And type of matching structures	0					
	SISR		SR	SISR		
	0		0	0		

Table 44 Accurate use of SISR/SR in text-based online chat but inaccurate/unnecessary use of SISR in FTF oral debate.

According to the data shown in Table 44, there is an overall amount of 19 instances of accurate use of SISR/SR in the text-based online chat, while there are two instances of inaccurate/unnecessary use of SISR in the FTF oral debate. Additionally, those two instances correspond to New structures, and none of them match any of the structures, which were used accurately in the text-based online chat through the use of SISR/SR.

These results seem to indicate that there is no negative transfer of knowledge from one context to the other with respect to this category. This means that none of the instances of accurate SISR/SR in the text-based online chat have been affected by fluctuations in terms of inaccurate/unnecessary SISR in the FTF oral debate.

Table 45 displays the general results for accurate SISR/SR in the text-based online chat but missing SISR in the FTF oral debate. [Appendix 10](#) shows specific instances for this comparison of categories in both the text-based online chat and the FTF oral debate.

	Text-based online chat			FTF oral debate S2		
No. Of instances	Accurate SISR/SR			Missing SISR		
	19			117		
	S1NR	S1A	New	S1NR	S1A	New
	3	4	12	14	8	95
	SISR		SR	SISR		
	5		14	117		
No. And type of matching structures	3 (1 S1A + 2 New)					
	SISR		SR	SISR		
	0		3	0		

Table 45 Accurate use of SISR/SR in text-based online chat but missing SISR in FTF oral debate.

As displayed in Table 45, there is an overall amount of 19 instances of accurate use of SISR/SR in the text based online chat, but 117 instances of missing SISR in the FTF oral debate: 14 instances out of 117 correspond to S1NR structures, eight instances correspond to S1A structures, and 95 instances correspond to New structures. Regarding the number of matching structures used in both contexts, which will be indicative of transfer of knowledge from one context to the other taking place, only 3 instances of accurate use of SISR/SR in the text-based online chat but missing SISR of the same structure in the FTF oral debate have been recorded. However, none of these instances correspond to the same exact idea.

Table 46 displays the matching structures subject to accurate SISR/SR in the text-based online chat but missing SISR in the FTF oral debate. [Appendix 10](#) shows specific instances corresponding to this category.

Participant	Text-based online chat	FTF oral debate
-------------	------------------------	-----------------

	Accurate SISR/SR	Missing SISR
ChatW1/1	No es justo que + Indic./*Subj. [It is not fair that + Indic./*Subj.]	No es justo que + Indic. [It is not fair that + Indic.]
ChatW3/25	Es posible que + Indic./*Subj. [It is possible that + Indic./*Subj.]	Es posible que + Indic. [It is possible that + Indic.]
ChatW7/38	Es importante que + Indic./*Subj. [It is important that + Indic./*Subj.]	Es importante que + Infinitivo [It is important that + Infinitive]

Table 46 Matching structures subject to accurate SISR/SR in text-based online chat but missing SISR in FTF oral debate.

As shown in Table 46, there are three instances of accurate use of SR in the online chat, but missing repair through SISR in the FTF oral debate for the same exact structure. In one of the instances the accurate repair and lack of it occurred in the same week and while discussing the same topic. In the other two instances, the accurate repair and the lack of it happened in different weeks. The structures are the same, namely, ‘*no es justo que + Subj.*’ (It is not fair that + Subj.), ‘*Es posible que + Subj.*’ (It is possible that + Subj.), and ‘*Es importante que + Subj.*’ (It is important that + Subj.) but the V2 (*pagar – to pay / perpetrar – to perpetrate, mirar – to look / haber – there is/are, recibir – to get / mantener – to keep*) and ideas or content expressed are not the same ([Appendix 10](#)).

These results seem to indicate, on the one hand, that the amount of use of the same exact structures in both contexts is low, meaning that missing use of SISR in the FTF oral context has hardly affected the 18 overall instances of accurate SISR/SR in the text-based online chat. Consequently, the negative transfer of knowledge from one context to the other is also low.

On the other hand, those instances of missing SISR in the FTF oral debates show that these structures are still subject to fluctuations with regards to the noticing, and subsequent repair. In this sense, while those structures were accurately repaired in the text-based online chat, they were unnoticed and missed repair in the FTF oral debate. The fact that the tutor elicited accurate repair in the online context for all three instances might explain the missing SISR in the FTF oral one. Thus, it seems that the

participants still need to be oriented by the tutor to noticing these structures, so that they can repair them.

Table 47 shows general results for inaccurate/unnecessary use of SISR/SR in the text-based online chat but accurate SISR in the FTF oral debate. [Appendix 10](#) shows specific instances for this comparison of categories in both the text-based online chat and the FTF oral debate.

		Text-based online chat			FTF oral debate S2		
No. Of instances		Inaccurate/Unnecessary SISR/SR			Accurate SISR		
		7			13		
		S1NR	S1A	New	S1NR	S1A	New
		0	0	7	2	2	9
		SISR		SR	SISR		
		3		4	13		
No. And type of matching structures		1 (New)					
		SISR		SR	SISR		
		0		1	1		

Table 47 Inaccurate/unnecessary use of SISR/SR in text-based online chat but accurate SISR in FTF oral debate.

As shown in Table 47, seven instances of inaccurate/unnecessary use of SISR/SR have been recorded in the text-based online chat. All seven examples correspond to New structures. On the other hand, there is an overall amount of 13 instances of accurate use of SISR in the FTF oral debate: Two instances correspond to a S1NR structure, two to a S1A structure, and nine to a New structure.

Regarding the number of matching structures used in both contexts, which will be indicative of transfer of knowledge from one context to the other taking place, only 1 instance of inaccurate/unnecessary SISR/SR in the text-based online chat but accurate SISR in the FTF oral debate of the same new structure, has been recorded.

Table 48 displays the matching structure subject to inaccurate/unnecessary SISR/SR in the text-based online chat, but accurate SISR in the FTF oral debate. [Appendix 10](#) shows specific instances for this category:

Participant	Text-based online chat	FTF oral debate
	Inaccurate/Unnecessary SISR/SR	Accurate SISR
ChatW4/28	Es como (si) + Indic. [It is as (if) + Indic.]	Es como si + Indic./*Subj. [It is as if + Indic/*Subj.]

Table 48 Matching structures subject to inaccurate/unnecessary SISR/SR in text-based online chat but accurate SISR in FTF oral debate.

As shown in Table 48, there is one instance of inaccurate/unnecessary use of SR in the text-based online chat, but accurate repair through SISR in the FTF oral debate for the same exact structure. The inaccurate repair but accurate SISR of it occurred in the same week (Week 7) and while discussing the same topic. Both the structure and the idea expressed were the same, namely, ‘*Es como (si) + Subj.*’ (It is as (if) + Subj.), ‘*Es como los españoles están celebrando*’ (It is as (if) the Spanish people were celebrating). [Appendix 10](#) shows this instance highlighted in red.

These results show, on the one hand, that the number of matching structures used in both contexts is low. This means that there is hardly any negative transfer of errors from the text-based online setting to the FTF oral one. On the other hand, the only instance of matching structure clearly shows how prior practice with text-based online chat has contributed to the successful repair and accurate use of that structure in the FTF oral debate for this participant. The participant has used not only the same structure but also the same idea in the FTF oral debate discussing the same topic. Reading of the transcript (as this participant admits in the reflective log), along with careful planning of the contributions in the FTF oral debate might have played a role in such positive transfer of knowledge. In this sense, this example illustrates positive transfer of knowledge from the online setting to the FTF oral one, which is the main hypothesis posed in this research project.

Table 49 includes the general results for inaccurate/unnecessary SISR/SR in both the text-based online chat and the FTF oral debate. [Appendix 10](#) shows specific instances for this comparison of categories.

	Text-based online chat			FTF oral debate S2		
No. Of instances	Inaccurate/Unnecessary SISR/SR			Inaccurate/Unnecessary SISR		
	7			2		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	7	0	0	2
	SISR		SR	SISR		
	3		4	2		
No. And type of matching structures	0					
	SISR		SR		SISR	
	0		0		0	

Table 49 Inaccurate/unnecessary use of SISR/SR in both text-based online chat and FTF oral debate.

As shown in Table 49, there is a total number of seven instances of inaccurate/unnecessary SISR/SR in the text-based online chat. All seven examples correspond to New structures. On the other hand, there are only two instances of inaccurate/unnecessary SISR in the FTF oral debate, and such instances do not correspond to the same inaccurate/unnecessary SISR in the text-based online chat.

These results show that the number of inaccurate/unnecessary repair is reduced in the FTF oral debate. Additionally, since there are no matching structures, it seems that there has not been a negative transfer of the same errors from one context to the other.

Table 50 shows general results for inaccurate/unnecessary SISR/SR in the text-based online chat but missing SISR of in the FTF oral debate. [Appendix 10](#) shows specific instances for this comparison of categories.

	Text-based online chat	FTF oral debate S2
--	------------------------	--------------------

No. Of instances	Inaccurate/Unnecessary SISR/SR			Missing SISR		
	7			117		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	7	14	8	95
	SISR		SR	SISR		
	3		4	117		
No. And type of matching structures	0					
	SISR		SR	SISR		
	0		0	0		

Table 50 Inaccurate/unnecessary use of SISR/SR in text-based online chat but missing SISR in FTF oral debate.

As shown in Table 50, there are a total of seven instances of inaccurate/unnecessary SISR/SR in the text-based online chat, while there are 117 instances of missing SISR in the FTF oral debate. However, none of those 117 instances corresponds to any previous inaccurate/unnecessary SISR/SR of the exact same structure in the text-based online chat.

These results show that the number of inaccurate/unnecessary repair in the text-based online chat is significantly lower than the amount of missing repair in the FTF oral debate. Additionally, since there are no matching structures, it seems that there has not been a negative transfer of the same errors from one context to the other.

Table 51 shows general results for missing SISR/SR in the text-based online chat but accurate SISR in the FTF oral debate. [Appendix 10](#) shows specific instances for this comparison of categories.

No. Of instances	Text-based online chat			FTF oral debate S2		
	Missing SISR/SR			Accurate SISR		
	31			13		
	S1NR	S1A	New	S1NR	S1A	New
	3	4	24	2	2	9
	SISR		SR	SISR		

	25	6	13
No. And type of matching structures	0		
	SISR	SR	SISR
	0	0	0

Table 51 Missing use of SISR/SR in text-based online chat but accurate SISR in FTF oral debate.

As shown in Table 51, there are 31 instances of missed use of SISR/SR in the text-based online chat, and 13 instances of accurate use of SISR in the FTF oral debate. However, none of those 13 instances corresponds to a missing use of SISR/SR of the exact same structure in the text-based online chat.

These results seem to indicate that there is little noticing occurring in the text-based online chat and, hence, the higher amount of missing SISR/SR. Additionally, there are no matching structures, meaning that there is no transfer of knowledge from one context to the other. In this sense, a missed SISR/SR in the text-based online chat could have been accurately amended in the FTF oral debate after, for example, reading of the transcript. However, since most of the instances of missing repair correspond to SISR, it seems that tutor's elicitation is required for noticing to happen, and for the participants to be able to use that feedback in the FTF oral debate accordingly.

Table 52 shows general results for missing SISR/SR in the text-based online chat but inaccurate/unnecessary SISR in the FTF oral debate. [Appendix 10](#) shows specific instances for this comparison of categories.

	Text-based online chat			FTF oral debate S2		
No. Of instances	Missing SISR/SR			Inaccurate/Unnecessary SISR		
	31			2		
	S1NR	S1A	New	S1NR	S1A	New
	3	4	24			2
	SISR		SR	SISR		

	25	6	2
No. And type of matching structures	0		
	SISR	SR	SISR
	0	0	0

Table 52 Missing use of SISR/SR in text-based online chat but inaccurate/unnecessary SISR in FTF oral debate.

As shown in Table 52, there are 31 instances of missed use of SISR/SR in the text-based online chat, while there are only two instances of inaccurate/unnecessary SISR in the FTF oral debate. However, none of those two instances corresponds to a missing use of SISR/SR of the exact same structure in the text-based online chat.

As in the case of results from the previous table, the fact that there are no matching structures means that there is no transfer of knowledge from one context to the other. In this sense, if a missed SISR/SR in the text-based online chat had been subject to inaccurate/unnecessary SISR in the FTF oral debate, it could have been evidence of some noticing taking place in the FTF oral debate for that structure. Even though the repair was not accurate, the fact that the participant had tried to amend the structure is indicative of some sort of cognitive dissonance occurring. However, since most of the instances of missing repair in the text-based online chat correspond to SISR, tutor's feedback in the form of elicitation of repair was not present in the transcript, and therefore, it is more difficult for participants to be able to notice missing instances in the FTF oral debate.

Table 53 shows general results for missing SISR/SR in both the text-based online chat and the FTF oral debate. [Appendix 10](#) shows specific instances for this comparison of categories.

	Text-based online chat			FTF oral debate S2		
No. Of instances	Missing SISR/SR			Missing SISR		
	31			117		
	S1NR	S1A	New	S1NR	S1A	New
	3	4	24	13	8	96

	SISR	SR	SISR
	25	6	117
No. And type of matching structures	5 (1 S1NR + 1S1A + 3 New)		
	SISR	SR	SISR
	5	0	5

Table 53 Missing use of SISR/SR in both text-based online chat and FTF oral debate.

As displayed in Table 53, there are 31 instances of missed use of SISR/SR in the text-based online chat, while there are 117 instances of missing SISR in the FTF oral debate. The lower number of missing SISR/SR in the text-based online chat seems to show, that this context promotes more accuracy than the FTF oral one. However, it must be noted that tutor's elicitation and feedback is available in the text-based online chat but not in the FTF oral debate, and this could have prevented the occurrence of more missing instances in the online context.

On the other hand, there are five instances of matching structures out of 117 missing instances. Table 54 displays the matching structures subject to missing SISR/SR in both the text-based online chat and the FTF oral debate. [Appendix 10](#) shows specific instances for this category:

Participant	Text-based online chat	FTF oral debate
	Missing SISR/SR	Missing SISR
ChatW1/1	Por mucho que respete que + Indic. [No matter how much I respect that + Indic.]	Por mucho que respete que + Indic. [No matter how much I respect that + Indic.]
ChatW1/4	Es injusto que + Indic. [It is unfair that + Indic.]	Es injusto que + Indic. [It is unfair that + Indic.]
ChatW1/5	Si + Presente Subj. [If + Present Subj.]	Si + Presente Subj. [If + Present Subj.]
ChatW3/18	No creo que + conditional [I do not think people +	No creo que + conditional [I do not think people +

	Conditional]	Conditional]
ChatW3/25	Es muy importante que + Indic. [It is very important that + Indic.]	Es muy importante que + Indic. [It is very important that + Indic.]

Table 54 Matching structures subject to missing SISR/SR in both text-based online chat and FTF oral debate.

According to the data displayed in Table 54, there are five matching structures of missing use of SISR both in the online chat and in the FTF oral debate. Those structures are, namely, '*Respete que + Subj.*' (I respect that + Subj.) '*Es injusto que + Subj.*' (It is unfair that + Subj.), '*Si + Indic.*' (If + Indic.), '*No creo que + Subj.*' (I do not think that + Subj.), and '*Es importante que + Subj.*' (It is important that + Subj.). one of those instances corresponds to a S1NR structure, one corresponds to a S1A, and three correspond to New structures ([Appendix 10](#)). All five matching instances correspond to missing SISR in the text-based online chat. Additionally, all structures were used in the same week and while discussing the same topic. Finally, in three of those instances not only the structure but also the same V2 and the exact same idea have been used (*excluir – to exclude* (Week 10), *estar trabajando – to be working* (Week 3), *olvidar y seguir – to forget and to keep on* (Week 7)). [Appendix 10](#) shows these instances highlighted in red.

These results indicate, on the one hand, that the number of matching structures in this category is low, that is, only five out of 117 missing instances in the FTF oral debate. This means that the negative transfer of knowledge in the form of missing repair from the text-based online chat to the FTF oral one is not significant. This could be indicative of missing SISR being prevented in the FTF oral settings, thanks to reading of the transcript of the online conversation, and using tutor's feedback to avoid those missing instances in the oral debate. On the other hand, the fact that all those matching instances correspond to missing SISR in the text-based online chat, again emphasizes the need for tutor's elicitation to facilitate noticing, and subsequent SISR in both contexts.

Once the results of comparison between the use of SISR/SR in both the text-based online chat and the FTF oral debate have been presented, the next subsection shows

the results of data related to the accurate production of indicative-subjunctive-related structures without resorting to SISR/SR in both the online and the FTF context.

4.3.2 Text-based online chat and accurate use of indicative-subjunctive-related structures in FTF oral debates without resorting to SISR.

This section presents the results, which respond to the second aspect included in RQ3, that is, how, if any, can text-based online chat contribute to the production of accurate indicative-subjunctive-related structures, which were used inaccurately during S1, and without resorting to SISR in a FTF oral debate, taking place in S2. For the analysis to be as comprehensive as possible this section shows a comparison of data in the following categories and combinations:

-Accurate use of SISR/SR in the text-based online chat, but accurate use of an indicative-subjunctive-related structure without resorting to SISR in the FTF oral debate.

-Inaccurate/unnecessary use of SISR/SR in the text-based online chat, but accurate use of an indicative-subjunctive-related structure without resorting to SISR in the FTF oral debate.

-Missing use of SISR/SR in the text-based online chat, but accurate use of an indicative-subjunctive-related structure without resorting to SISR in the FTF oral debate.

-Accurate use of an indicative/subjunctive-related structure without resorting to SISR/SR, but accurate use of SISR/SR in the FTF oral debate.

-Accurate use of an indicative/subjunctive-related structure without resorting to SISR/SR, but inaccurate/unnecessary use of SISR/SR in the FTF oral debate.

-Accurate use of an indicative/subjunctive-related structure without resorting to SISR/SR, but missing use of SISR/SR in the FTF oral debate.

-Accurate use of an indicative/subjunctive-related structure without resorting to SISR/SR in both the text-based online chat and the FTF oral debate.

Tables related to these categories only display overall amounts. [Appendixes 10](#) and [11](#) show the specific instances in Spanish corresponding to those amounts, as identified in the text-based online transcripts, the FTF oral debates feedback sheets, and the audio recordings available.

Following each one of these categories, a table displaying the same exact structures, which were used both in the text-based online chat and the FTF oral debate is also included.

Table 55 displays general results for accurate SISR/SR in the text-based online chat but accurate output without resorting to SISR in the FTF oral debate. [Appendixes 10](#) and [11](#) show specific instances for this comparison of categories in both the text-based online chat and the FTF oral debate.

	Text-based online chat			FTF oral debate S2		
	Accurate SISR/SR			Accurate Output without resorting to SISR		
No. Of instances	19			391		
	S1NR	S1A	New	S1NR	S1A	New
	3	4	12	27	61	303
	SISR		SR			
	5		14			
No. And type of matching structures	15 (8 S1NR + 3 S1A + 4 New)					
	SISR		SR			
	6		9			

Table 55 Accurate use of SISR/SR in text-based online chat, but accurate output of an indicative-subjunctive-related structure without resorting to SISR in FTF oral debate.

As shown in Table 55, there is a total amount of 19 instances of accurate use of SISR/SR in the text-based online chat. Three instances correspond to a structure that needed repair in S1, four to a structure, which was accurately used in S1, and 12 to a New structure. On the other hand, 391 instances of accurate output without resorting to SISR have been identified in the FTF oral debate. 27 out of those 391 instances correspond to accurate production of a S1NR structure, 61 correspond to a S1A structure, and 303 correspond to New structures.

Additionally, there are 15 instances of matching structures. Table 56 shows the matching structures subject to accurate SISR/SR in the text-based online chat but accurate output without resorting to SISR in the FTF oral debate. If the same structure has been used more than once by the same participant, this is indicated in brackets. [Appendixes 10](#) and [11](#) show specific instances for this comparison of categories.

Participant	Text-based online chat	FTF oral debate S2
	Accurate SISR/SR	Accurate output without SISR
ChatW1/1	Por mucho que + Indic./*Subj. [No matter how much + Indic./*Subj.]	Por mucho que + Subj. (6) [No matter how much + Subj.]
ChatW1/5	Para que + Indic./*Subj. (2) [in order to + Indic./*Subj.]	Para que + Subj. (3) [In order to + Subj.]
ChatW3/25	Es posible que + Indic./*Subj. [It is possible that + Indic./*Subj.]	Es posible que + Subj. [It is possible that + Subj.]
	Quieren que + Infinitivo /*Subj. [Many people want that + infinitive/*Subj.]	Quieren que + Subj. [Many people want that + Subj.]
ChatW7/38	Es importante que + Futuro Subj./*Presente Subj.	Es importante que + Presente Subj. (4)

	[It is important that + Future Subj.)/*Present Subj.]	[It is important that + Present Subj.]
--	---	--

Table 56 Matching structures subject to accurate SISR/SR in text-based online chat but accurate output without resorting to SISR in FTF oral debate.

As shown in Table 56, there are six instances of accurate use of SISR/SR in the text-based online chat, and 15 instances of accurate output of the same exact structure in the FTF oral debate without resorting to SISR. Eight out of those 15 instances correspond to S1NR structures, 3 correspond to S1A structures, and four instances correspond to New structures ([Appendix 10](#)). Moreover, eight out of those 15 instances were used in both contexts in the same week and while discussing the same topic, and two (highlighted in red in Appendixes 10 and 11) out of those eight structures are followed by the same verb (V2) to express the same exact idea (*Es posible que miren/It is possible that they look at* (Week 3) – *Quieren que tenga/They want [their kid] to have* (Week 5)). The other seven instances correspond to those same structures, which were used before or after the week were SISR/SR took place in the text-based online chat, and while discussing other topics. Finally, six of those structures were subject to SISR, while nine were subject to SR in the text-based online chat.

These results show that there is a positive transfer of knowledge from the text-based online chat to the FTF oral debate. The fact that most of the instances of accurate output without resorting to SISR/SR correspond to a S1NR seems to indicate, that practice with text-based online chat has facilitated a repair that was not even necessary in the FTF oral context in the form of SISR. Also, the non-significant difference between SISR/SR in the text-based online chat shows that both the repair initiated by the participants and elicited by the tutor, have equally worked successfully. Additionally, instances in which the same structures followed by the same verb to express the same ideas in both contexts are evidence of such transfer of knowledge. It seems that participants have used the text-based online chat to carefully prepare their interventions in the FTF oral debate. All this supports the hypothesis proposed in this research project with regards to RQ3, and how the written mode can contribute to the transition to the speaking mode.

Table 57 displays the general results for inaccurate/unnecessary SISR/SR in the text-based online chat, but accurate output without resorting to SISR in the FTF oral debate. [Appendixes 10](#) and [11](#) show specific instances for this comparison of categories in both the text-based online chat and the FTF oral debate.

	Text-based online chat						FTF oral debate S2		
	Inaccurate/Unnecessary SISR/SR						Accurate Output without resorting to SISR/SR		
No. Of instances	7						391		
	NR		S1A		New		NR	S1A	New
	0		0		7		27	61	303
	SISR	SR	SISR	SR	SISR	SR			
				3	4				
No. And type of matching structures	0								
	SISR				SR				
	0				0		0		
	S1NR				S1A		New		
	0				0		0		

Table 57 Inaccurate/unnecessary use of SISR/SR in text-based online chat, but accurate output without resorting to SISR in FTF oral debate.

As displayed in Table 57, there are seven instances of inaccurate/unnecessary SISR/SR in the text-based online chat, and 391 instances of accurate use of an indicative-subjunctive-related structure without resorting to SISR in the FTF oral debate. However, none of the 391 instances correspond to any of the seven instances of inaccurate/unnecessary SISR/SR of the same exact structures in the text-based online chat. In this sense, it seems that there is no negative or positive transfer of structures, which were not accurately repaired in the text-based online chat to an accurate output in the FTF oral debate.

Table 58 displays general results for missing use of SISR/SR, but accurate output without resorting to SISR in the FTF oral debate. [Appendixes 10](#) and [11](#) show specific instances for this comparison of categories.

	Text-based online chat			FTF oral debate S2		
	Missing SISR/SR			Accurate Output without resorting to SISR/SR		
No. Of instances	31			391		
	S1NR	S1A	New	S1NR	S1A	New
	3	4	24	27	61	303
	SISR		SR			
	25		6			
No. And type of matching structures	14 (6 S1NR + 4 S1A + 4 New)					
	SISR		SR			
	14		0			

Table 58 Missing use of SISR/SR in text-based online chat, but accurate output without resorting to SISR in FTF oral debate.

As shown in Table 58, there are 31 instances of missing SISR/SR in the text-based online chat, while there are 391 instances of accurate output of indicative-subjunctive-related structures in the FTF oral debate. 27 out of those 391 correspond to a structure that needed repair in S1, 61 to a structure, which was accurately used in S1, and 303 to a New structure.

On the other hand, there are 14 matching structures. Table 59 shows the matching structures subject to missing SISR/SR in the text-based online chat, but accurate output without resorting to SISR in the FTF oral debate. If the same structure has been used more than once by the same participant, this is indicated in brackets. [Appendixes 10](#) and [11](#) show specific instances for this comparison of categories.

Participant	Text-based online chat	FTF oral debate S2
	Missing SISR/SR	Accurate output without resorting to SISR
ChatW1/1	Por mucho que + Indic. (2) [No matter how much + Indic.]	Por mucho que + Subj. (6) [No matter how much + Subj.]
ChatW1/5	Es importante que + Indic. [It is important that + Indic.]	Es importante que + Subj. (2) [It is important that + Subj.]

	Si + Present Subj. [If + Present Subj.]	Si + Present Indic. [If + Present Indic.]
	En vista de que + Indic. [With the intention that + Indic.]	En vista de que + Subj. [With the intention that + Subj.]
ChatW1/6	Es imprescindible que + Indic. [It is essential that + Indic.]	Es imprescindible que + Subj. [It is essential that + Subj.]
ChatW2/11	No creo que + Condicional [I do not think that + Condicional]	No creo que + Subj. [They do not think that + Subj.]
ChatW3/18	No creo que + Condicional [I do not think that + Condicional]	No creo que + Subj. (2) [They do not think that + Subj.]

Table 59 Matching structures subject to missing SISR/SR in text-based online chat, but accurate output without resorting to SISR in FTF oral debate.

As shown in Table 59, there are eight instances of missing use of SISR in the text-based online chat, but 14 instances of accurate output of the same exact structure in the FTF oral debate without resorting to SISR. Six out of those 14 matches correspond to S1NR structures, four correspond to S1A structures, and four correspond to New structures. All 14 instances correspond to five participants, who missed SISR in the text-based online chat. Moreover, six out of those 14 instances were used in both contexts in the same week and while discussing the same topic, although none of those instances corresponds to both the same structure followed by the same V2 verb, and the same idea. The other eight instances, which correspond to those same structures, were used before or after the week, were SISR/SR was missing in the text-based online chat, and while discussing other topics.

These results show that there has not been a negative transfer of knowledge from the text-based online chat to the FTF oral debate, meaning that some of the structures, which missed SISR/SR in the text-based online chat, have been successfully and accurately produced in the FTF oral debate without even resorting to SISR.

Table 60 displays the general results for accurate output of an indicative-subjunctive-related structure without resorting to SISR/SR in the text-based online chat and

accurate SISR in the FTF oral debate. [Appendixes 10](#) and [11](#) show specific instances for this comparison of categories.

	Text-based online chat			FTF oral debate S2		
	Accurate Output without resorting to SISR/SR			Accurate SISR		
No. Of instances	304			13		
	S1NR	S1A	New	S1NR	S1A	New
	31	42	231	2	2	9
				SISR		
				13		
No. And type of matching structures	2 (1 S1NR + 1 S1A)					

Table 60 Accurate output without resorting to SISR/SR in text-based online chat but accurate SISR in FTF oral debate.

According to Table 60, there are 304 instances of accurate output without resorting to SISR/SR in the text-based online chat, while there are 13 instances of accurate SISR in the FTF oral debate. Additionally, there are two instances of matching structures.

Table 61 displays the matching structures subject to accurate output without resorting to SISR/SR in the text-based online chat, but accurate SISR in the FTF oral debate. If the same structure has been used more than once by the same participant, this is indicated in brackets. [Appendixes 10](#) and [11](#) show specific instances for this comparison of categories.

Participant	Text-based online chat	FTF oral debate S2
	Accurate Output without resorting to SISR/SR	Accurate SISR
ChatW1/1	Para que + Subj. (3) [In order to + Subj.]	Para que + Indic./*Subj. [In order to + Subj.]
	A menos que + Subj. (7)	A menos que + Indic./*Subj.

	[Unless + Subj.]	[Unless + Indic./*Subj.]
--	------------------	--------------------------

Table 61 Matching structures subject to accurate output without resorting to SISR/SR in text-based online chat, but accurate SISR in FTF oral debate.

As displayed in Table 61, there are 10 instances of accurate output without resorting to SISR/SR in the text-based online chat, and two instances of accurate SISR of the same exact structure in the FTF oral. One of the instances corresponds to a S1NR but was not used in the same week or while discussing the same topic. The other instance corresponds to a S1A structure and was used in the same week and while discussing the same topic. However, none of those instances corresponds to both the same structure followed by the same V2, and the same idea ([Appendix 10](#)).

These results show, on the one hand, that the number of matching structures in this category of comparison is low. This means that there are not so many instances in which the accurate output of indicative-subjunctive-related structures needs to resort to SISR in the FTF oral debate, following accurate output without SISR/SR in the text-based online chat. Moreover, such instances of hesitation could be regarded as part of the process of adjustments taking place in the participant's linguistic development. Finally, analysis of whether these same structures were produced accurately, and without resorting to SISR in the FTF oral debate, supports the hypothesis of minor fluctuations occurring as the system is adapting and coming to a stage of stability.

Table 62 displays general results for accurate output without resorting to SISR/SR in the text-based online chat but inaccurate/unnecessary SISR in the FTF oral debate. [Appendixes 10](#) and [11](#) show specific instances for this comparison of categories.

	Text-based online chat			FTF oral debate S2		
	Accurate Output without resorting to SISR/SR			Inaccurate/unnecessary SISR		
No. Of instances	304			2		
	S1NR	S1A	New	S1NR	S1A	New
	31	42	231	0	0	2

		SISR
		2
No. And type of matching structures	0	

Table 62 Accurate output without resorting to SISR/SR in text-based online chat, but inaccurate/unnecessary SISR in FTF oral debate.

As shown in Table 62, there is an overall amount of 304 instances of accurate use without resorting to SISR/SR in the text-based online chat. On the other hand, there are two instances of inaccurate/unnecessary SISR in the FTF oral debate. However, there are no matching structures in this comparison of categories.

In this sense, it seems that there is no negative transfer of those structures, which were accurately repaired in the text-based online chat without resorting to SISR/SR to an inaccurate/unnecessary SISR in the FTF oral debate.

Table 63 displays general results for accurate output without resorting to SISR/SR in the text-based online chat, but missing SISR in the FTF oral debate. [Appendixes 10](#) and [11](#) show specific instances for this comparison of categories.

	Text-based online chat			FTF oral debate S2		
	Accurate Output without resorting to SISR/SR			Missing SISR		
No. Of instances	304			117		
	S1NR	S1A	New	S1NR	S1A	New
	31	42	231	13	8	96
				SISR		
				117		
No. And type of matching structures	34 (5 S1NR + 6 S1A + 23 New)					

Table 63 Accurate output without resorting to SISR/SR in text-based online chat, but missing SISR in FTF oral debate.

As shown in table 63, there are 304 instances of accurate use without resorting to SISR/SR in the text-based online chat, while there are 117 instances of missing SISR in the FTF oral debate. Additionally, there are 34 instances of matching structures, which were accurately produced in the text-based online chat without resorting to SISR/SR but missed SISR in the FTF oral debate.

Table 64 displays matching structures subject to accurate output without resorting to SISR/SR in the text-based online chat, but missing SISR in the FTF oral debate. If the same structure has been used more than once by the same participant, this is indicated in brackets. [Appendixes 10](#) and [11](#) show specific instances for this comparison of categories.

Participant	Text-based online chat	FTF oral debate S2
	Accurate Output without resorting to SISR/SR	Missing SISR
ChatW1/1	A menos que + Subj. (7) [Unless + Subj.]	A menos que + Indic. [Unless + Indic.]
	Pluscuamp. Subj. + Si + Imperfecto Subj. [Past perfect Subj. + if + Past Subj.]	Pluscuamp. Subj. + Si + Imperfect Indic. [Past perfect Subj. + if + Past Indic.]
	Si + Imperfecto Subj. + Condicional (2) [If + Past Subj. + Conditional]	Si + Condicional/Imperfecto Indic. + Condicional/Imperfecto Indic. (4) [If + Conditional/Past Indic. + Conditional/Past Indic.]
	No me parece justo que + Subj. [I do not find it's fair that + Subj.]	No me parece justo que + Indic. [I do not find it's fair that + Indic.]
	Quizás es algo que + Subj. (Oración relativa)	Quizás es algo que + Imperfecto Indic. (Oración relativa)

	[Maybe it is something that + Subj./relative clause]	[Maybe + Past Indic./relative clause]
	Me parece espantoso que + Subj. [It is awful that + Subj.]	Me parece espantoso que + Indic. [I find awful that + Indic.]
	Es inevitable que + Subj. [It is unavoidable that + Subj.]	Es inevitable que + Indic. [It is unavoidable that + Indic.]
ChatW1/5	Es imprescindible que + Subj. [It is imperative that + Subj.]	Es imprescindible que + Indic. [It is imperative that + Indic.]
	Es interesante que + Subj. (2) [It is interesting that + Subj.]	Es interesante que + Indic. [It is interesting that + Indic.]
ChatW1/6	Para que + Subj. (6) [In order to + Subj.]	Para que + Indic. (4) [In order to + Indic.]
	Me indigna que + Subj. (2) [I find shameful that Subj.]	Me indigna que + Indic. [I find shameful that + Indic.]
	Es probable que + Subj. (2) [It is likely that + Subj.]	Es probable que + Condicional. [It is likely that + Conditional.]
ChatW2/7	No creo que + Subj. [I do not think that + Subj.]	No creo que + Indic. [I do not think that + Indic.]
ChatW2/10	No me parece justo que + Subj. [I do not find it is fair that + Subj.]	No me parece justo que + Indic. [I do not find it is fair that + Indic.]
ChatW2/11	Condicional + Si + Imperfecto Subj. [Conditional + if + Past Subj.]	Condicional + Si + Presente Subj. [Conditional + if + Present Subj.]
ChatW2/18	Es importante que + Subj. [It is important that + Subj.]	Es importante que + Indic. [It is important that + Indic.]
	No creo que + Subj. [I do not think that + Subj.]	No creo que + Indic. (2) [I do not think that + Indic.]
ChatW3/21	Es importante que + Subj. (3) [It is important that + Subj.]	Es importante que + Indic. (2) [It is important that + Indic.]
ChatW3/23	Para que + Subj. [In order to + Subj.]	Para que + Indic. [In order to + Indic.]

ChatW4/31	Es necesario que + Subj. [It is necessary that + Subj.]	Es necesario que + Indic. [It is necessary that + Indic.]
ChatW6/35	No creo que + Subj. [I do not think that + Subj.]	No creo que + Indic. (2) [I do not think that + Indic.]
ChatW7/38	Es importante que + Subj. [It is important that + Subj.]	Es importante que + Infinitivo [It is important that + Infinitive]
	Es imprescindible que + Subj. (2) [It is imperative that + Subj.]	Es imprescindible que + Indic. [It is imperative that + Indic.]
ChatW7/39	Si + Imperfecto de Subj. (2) [If + Past Subj.]	Si + Presente de Subj. [If + Present Subj.]
	Para que + Subj. [In order to + Subj.]	Para que + Indic. [In order to + Indic.]

Table 64 Matching structures subject to accurate output without resorting to SISR/SR in text-based online chat, but missing SISR in FTF oral debate.

As shown in table 64, there are 44 instances of accurate output without resorting to SISR/SR in the text-based online chat, and 34 instances of missing use of SISR in those structures in the FTF oral debate. Five of those 34 structures correspond to S1NR, six correspond to S1A, and 23 instances have been identified as New structures. Moreover, 21 out of the 34 instances of missing SISR were produced in the same week and while discussing the same topic, although those structures were used accurately, and without resorting to SISR/SR in the text-based online chat. Finally, only one of those instances (Week 7) correspond to the same exact structure followed by the same V2, and the same idea (highlighted in red in [Appendix 10](#) and [11](#)).

These results seem to indicate, on the one hand, that the number of matching structures for this category of comparison is higher than in other combinations of categories. This could mean, that there is no positive transfer of knowledge from the text-based online chat to the FTF oral context, given that structures, which have been accurately used without resorting to SISR/SR in the online setting, have been inaccurately used in the FTF oral debate. However, when considering the whole number of accurate output without resorting to SISR/SR produced in the FTF oral context (391 instances), and the number of missing instances (117 instances) or matching structures (34), which missed SISR/SR in the FTF oral setting, such lack of

positive transfer of knowledge does not seem so high. On the other hand, in one of those matching instances, namely, ‘*a menos que + Subj.*’ (Unless + Subj.), the participant ChatW1/1 missed SISR in the FTF oral debate in week 3, although SISR was provided for that structure in week 8 ([Appendix 10](#)). Examples like this show that fluctuations in the use of certain structures occur in different weeks of participation. The fluctuation mentioned before for participant ChatW1/1 could, thus, be interpreted as adjustments happening in the participant’s linguistic repertoire.

Table 65 displays general results for accurate output without resorting to SISR both in the text-based online chat and the FTF oral debate. [Appendix 11](#) shows specific instances for this comparison of categories.

	Text-based online chat			FTF oral debate S2		
	Accurate Output without resorting to SISR /SR			Accurate Output without resorting to SISR		
No. Of instances	304			391		
	S1NR	S1A	New	S1NR	S1A	New
	31	42	231	27	61	303
No. And type of matching structures	158					
	S1NR		S1A		New	
	22		39		97	

Table 65 Accurate output without resorting to SISR/SR in both text-based online chat and FTF oral debate.

As displayed in Table 65, there are 304 instances of accurate output without resorting to SISR/SR in the text-based online chat, and 391 instances of accurate output without resorting to SISR in the FTF oral debate. Additionally, there is a total amount of 162 matching structures, which were used accurately, and without resorting to SISR/SR both in the text-based online chat and in the FTF oral debate.

Table 66 shows the matching structures subject to accurate output without resorting to SISR/SR in both the text-based online chat, and the FTF oral debate. If the same structure has been used more than once by the same participant, this is indicated in brackets. [Appendix 11](#) shows specific instances for this comparison of categories.

Participant	Text-based online chat	FTF oral debate S2
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
ChatW1/1	Por mucho que + Subj. (4) [No matter how much + Subj.]	Por mucho que + Subj. (6) [No matter how much + Subj.]
	Para que + Subj. (4) [In order to + Subj.]	Para que + Subj. (4) [In order to + Subj.]
	A menos que + Subj. (7) [Unless + Subj.]	A menos que + Subj. [Unless + Subj.]
	Es necesario que + Subj. [It is necessary that + Subj.]	Es necesario que + Subj. [It is necessary that + Subj.]
	Aunque + Subj. (7) [Although + Subj.]	Aunque + Subj. (9) [Although + Subj.]
	No creo que + Subj. (6) [I do not think that + Subj.]	No creo que + Subj. (10) [I do not think that + Subj.]
	Si + Imperfecto Subj. + Condicional/ Pluscuamperfecto Subj. (3) [If + Past Subj. + Conditional]	Si + Imperfecto Subj. + Condicional/ Pluscuamperfecto Subj. (7) [If + Past Subj. + Conditional]
	Me parece penoso que + Subj. (2) [I find it is very sad that + Subj.]	Me parece penoso que + Subj. (3) [I find it is very sad that + Subj.]
Quizás + Subj. [Maybe + Subj.]	Quizás + Subj. [Maybe + Subj.]	
Es importante que + Subj. (5) [It is important that + Subj.]	Es importante que + Subj. (4) [It is important that + Subj.]	
Siempre y cuando + Subj. [As long as + Subj.]	Siempre y cuando + Subj. [As long as + Subj.]	
Es interesante que + Subj. (4) [It is interesting that + Subj.]	Es interesante que + Subj. (4) [It is interesting that + Subj.]	
Es imprescindible que + Subj. [It is imperative that + Subj.]	Es imprescindible que + Subj. [It is imperative that + Subj.]	

	Es inevitable + Subj. [It is unavoidable that + Subj.]	Es inevitable + Subj. (2) [It is unavoidable that + Subj.]
ChatW1/4	Aunque + Subj. [Although + Subj.]	Aunque + Subj. [Although + Subj.]
ChatW1/5	Es interesante que + Subj. (2) [It is interesting that + Subj.]	Es interesante que + Subj. (2) [It is interesting that + Subj.]
	Aunque + Subj. (3) [Although + Subj.]	Aunque + Subj. [Although + Subj.]
	No creo que + Subj. (3) [I do not think that + Subj.]	No creo que + Subj. (4) [I do not think that + Subj.]
	Es importante que + Subj. [It is important that + Subj.]	Es importante que + Subj. (2) [It is important that + Subj.]
ChatW1/6	Para que + Subj. (6) [In order to + Subj.]	Para que + Subj. (5) [In order to + Subj.]
	Me parece injusto que + Subj. (2) [I find it is unfair that + Subj.]	Me parece injusto que + Subj. (6) [I find it is unfair that + Subj.]
	Es imprescindible que + Subj. [It is imperative that + Subj.]	Es imprescindible que + Subj. [It is imperative that + Subj.]
	Es probable que + Subj. (2) [It is likely that + Subj.]	Es probable que + Subj. [It is likely that + Subj.]
	Me indigna que + Subj. (2) [I find awful that + Subj.]	Me indigna que + Subj. [I find awful that + Subj.]
	Es una lástima que + Subj. [It is a shame that + Subj.]	Es una lástima que + Subj. [It is a shame that + Subj.]
	Mientras + Subj. (2) [As long as + Subj.]	Mientras + Subj. (2) [As long as + Subj.]
	ChatW2/7	Es esencial que + Subj. [It is essential that + Subj.]
ChatW2/9	Si + Imperfecto Subj. [If + Past Subj.]	Si + Imperfecto Subj. (3) [If + Past Subj.]
ChatW2/10	Si + Imperfecto Subj. (3) [If + Past Subj.]	Si + Imperfecto Subj. (4) [If + Past Subj.]

	Tal vez + Imperfecto Subj. [Maybe + Past Subj.]	Tal vez + Imperfecto Subj. [Maybe + Past Subj.]
	Para que + Subj. [In order to + Subj.]	Para que + Subj. (2) [In order to + Subj.]
	Con la intención de que + Subj. [With the intention that + Subj.]	Con la intención de que + Subj. [With the intention that + Subj.]
	Es necesario que + Subj. (3) [It is necessary that + Subj.]	Es necesario que + Subj. [It is necessary that + Subj.]
	Parece muy injusto que + Subj. [It is very unfair that + Subj.]	Parece muy injusto que + Subj. [It is very unfair that + Subj.]
	Existe la necesidad de que + Subj. [There is the need that + Subj.]	Existe la necesidad de que + Subj. [There is the need that + Subj.]
	Quizás + Subj. (2) [Maybe + Subj.]	Quizás + Subj. [Maybe + Subj.]
ChatW2/11	Si + Imperfecto Subj. [If + Past Subj.]	Si + Imperfecto Subj. [If + Past Subj.]
	Espero que + Subj. [I hope that + Subj.]	Espero que + Subj. [I hope that + Subj.]
ChatW2/13	Con la condición de que + Subj. [With the condition that + Subj.]	Con la condición de que + Subj. [With the condition that + Subj.]
	Si + Imperfecto Subj. (3) [If + Past Subj.]	Si + Imperfecto Subj. [If + Past Subj.]
ChatW2/15	Si + Imperfecto Subj. (2) [If + Past Subj.]	Si + Imperfecto Subj. (4) [If + Past Subj.]
	Es esencial que + Subj. [It is essential that + Subj.]	Es esencial que + Subj. (2) [It is essential that + Subj.]
ChatW2/16	Es importante que + Subj. [It is important that + Subj.]	Es importante que + Subj. [It is important that + Subj.]
ChatW3/18	Si + Imperfecto Subj. [If + Past Subj.]	Si + Imperfecto Subj. [If + Past Subj.]
	Es hora de que + Subj. [It is time that + Subj.]	Es hora de que + Subj. [It is time that + Subj.]

	No creo que + Subj. [I do not think + Subj.]	No creo que + Subj. (2) [I do not think + Subj.]
	Es importante que + Subj. [It is important that + Subj.]	Es importante que + Subj. [It is important that + Subj.]
ChatW3/19	No creo que + Subj. [I do not think + Subj.]	No creo que + Subj. (6) [I do not think + Subj.]
	Si + Imperfecto Subj. [If + Past Subj.]	Si + Imperfecto Subj. (3) [If + Past Subj.]
ChatW3/21	Es importante que + Subj. (3) [It is important that + Subj.]	Es importante que + Subj. (2) [It is important that + Subj.]
	Si + Imperfecto Subj. (4) [If + Past Subj.]	Si + Imperfecto Subj. (2) [If + Past Subj.]
ChatW3/22	No creo que + Subj. (2) [I do not think + Subj.]	No creo que + Subj. (4) [I do not think + Subj.]
	Me gustaría que + Subj. [I would like that + Subj.]	Me gustaría que + Subj. [I would like that + Subj.]
	Para que + Subj. (2) [In order to + Subj.]	Para que + Subj. [In order to + Subj.]
ChatW3/23	Para que + Subj. [In order to + Subj.]	Para que + Subj. (3) [In order to + Subj.]
	Asegurarse de que + Subj. [To make sure that + Subj.]	Asegurarse de que + Subj. [To make sure that + Subj.]
	Es imprescindible que + Subj. [It is imperative that + Subj.]	Es imprescindible que + Subj. [It is imperative that + Subj.]
	Es esencial que + Subj. [It is essential that + Subj.]	Es esencial que + Subj. [It is essential that + Subj.]
ChatW4/28	Es importante que + Subj. (4) [It is important that + Subj.]	Es importante que + Subj. (2) [It is important that + Subj.]
	Si + Imperfecto Subj. (2) [If + Past Subj.]	Si + Imperfecto Subj. (2) [If + Past Subj.]
	Para que + Subj. (3) [In order to + Subj.]	Para que + Subj. (2) [In order to + Subj.]
ChatW6/35	Si + Imperfecto Subj. (3)	Si + Imperfecto Subj. (2)

	[If + Past Subj.]	[If + Past Subj.]
	No creo que + Subj. [I do not think + Subj.]	No creo que + Subj. (2) [I do not think + Subj.]
ChatW7/38	Es importante que + Subj. [It is important that + Subj.]	Es importante que + Subj. (4) [It is important that + Subj.]
ChatW7/39	Por mucho que + Subj. [No matter how much + Subj.]	Por mucho que + Subj. [No matter how much + Subj.]
	Si + Imperfecto Subj. (2) [If + Past Subj.]	Si + Imperfecto Subj. (2) [If + Past Subj.]
	Para que + Subj. [In order to + Subj.]	Para que + Subj. [In order to + Subj.]
	Existe el riesgo de que + Subj. [There is the risk that + Subj.]	Existe el riesgo de que + Subj. [There is the risk that + Subj.]
	Es necesario que + Subj. [It is necessary that + Subj.]	Es necesario que + Subj. [It is necessary that + Subj.]

Table 66 Matching structures subject to accurate output without resorting to SISR/SR in both text-based online chat, and FTF oral debate.

As displayed in Table 66, there are 304 instances of accurate output without resorting to SISR/SR in the text-based online chat, and 158 instances of accurate output of the same exact structure in the FTF oral debate without resorting to SISR. 22 out of those 158 structures correspond to S1NR structures, 39 correspond to S1A structures, and 97 instances correspond to New structures. Moreover, 109 instances out of 158 correspond to the use of the same structure in the FTF oral debates and the text-based online chats in the same week, and while discussing the same topic, although the V2 or the idea were not the same ([Appendix 11](#)). Finally, 34 of those 109 instances correspond to the same exact structure followed by the same V2, and the same idea (highlighted in blue in [Appendix 11](#)). There might be more instances of such matching structures, however, the lack of audio recordings of some participants and some weeks made it impossible to confirm whether V2 and ideas were the same in some instances.

These results seem to indicate, on the one hand, that the number of matching structures for this category of comparison is higher than in other combinations of

categories. This shows that there is positive transfer of knowledge from the text-based online chat to the FTF oral context, given that a significant number of structures and ideas, which have been accurately used without resorting to SISR/SR in the text-based online chat, have been equally used accurately in the FTF oral debate.

On the other hand, nine out of those 109 instances correspond to a structure, which was used previously by the participants in both the text-based online chat and the FTF oral debate, and subject to different types of SISR/SR or lack of it. For example, participant ChatW1/5 used the structure *'Es importante que + Subj.'* (It is important that + Subj.), accurately and without resorting to SISR/SR in week 4 in both the text-based online chat and the FTF oral debate. However, that same participant missed the use of SISR/SR of that same structure in the text-based online chat in week 2. Similarly, participant ChatW3/18 used the structure *'Es importante que + Subj.'* (It is important that + Subj.), accurately and without resorting to SISR/SR in week 8 in both the text-based online chat and the FTF oral debate. However, that same participant missed the use of SISR of that same structure in the text-based online chat in week 3. That same participant used the structure *'No creo que + Subj.'* (I do not think that + Subj.) accurately and without resorting to SISR/SR in week 8 in both the text-based online chat and the FTF oral debate. However, the participant missed the use of SISR of that same structure in the text-based online chat in week 8, and in the FTF oral debate in weeks 6 and 8, ([Appendixes 10](#) and [11](#)).

Participant ChatW3/21 used the structure *'Es importante que + Subj.'* (It is important that + Subj.), accurately and without resorting to SISR/SR in weeks 3 and 6 in both the text-based online chat and the FTF oral debate. However, that same participant missed the use of SISR of that same structure in the FTF oral debate in week 3, ([Appendixes 10](#) and [11](#)).

Participant ChatW3/23 used the structure *'Para que + Subj.'* (In order to + Subj.), accurately and without resorting to SISR/SR in week 5 in both the text-based online chat and the FTF oral debate. However, that same participant missed the use of SISR of that same structure in the FTF oral debate in week 5, ([Appendixes 10](#) and [11](#)).

Participant ChatW6/35 used the structure '*No creo que + Subj.*' (I do not think that + Subj.) accurately and without resorting to SISR/SR in week 6 in both the text-based online chat and the FTF oral debate. However, the participant missed the use of SISR of that same structure in the FTF oral debate in week 6, ([Appendixes 10](#) and [11](#)).

Participant ChatW7/39 used the structure '*Para que + Subj.*' (In order to + Subj.), accurately and without resorting to SISR/SR in week 7 in both the text-based online chat and the FTF oral debate. However, that same participant missed the use of SISR of that same structure in the FTF oral debate in week 8, ([Appendixes 10](#) and [11](#)).

Examples like these show that fluctuations in the use of certain structures occur not only in different weeks of participation, but also in the same week of participation in both contexts (the online and the FTF), and even within the same context. Such fluctuations could be interpreted as adjustments happening while participants develop their linguistic repertoires.

Anyhow, the number of instances of accurate output without resorting to SISR/SR is notably high in both contexts, as it is the number of matching structures, which shows that positive transfer of knowledge is happening from the text-based online chat to the FTF oral debate.

Moreover, the number of matching structures followed by the same V2 and expressing the same idea is higher for this category than for other categories, which could be an indicator of participants' careful reading of the transcript and planning their FTF oral debates using text-based online chat.

Once the results of comparing text-based online chats transcripts and feedback sheets from FTF oral debates have been presented, the next subsection shows results of the reflective logs in relation to performance in FTF oral debates.

4.3.3 Analysis of reflective logs in relation to performance in FTF oral debate

This section presents the results of analysing the reflective logs after participation in the FTF oral debate. Such results will contribute to a better understanding of how, if any, has prior practice with text-based online chat influenced participants' performance in the FTF oral debate. The focus of the analysis of results will be to identify, whether participants' perceptions correlate with the results shown in the previous section of this study in relation to RQ3, and which specific factors may, if any, facilitate the positive transfer of knowledge from text-based online chat to FTF oral debates.

The questions aimed at prompting reflection on performance in the FTF oral debate after the use of the text-based online chat were the following:

1. Did you read the transcript of the online chat prior to the face-to-face debate?
2. Do you think prior participation in the online text-based debate helped you with the use of indicative and subjunctive modes in the face-to-face debate? Why? How?
3. Have you observed any other improvements of using the text-based online tool for your face-to-face oral debates? Which ones?

A total number of 17 reflective logs from the 25 participants in this study were collected. The reflective logs, which have not been collected correspond to participants: ChatW2/7, ChatW2/9, ChatW2/15, ChatW3/19, ChatW3/20, ChatW4/29, ChatW4/31, and ChatW6/35. Thus, no further qualitative data is available to expand on the existing links between performance in text-based online chat and FTF oral debate for those participants. [Appendix 12](#) includes a sample of two of the 17 reflective logs analyzed in this study.

As far as the first question is concerned, all 17 participants answered 'yes' to have read the transcript of the text-based online chat before participation in the FTF oral debate about the same topic. Some of the participants expanded on this question and added specific aspects that motivated the reading of the transcript. Those aspects were the following:

-Use of the transcript to collect new ideas, good points, or different points of view about the topic, and which were used in the FTF oral debate (10 reflective logs).

-Use of the transcript to identify structures or grammatical constructions (6 reflective logs). 1 of the participants (ChatW2/13) specifies in this regard the interest for subjunctive structures:

‘Yes! I found it really useful, especially looking at good subjunctive structures people use or interesting points of discussion’ (ChatW2/13).

-Use of the transcript to take notes of key vocabulary (1 reflective log)

In relation to the comment by participant ChatW2/13 about looking at other participants’ structures, there is an instance (although not produced by this participant) in which a participant (ChatW3/18) uses the same structure and the same idea in the FTF oral debate, that other participant (ChatW1/1) used while discussing with ChatW3/18 in the text-based online chat. That structure is ‘*No creo que la ley de memoria histórica aborde*’/No creo que + Subj. (I do not think that the law of historic memory addresses/I do not think that + Subj.), and it was used when discussing the same topic in the FTF oral debate. See [Appendix 11](#) week 8 for this specific instance. Another instance of this phenomenon has been identified between these participants in week 6, and between participant ChatW1/1 and participant ChatW1/6 in week 2. These examples seem to support the idea that use of text-based online chat contributes to the creation of ZPD among learners according to a socio-constructivist view of learning.

As far as the second question of the reflective log is concerned, that is, do you think prior participation in the online text-based debate helped you with the use of indicative and subjunctive modes in the face-to-face debate? Why? How? 15 out of the 17 participants answered ‘yes’ to the positive contribution of text-based online chat to the use of indicative and subjunctive modes in the FTF oral debate. 1 participant (ChatW1/5) said that the text-based online chat had equally contributed and not contributed to the use of indicative and subjunctive modes. This participant links the positive contribution to spontaneous communication in the FTF oral debate,

while regards as negative, the attempt at recalling information from the online setting since this could be perceived as ‘formulated’ or not spontaneous in oral communication:

‘Sometimes. Yes, when I was being spontaneous but sometimes, I may have tried to recall a specific phrase, which then made my speech appear formulated. This sometimes damaged the conversational aspects of the debate’ (ChatW1/5).

Finally, 1 participant (ChatW9/41) answered ‘no’ on the basis that they had not used any indicative-subjunctive-related structure in the FTF oral debate. However, participant ChatW9/41’s perception of the use of indicative-subjunctive related structures in the FTF oral debate has proven to be contradictory, since 1 instance of accurate SISR, and 8 instances of accurate use of indicative-subjunctive-related structures without resorting to SISR have been recorded for that participant in the FTF oral debate.

On the other hand, the 15 participants who found text-based online chat useful to improve accuracy of indicative-subjunctive-related structures in the FTF oral debate, listed the following aspects on how this contribution occurred:

-More awareness or understanding of the uses of indicative and subjunctive modes (6 reflective logs).

-More use of new and complex structures learned in the lecture or showcased by other participants (3 reflective logs).

-More time to think or develop complex structures (2 reflective logs).

-Remembering or repeating the same structures in both settings (2 reflective logs).

-More self-correction in speaking (1 reflective log).

-The fact of writing and having a record of that writing (1 reflective log).

-More relaxed way of thinking about structures (1 reflective log).

-The feedback and explanation received in the text-based online chat (1 reflective log).

-Practice before the FTF oral debate (1 reflective log).

As far as the third and last question to be complete after participation in the FTF oral debate is concerned, that is, have you observed any other improvements of using the text-based online tool for your face-to-face oral debates? Which ones? 15 out of 17 participants answered this question providing information on aspects, in which they had seen improvements. 1 of the participants did not answer the question, and 1 of the participants responded that no other improvements aside from the already mentioned in previous questions had been observed.

The main areas in which the 15 participants perceived improvement in the FTF oral debate thanks to prior practice with the text-based online chat include:

-Developing ideas and arguments (Nine reflective logs).

-An increase in confidence (Five reflective logs). The areas in which confidence was increased are related to: Ideas and arguments, and the use of language and complex structures.

-Use of new structures or a wider range of structures (Three reflective logs).

-Better grades in the FTF oral debate following practice with the text-based online chat (One reflective log).

In this sense, Table 67 shows the correlation between participants admitting to having improved their use of indicative-subjunctive modes in the FTF oral debate, and overall instances of accurate production of these structures in S1 FTF oral debates, text-based online chat, and S2 FTF oral debates. The number of instances includes both the accurate output of indicative-subjunctive-related structures using SISR/SR or

without resorting to SISR/SR. This information will contribute to assess whether participants' perception about the benefits of text-based online chat to improve use of indicative-subjunctive-related structures in the S2 FTF oral debates corresponds to their actual performance in the FTF oral debate.

	S1 oral debates	Text-based online chat	S2 FTF oral debate	S2 Reflective Log
Participant	Instances of accurate use of an indicative-subjunctive-related structure without resorting to SISR/SR	Instances of accurate use of an indicative-subjunctive-related structure by using SISR/SR or without resorting to SISR/SR	Instances of accurate use of an indicative-subjunctive-related structure by using SISR/SR or without resorting to SISR/SR	Improved used of indicative-subjunctive-related structures in FTF oral debate according to the reflective log
ChatW1/1	6	66	83	Yes
ChatW1/4	5	5	2	Yes
ChatW1/5	24	21	23	Sometimes
ChatW1/6	2	27	30	Yes
ChatW2/10	1	22	57	Yes
ChatW2/11	5	19	13	Yes
ChatW2/13	3	9	11	Yes
ChatW2/16	1	4	4	Yes
ChatW3/18	24	7	22	Yes
ChatW3/21	1	19	6	Yes
ChatW3/22	5	18	8	Yes
ChatW3/23	10	25	9	Yes
ChatW3/25	1	4	3	Yes
ChatW4/28	3	15	11	Yes
ChatW7/38	2	9	10	Yes
ChatW7/39	4	5	8	Yes

ChatW9/41	3	1	9	No
-----------	---	---	---	----

Table 67 Correlation participation in FTF oral debate and reflective log with regards to improved use of indicative-subjunctive-related structures.

As shown in table 67, there are 12 participants admitting to having improved their use of indicative-subjunctive-related structures who show an increase in the use of those structures in S2 FTF oral debates, in comparison with numbers from S1 FTF oral debates. Those participants are: ChatW1/1, ChatW1/6, ChatW2/10, ChatW2/11, ChatW2/13, ChatW2/16, ChatW3/21, ChatW3/22, ChatW3/25, ChatW4/28, ChatW7/38, and ChatW7/39. Additionally, 6 of those participants (ChatW1/1, ChatW1/6, ChatW2/10, ChatW2/13, ChatW2/16, and ChatW7/38) show steady increasing numbers and progression from S1 FTF oral debates to SCMC text-based online chat and end up by having the highest number of accurate structures in the S2 FTF oral debates. However, the other six participants (ChatW2/11, ChatW3/21, ChatW3/22, ChatW3/25, ChatW4/28, and ChatW7/39) show slightly lower numbers and regression in SCMC text-based online chat, although they end up by having the highest number of accurate structures in the S2 FTF oral debates. All these participants admitted in their reflective logs to have improved the use of these structures, meaning that, overall, there is a correlation between the perception of SCMC text-based online chat contributing to improve the use of these structures in FTF oral debates, and the actual participants' performance in those FTF oral debates.

On the other hand, four participants show slightly lower numbers of accurate indicative-subjunctive-related structures in the S2 FTF oral debates than in S1 FTF oral debates. Those participants are: ChatW1/4, ChatW1/5, ChatW3/18, and ChatW3/23. Three of those participants (ChatW1/4, ChatW1/5, ChatW3/18) also show the same number or lower number of instances of accurate use in SCMC text-based online chat, and only one participant (ChatW3/23) shows a significantly higher number of instances in the SCMC text-based online chat. Three participants admitted in their reflective logs to have improved these structures, while one (ChatW1/5) participant said that such improvement occurred 'sometimes'. These results seem to indicate that, for some participants, the use of SCMC text-based online chat has not improved their performance in FTF oral debates. However, since the difference in numbers between S1 and S2 FTF oral debates is not significant, this could also be

interpreted as text-based online chat contributing to consolidate already existing knowledge for these participants. In the case of participant ChatW3/23, there is a significant difference between instances of accurate output in the text-based online chat (24), and in the S2 FTF oral debate (9). In this case, it seems that this participant has not planned their FTF oral debate by working on the indicative-subjunctive-related structures recorded in the text-based online chat transcript, although they admitted in the reflective log to have read it before the FTF oral debate.

Finally, there is one participant ChatW9/41 who did not perceive any improvement in their S2 FTF oral debates from prior practice with text-based online chat. However, the number of instances of indicative-subjunctive-related structures in S2 FTF oral debates is higher than in S1 FTF oral debates or SCMC text-based online chat. In this case, it seems that this participant's perception does not correlate with their actual performance in the S2 FTF oral debate. This could be due to a lack of clarity by the participant on what indicative-subjunctive-related structures are, since this same participant admitted in question three of the first section of the reflective log, not to be sure or aware of when to use subjunctive.

Once the results of comparison of text-based online chat and S2 FTF oral debates for all participants have been presented, the next subsection shows results for the three participants who practiced over time.

4.4 Knowledge retrieval from the text-based online chat to the FTF oral debate over time

This section presents the results of analysing the individual performance of the three participants, who took part in at least four or more text-based online chats and the subsequent FTF oral debates. A table comparing overall results of the three participants, and the rest of the cohort of participants who did not take part in the text-based online chat and the FTF debates in so many weeks is also included. This data provides information on whether, if any, practice with text-based online chat over an extended period promotes the transfer or retrieval of knowledge from the online context to the FTF context, and how it may or may not lead to eventual proceduralization and automatization of the structures object of this study. For the

purposes of this research, recurrent use of a structure has been considered as the use of that specific structure by the same participant in half + one of the weeks of participation or the production of instances of that same structure for that same amount or higher in both contexts. Collection and identification of such recurrent structures will be an indicator of proceduralization/automatization taking place.

Thus, Tables 68 to 73 show the results corresponding to participants ChatW1/1, ChatW1/6, and ChatW2/10 with respect to:

-Use or lack of use of SISR/SR both in the text-based online chat and the FTF oral debate.

-Accurate use of indicative-subjunctive-related structures without resorting to SISR/SR in both the text-based online chat and the FTF oral debate.

-Recurrent use of the same structures in both the text-based online chat and the FTF oral debate.

[Appendixes 10](#) and [11](#) show the specific examples of indicative-subjunctive-related structures in Spanish, which have been identified in the text-based online transcripts, the FTF oral debates feedback sheets, and audio recordings available for these participants.

Table 68 shows comparison of performance in text-based online chat and FTF oral debate for participant ChatW1/1.

Participant: Chat W1/1						
	Text-based online chat			FTF oral debate S2		
	Accurate SISR/SR			Accurate SISR		
	3			7		
	S1NR	S1A	New	S1NR	S1A	New
	1	0	2	1	1	5
Total No. Of matching	0					

structures						
	Accurate SISR/SR			Inaccurate/Unnecessary SISR		
	3			1		
	S1NR	S1A	New	S1NR	S1A	New
	1	0	2	0	0	1
Total No. Of matching structures	0					
	Accurate SISR/SR			Missing SISR		
	3			29		
	S1NR	S1A	New	S1NR	S1A	New
	1	0	2	0	1	28
Total No. Of matching structures	1					
	S1NR		S1A		New	
	0		0		1	
	Inaccurate/Unnecessary SISR/SR			Accurate SISR		
	0			7		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	0	1	1	5
Total No. Of matching structures	0					
	Inaccurate/Unnecessary SISR/SR			Inaccurate/Unnecessary SISR		
	0			1		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	0	0	0	1
Total No. Of matching structures	0					
	Inaccurate/Unnecessary SISR/SR			Missing SISR		
	0			29		

	S1NR	S1A	New	S1NR	S1A	New
	0	0	0	0	1	28
Total No. Of matching structures	0					
	Missing SISR/SR			Accurate SISR		
	7			7		
	S1NR	S1A	New	S1NR	S1A	New
	2	0	5	1	1	5
Total No. Of matching structures	0					
	Missing SISR/SR			Inaccurate/Unnecessary SISR		
	7			1		
	S1NR	S1A	New	S1NR	S1A	New
	2	0	5	0	0	1
Total No. Of matching structures	0					
	Missing SISR/SR			Missing SISR		
	7			29		
	S1NR	S1A	New	S1NR	S1A	New
	2	0	5	0	1	28
Total No. Of matching structures	1					
	S1NR		S1A		New	
	0		0		1	
	Accurate SISR/SR			Accurate Output without resorting to SISR		
	3			76		
	S1NR	S1A	New	S1NR	S1A	New
	1	0	2	11	3	62
Total No. Of matching structures	6					
	S1NR		S1A		New	
	6		0		0	
	Inaccurate/Unnecessary			Accurate Output without		

	SISR/SR			resorting to SISR		
	0			76		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	0	11	3	62
Total No. Of matching structures	0					
	Missing SISR/SR			Accurate Output without resorting to SISR		
	7			76		
	S1NR	S1A	New	S1NR	S1A	New
	2	0	5	11	3	62
Total No. Of matching structures	6					
	S1NR		S1A		New	
	6		0		0	
	Accurate Output without resorting to SISR /SR			Accurate Output without resorting to SISR		
	63			76		
	S1NR	S1A	New	S1NR	S1A	New
	9	8	46	11	3	62
Total No. Of matching structures	54					
	S1NR		S1A		New	
	10		2		42	
Total No. Of matching structures for all categories	68					
	S1NR		S1A		New	
	22		2		44	

Table 68 Knowledge retrieval from text-based online chat to FTF oral debate by participant ChatW1/1.

As shown in Table 68, overall, there are more instances of accurate use of SISR (3-7), inaccurate/unnecessary use of SISR (0-1), and missing SISR (7-29) in the FTF oral debate than in the text-based online chat for participant ChatW1/1. In this same sense, there are more instances of accurate use of structures without resorting to SISR in the FTF oral debate (76) than in the text-based online chat (63), especially in the category of New structures (62 instances in the FTF oral debate vs. 46 in the text-based online

chat). Moreover, 54 out of those 76 correspond to the same structures previously used in the text-based online chat in different categories (10 S1NR, 2 S1A, and 42 New).

As far as the proceduralization/automatization of accurate use of the same structures is concerned, a comparison between recurrent use of structures identified for this participant in the text-based online chat, and the use of those same structures in the FTF oral debate needs to be established. For participant ChatW1/1, who participated in 9 text-based online debates, recurrent use has been considered occurrence of the same structure in at least 5.5 weeks of participation or the production of instances of that same structure for that same amount or higher in both settings. Whenever a structure has been used more than once in the same week, this is indicated with the number of instances of use for that specific week in brackets.

Table 69 shows those specific instances of recurrent use of the same indicative-subjunctive-related structures in both the text-based online chat and the FTF oral debate for at least half + one weeks of participation or the production of instances of that same structure for that same amount or higher for participant ChatW1/1. [Appendix 11](#) includes the specific instances corresponding to this category of comparison.

ChatW1/1	
Text-based online chat	FTF oral debate
Indicative-subjunctive-related structure	Indicative-subjunctive-related structure
Aunque + Subj. [Although + Subj.]	Aunque + Subj. [Although + Subj.]
No. Of instances	No. Of instances
7	9
Weeks	Weeks
1(2) 2 (3) 8,9	1, 2, 3,4,6,7 (2) 8,9
Indicative-subjunctive-related structure	Indicative-subjunctive-related structure
No creo que + Subj. [I do not think that + Subj.]	No creo que + Subj. [I do not think that + Subj.]
No. Of instances	No. Of instances

6	10
Weeks	Weeks
1,3,4,8,10 (2)	2,3,4 (2) 6, 8 (3) 9,10

Table 69 Recurrent use of the same structures in both text-based online chat and FTF oral debate by participant ChatW1/1.

As shown Table 69, there are two indicative-subjunctive-related structures, which participant ChatW1/1 has used accurately and repeatedly over the nine weeks of participation both in the text-based written chat, and the FTF oral debates. Moreover, the number of instances of use of these structures is higher in the FTF oral debate than in the text-based online chat. This could be due to an increased motivation in using a wider variety of indicative-subjunctive-related structures in the FTF oral debate, since those debates were assessed and could be part of the final mark. On the other hand, there are six instances of use of the same structure followed by the same V2, and the same idea.

Additionally, there is one instance of repeated use of the same structure by this participant in both contexts, which, although not regarded as recurrent use (because it did not occur in 5.5 weeks of participation nor was the structure produced for that same amount of instances or higher), it is worth noting and analysing, for its discursive function and/or strategic value. This structure and its particular use have already been mentioned in section 4.2 of the results when analysing the text-based online chat transcripts.

Table 70 shows use of that structure in both settings by participant ChatW1/1. The specific samples of this structure are included in [Appendix 11](#).

ChatW1/1	
Text-based online chat	FTF oral debate
Indicative-subjunctive-related structure	Indicative-subjunctive-related structure
Es interesante que + Subj. [It is interesting that + Subj.]	Es interesante que + Subj. [It is interesting that + Subj.]
No. Of instances	No. Of instances

4	4
Weeks	Weeks
6,7,9,10	7,9,10 (2)

Table 70 Repeated use of the same structure in both text-based online chat and FTF oral debate by participant ChatW1/1.

As shown in Table 70, the structure ‘*Es interesante que hayas presentado/abordado/ilustrado/mencionado*’ ‘It is interesting that you have presented/addressed/illustrated/mentioned’ has been used four times in the text-based online chat, and ‘*Es interesante que hayas abordado/mencionado/dicho/contado*’ ‘It is interesting that you have addressed/mentioned/said/told’ has been used four times in the FTF oral debate. This structure has been used repeatedly with the specific discursive function of enhancing interaction. More specifically, this structure is being used to summarize, but not to make a statement or declare (hence the use of subjunctive), what the previous speaker has said, while taking the turn to add the participants’ own thoughts to the discussion. Interaction, more specifically, formal interaction is one aspect included in the marking criteria for the FTF oral debates ([Appendix 1](#)). Thus, it seems that this participant has used the text-based online chat to carefully plan and try to systematize the way their take the turn in the conversation, while also using an indicative-subjunctive-related structure according to the explanation provided in the grammar workshop.

Table 71 shows comparison of performance in text-based online chat and FTF oral debate for participant ChatW1/6.

Participant: Chat W1/6						
	Text-based online chat			FTF oral debate S2		
	Accurate SISR/SR			Accurate SISR		
	1			0		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	1	0	0	0
Total No. Of matching structures	0					

	Accurate SISR/SR			Inaccurate/Unnecessary SISR		
	1			0		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	1	0	0	0
Total No. Of matching structures	0					
	Accurate SISR/SR			Missing SISR		
	1			10		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	1	5	0	5
Total No. Of matching structures	0					
	Inaccurate/Unnecessary SISR/SR			Accurate SISR		
	3			0		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	3	0	0	0
Total No. Of matching structures	0					
	Inaccurate/Unnecessary SISR/SR			Inaccurate/Unnecessary SISR		
	3			0		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	3	0	0	0
Total No. Of matching structures	0					
	Inaccurate/Unnecessary SISR/SR			Missing SISR		
	3			10		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	3	5	0	5
Total No. Of matching structures	0					

structures						
	Missing SISR/SR			Accurate SISR		
	2			0		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	2	0	0	0
Total No. Of matching structures	0					
	Missing SISR/SR			Inaccurate/Unnecessary SISR		
	2			0		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	2	0	0	0
Total No. Of matching structures	0					
	Missing SISR/SR			Missing SISR		
	2			10		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	2	5	0	5
Total No. Of matching structures	0					
	Accurate SISR/SR			Accurate Output without resorting to SISR		
	1			30		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	1	5	0	25
Total No. Of matching structures	0					
	Inaccurate/Unnecessary SISR/SR			Accurate Output without resorting to SISR		
	3			30		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	3	5	0	25
Total No. Of matching structures	0					

structures						
	Missing SISR/SR			Accurate Output without resorting to SISR		
	2			30		
	S1NR	S1A	New	S1NR	S1A	New
	1	0	2	5	0	25
Total No. Of matching structures	1					
	S1NR		S1A		New	
	0		0		1	
	Accurate Output without resorting to SISR /SR			Accurate Output without resorting to SISR		
	26			30		
	S1NR	S1A	New	S1NR	S1A	New
	6	0	20	5	0	25
Total No. Of matching structures	17					
	S1NR		S1A		New	
	5		0		12	
Total No. Of matching structures for all categories	18					
	S1NR		S1A		New	
	5		0		13	

Table 71 Knowledge retrieval from text-based online chat to FTF oral debate by participant ChatW1/6.

As shown in Table 71, overall, there are fewer instances of accurate use of SISR/SR (0-1), and inaccurate/unnecessary use of SISR (0-3) in the FTF oral debate than in the text-based online chat for participant ChatW1/6. Conversely, there are more instances of missing SISR (10-2) in the FTF oral debate than in the text-based online chat. However, none of the 10 instances in which SISR is missing in the FTF oral debate corresponds to the same exact structure used in both settings.

As far as the accurate use of structures without resorting to SISR in the FTF oral debate is concerned, overall, there are slightly more instances of such use in the FTF oral debate (30) than in the text-based online chat (26). Additionally, there are more instances (17) of use of the same exact structures in both contexts in this category

than in other categories. Five out of the 17 instances correspond to a structure ('para que' + Subj. – 'In order to' + Subj.), which needed repair in S1, and was used accurately in the text-based online chat in weeks 1, 2, 3 and 9 (six instances), and used accurately in the FTF oral debate in weeks 1 and 9 (five instances). 12 out of the 17 matching structures correspond to New structures.

As far as the proceduralization/automatization of the same structures is concerned, a comparison between recurrent use of structures identified for this participant in the text-based online chat and the use of those same structures in the FTF oral debate needs to be established. For participant ChatW1/6, who participated in four text-based online debates, recurrent use has been considered occurrence of the same structure in at least three weeks of participation or the production of instances of that same structure for that same amount or higher in both settings. Whenever a structure has been used more than once in the same week, this is indicated with the number of instances of use for that specific week in brackets.

Table 72 shows those specific instances of recurrent use of the same indicative-subjunctive-related structures in both the text-based online chat and the FTF oral debate for at least half + one weeks of participation or the production of instances of that same structure for that same amount or higher for participant ChatW1/6. [Appendix 11](#) includes specific instances for this category of comparison.

ChatW1/6	
Text-based online chat	FTF oral debate
Indicative-subjunctive-related structure	Indicative-subjunctive-related structure
Para que + Subj. [In order to + Subj.]	Para que + Subj. [In order to + Subj.]
No. Of instances	No. Of instances
6	5
Weeks	Weeks
1 (2),2,3,9 (2)	1,9 (4)

Table 72 Repeated use of the same structures in both text-based online chat and FTF oral debate by participant ChatW1/6.

As shown in Table 72, the same structure, which has been repeatedly used in the text-based online chat six times, has been used five times in the FTF oral debate. The use of this structure is not spread across all weeks of participation but concentrated mostly in week 9, the last week of practice for this participant. Finally, the number of instances of accurate use is slightly higher in the text-based online chat than in the FTF oral debate.

Table 73 shows comparison of performance in text-based online chat and FTF oral debate for participant ChatW2/10.

Participant: Chat W2/10						
	Text-based online chat			FTF oral debate S2		
	Accurate SISR/SR			Accurate SISR		
Total	0			0		
Total No. Of matching structures	0					
	Accurate SISR/SR			Inaccurate/Unnecessary SISR		
	0			0		
Total No. Of matching structures	0					
	Accurate SISR/SR			Missing SISR		
	0			8		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	0	1	0	7
Total No. Of matching structures	0					
	Inaccurate/Unnecessary SISR/SR			Accurate SISR		
	0			0		

Total No. Of matching structures	0					
	Inaccurate/Unnecessary SISR/SR			Inaccurate/Unnecessary SISR		
	0			0		
Total No. Of matching structures	0					
	Inaccurate/Unnecessary SISR/SR			Missing SISR		
	0			8		
	S1NR	S1A	New	S1NR	S1A	New
				1	0	7
Total No. Of matching structures	0					
	Missing SISR/SR			Accurate SISR		
	4			0		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	4	0	0	0
Total No. Of matching structures	0					
	Missing SISR/SR			Inaccurate/Unnecessary SISR		
	4			0		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	4	0	0	0
Total No. Of matching structures	0					
	Missing SISR/SR			Missing SISR		
	4			8		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	4	1	0	7
Total No. Of matching structures	0					

	Accurate SISR/SR			Accurate Output without resorting to SISR		
	0			57		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	0	0	4	53
Total No. Of matching structures	0					
	Inaccurate/Unnecessary SISR/SR			Accurate Output without resorting to SISR		
	0			57		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	0	0	4	53
Total No. Of matching structures	0					
	Missing SISR/SR			Accurate Output without resorting to SISR		
	4			57		
	S1NR	S1A	New	S1NR	S1A	New
	0	0	4	0	4	53
Total No. Of matching structures	0					
	Accurate Output without resorting to SISR /SR			Accurate Output without resorting to SISR		
	22			57		
	S1NR	S1A	New	S1NR	S1A	New
	1	3	18	0	4	53
Total No. Of matching structures	12					
	S1NR		S1A		New	
	0		4		8	
Total No. Of matching structures for all categories	12					
	S1NR		S1A		New	
	0		4		8	

Table 73 Knowledge retrieval from text-based online chat to FTF oral debate by participant ChatW2/10.

As displayed in Table 73, there are no instances of accurate use of SISR or inaccurate or unnecessary SISR in the FTF oral debate for participant ChatW2/10. The only instances recorded for this participant are related to missing use of SISR/SR in both the text-based online chat (four instances) and in the FTF oral debate (eight instances). However, none of those instances correspond to the same exact structure.

As far as the accurate use of structures without resorting to SISR in the FTF oral debate is concerned, overall, there are more instances of such use in the FTF oral debate (57) than in the text-based online chat (22). Additionally, there are more instances (12) of use of the same exact structures in both contexts in this category than in other categories. All 12 instances correspond to structures, which were accurately used without resorting to SISR/SR in both the text-based online chat and the FTF oral debate. Four out of the 12 instances correspond to a structure, which was accurately used in S1, and eight out of the 12 matching structures correspond to New structures.

As far as the proceduralization/automatization of the same structures is concerned, a comparison between recurrent use of structures identified for this participant in the text-based online chat, and the use of those same structures in the FTF oral debate needs to be established. For participant ChatW2/10, who participated in five text-based online debates, recurrent use has been considered occurrence of the same structure in at least 3.5 weeks of participation or the production of instances of that same structure for that same amount or higher. However, there are no structures, which have been used in this number of weeks repeatedly in the text-based online chat as already observed in section 4.2 of this study. Therefore, no comparison between both contexts can be made for this participant in relation to proceduralization or automatization.

All these results should also be considered in relation to the answers of these participants' reflective logs. In this sense, the questions aimed at prompting reflection

on performance in the FTF oral debate after the use of the text-based online chat were the following:

1. Did you read the transcript of the online chat prior to the face-to-face debate?
2. Do you think prior participation in online text-based debate helped you with the use of indicative and subjunctive modes in the face-to-face debate? Why? How?
3. Have you observed any other improvements of using the text-based online tool for your face-to-face oral debates? Which ones?

With regards to question one, all three participants admitted to having read the transcript of the text-based online chat prior to participating in a FTF oral debate. The main aspects on which participants focused when reading those transcripts were: Getting ideas, grammar structures and vocabulary.

‘Yes, I picked out some key ideas and structures that would be helpful for the face-to face chat’. (Reflective log ChatW1/1).

‘Yes – I would often take notes of key vocabulary and structures for the debate, especially if other students had argued good points’. (Reflective log ChatW1/6).

‘Yes, I rewrite the more interesting and unique opinions in my own words, also if anyone uses any grammar that I haven’t thought of using I try to include a similar structure in the debate’. (Reflective log ChatW2/10).

With regards to question two of the reflective log, and the contribution of text-based online chat to improve indicative-subjunctive use in the FTF oral debate, only participant ChatW1/1 clearly answers ‘yes’ to the question. However, the answer is related to ideas rather than the use of indicative-subjunctive modes. On the other hand, participants ChatW1/6 and ChatW2/10 explain the reasons why text-based online chat has had a positive influence in FTF oral debates, although there is no specific reference to indicative-subjunctive structures but to ‘structures’ in general. Other positive aspects of text-based online chat underlined by these participants were: A relaxed context, and the provision of feedback or tutor’s elicitation to reflect on structures.

‘Yes. Gave me more ideas to talk about, and validation that my ideas were correct and interesting’. (Reflective log ChatW1/1).

‘By practicing with the online debate and thinking about phrases or structures in a more relaxed way allowed me to prepare a lot and plan my ideas for the debates. Isabel was really helpful and inspired us to think about our structures and gave us ideas and prompts too which was really good and definitely made me feel like I felt more prepared for the debates’. (Reflective log ChatW1/6).

‘If I say something that is incorrect I can check it and ask for an explanation. In the debates we do not receive much actual feedback on corrections, let alone explanations of why something might be wrong’. (Reflective log ChatW2/10).

Regarding question three of the reflective log and how has the text-based online chat contributed to improving other aspects of the FTF oral debates, the main aspects reported by participants were: Getting ideas, increase in confidence, more vocabulary, exposure and use of new structures.

‘Given me more ideas to talk about’. (Reflective log ChatW1/1).

‘I found my confidence during the debates to be higher as I had thought more about my ideas and formulated sentences. I also found I learnt more vocabulary and

debating with students from other groups was really helpful as they brought ideas to the debate'. (Reflective log ChatW1/6).

'I am reminded of other structures that I wouldn't necessarily use, it's a good way of getting exposure to different structures that I might not be as comfortable using'. (Reflective log ChatW2/10).

Such results show that, on the one hand, participants' perceptions about the positive contribution of text-based online chat to FTF oral debates align with the actual positive performance of those participants in the FTF oral debate. However, the content of most of the answers seems to indicate a lack of more awareness on how this contribution has affected particularly indicative-subjunctive-related structures. Although there is some awareness on how new structures have been incorporated to their oral discourse, especially in the case of ChatW1/1, such awareness is missing. Lack of such awareness could translate in a missing opportunity to use the text-based online chat as a strategic tool to focus on indicative-subjunctive-related errors or improvement of these structures.

Finally, Table 74 shows a comparison of transfer of knowledge from the text-based online context to the FTF oral debate for the three participants and the rest of the cohort, which was not exposed to extended practice. The table includes the number of matching structures in both contexts, that is, structures, which were used both in the text-based online chat and the FTF oral debate. Only those structures, which are the same and have been used accurately in both contexts will account for the transfer of knowledge from one setting to the other.

	Participation in text-based online chat over an extended period		Participation in text-based online chat over a limited period	
Category	Accurate SISR/SR in both contexts	Accurate output without resorting to SISR/SR in both contexts	Accurate SISR/SR in both contexts	Accurate output without resorting to SISR/SR in both contexts
No. Of matching	0	83	1	75

structures				
Total No. Of matching structures	83		76	
Total No. Of weeks	18		43	

Table 74 Comparison of performance in text-based online chat and FTF oral debate over an extended period or a short period of time.

According to the data shown in Table 74, the three participants who practiced with the text-based online chat over time produced no instances of accurate SISR/SR in the text-based online chat, which were transferred to the FTF oral debate. Conversely, there is one instance of accurate use of SISR/SR in the text-based online chat, which was also used in the FTF oral debate by the same participant, who did not practice over an extended period. However, the three participants who practiced with the text-based online chat over time produced more instances of accurate output without resorting to SISR of the same structures in both settings (83) than those who did not participate over time (75), even though there are more weeks of data for those participants who did not practice for an extended period.

Once the results of the study have been presented, the next section discusses and interprets those results.

Chapter 5: Discussion

This chapter provides an interpretation of the results presented in chapter 4, according to the three main RQs posed in this study and in relation to the theoretical framework underpinning the design of this research. Thus, the chapter is organised in three subsections, namely:

- How, if at all, can SCMC text-based online chat facilitate noticing and SISR/SR of indicative-subjunctive-related structures?
- How, if at all, can SCMC text-based online chat facilitate automaticity of SISR/SR of indicative-subjunctive-related structures?

-How, if at all, can SCMC text-based online chat facilitate the transfer of knowledge and abilities from the text-based online setting to the FTF oral situation?

5.1 RQ1. How, if at all, can SCMC text-based online chat facilitate noticing and SISR/SR of indicative-subjunctive-related structures?

This section discusses the results that answer RQ1, that is, how, if at all, can SCMC text-based online chat facilitate noticing and subsequent SISR/SR of indicative-subjunctive-related structures?

According to the results shown in section 4.1, overall, SISR/SR was mostly used in the text-based online chat in combination with *, and for amending other than indicative-subjunctive-related errors, which are the object of this study. Lee (2009), and Smith (2012) claim that semantic and lexical errors are more likely to be noticed than morphological ones because morphological errors have less communicative value. As it has been hypothesized in this research this might be applicable to the case of learners of Spanish, who were taught the difference between indicative-subjunctive modes according to traditional approaches, which did not highlight the semantic relevance of these modes.

However, results also revealed that the amount of morphological-related SISR/SR (non-indicative-subjunctive-related) combined with indicative-subjunctive-related repair is slightly higher than other-related SISR/SR. Although the difference is not significant, it must be noted that self-repair related to reformulation, and specially spelling errors (more prone to occur due to the typing/writing nature of the task) were not included in Smith's study (2012) but have been included in this research. This might have increased the amount of repair in this category. On the other hand, the amount of SISR is higher in non-morphological errors, meaning that morphological-related, including indicative-subjunctive-related errors require tutor's elicitation to be noticed. This would support the argument that morphological-related errors are less noticed than semantic or syntactic ones (Smith, 2012:55). Nevertheless, there are factors considered in this research such as learners' orientation (provided by the tutor), motivation (assessment criteria emphasizing grammatical accuracy), and

explicit instruction (attaching semantic value to indicative-subjunctive modes), which might question that morphological errors are less noticed, as will be discussed in the following sections.

Thus, although SISR is more prevalent in non-morphological-related errors, it seems that participants are aware of how SISR/SR may contribute to the repair of morphological-related errors and the noticing of morphological traits, and not only the semantic ones. This is aligned with Sotillo's claim (2009) that text-based chat increases noticing in linguistic forms in comparison to voice chats, and Warschauer's statement (1997), that SCMC amplifies attention to linguistic form. These results would not completely refute Smith's (2012) argument that morphological errors are less noticed, but it clearly questions Blake's (2000) claim that SCMC's contribution to grammatical development is questionable, since the amount of grammar-related repair and accurate output collected in this study is significant.

With regards to indicative-subjunctive-related errors, which are the object of this research, the number of accurate SISR/SR of these structures is lower than the number of SISR/SR of other linguistic-related errors (gender agreement, past tenses, use of prepositions), and lower than the instances of missing SISR/SR in indicative-subjunctive-related structures. Moreover, noticing of indicative-subjunctive-related errors is mostly prompted by the tutor in the form of SR, and is primarily focused on new structures, rather than structures which needed repair in S1. This seems to indicate that SCMC is not contributing significantly to the SISR of recurrent errors in indicative-subjunctive-related structures, which constitutes RQ1 of this research. Such higher number of instances of SISR/SR in new structures rather than in those structures, which needed repair in S1, could be due to two main reasons:

1. Lack of awareness of the errors made during S1 in relation to indicative-subjunctive structures, due to lack of reflection and orientation on S1 feedback provided by the tutors.
2. Participants' tendency to use a wider range of structures, and to experiment more in the text-based online chat (as shown in participants' reflective logs) may lead to a

higher use of new structures. This might account for the higher number of repairs performed on new rather than previously used indicative-subjunctive structures.

These factors are related to the concept of orientation or voluntary attention. If learners are not oriented to focus on specific aspects, they will not notice them (Tomlin and Villa, 1994). Conversely, learners can voluntarily focus their attention on aspects they find more relevant. In this sense, if tutors do not insist in the importance of amending existing errors, learners will not notice them. On the other hand, if learners are oriented to use a wide variety of indicative-subjunctive-related structures, as proposed in the assessment criteria, they might tend to experiment and try new structures when using SCMC. As Hayes, Flower, Schriver, Stratman and Carey (1987) in (Hayes, 2012:375) argue, the reading process must change in response to the writer's goal. If the goal of reading is to use the information as a source material, the writer will not pay attention to spelling, grammar, or ambiguity problems. Conversely, when the goal is to edit (i.e., self-repair) such problems must be detected and fixed. Setting a particular goal for reading to carry out a specific writing task should be part of the task description.

However, the results from the reflective logs show that most participants admitted to having used * to amend indicative-subjunctive-related structures, and that SCMC had contributed to improve their use of indicative-subjunctive modes. This means that, even though the amount of SISR/SR might not be high, participants perceive SCMC as contributing to improve their awareness on the use of indicative-subjunctive-related structures.

On the other hand, the number of instances of missing use of SISR/SR in indicative-subjunctive-related structures is higher than the accurate use of repair in these structures. Moreover, some of the participants who missed the use of SISR/SR had also used them accurately and had taken part in the grammar workshop. All this seems to indicate that despite participants' perception of understanding the indicative-subjunctive rule, they are still struggling to notice and self-repair those errors. However, it must also be noted that, most of the instances in which self-repair was missed correspond to new structures and missed SISR. This could be due to the limited capacity of attention required for noticing advocated by Schmidt (2001).

Given the wide variety of structures followed by indicative/subjunctive modes in Spanish, it might be overwhelming for learners to notice all instances of these uses, especially if those structures are completely new. According to this, it seems understandable that learners need the assistance of the tutor to notice those errors, hence the lack of SISR, and the need for elicitation in the form of SR. In this sense, interaction that involves negotiation along with instruction that directs learners' conscious attention to some linguistic forms might be a way to overcome the limitations of detection as proposed by Ellis (2015:188). Furthermore, not only attention to some linguistic forms but to specific indicative-subjunctive structures or types of clauses (substantive clauses, relative clauses, conditional clauses, concessive clauses, etc.) seems necessary to monitor progress in the accurate performance of these structures given the learner's limited capacity of attention, and the wide range of structures requiring indicative/subjunctive modes. Anyhow, even though the instances of inaccurate/unnecessary or missed SISR/SR are not significantly higher than the instances of accurate SISR/SR for indicative-subjunctive-related structures, these fluctuations in the accurate, non-accurate, or missed use of SISR/SR align with Ellis' statement that 'not everything that is processed in short-term or complex working memory results in observable changes in interlanguage' (2015:188). Similarly, Larsen-Freeman describes languages as open, non-linear systems in which 'new forms enter and leave the language in a non-incremental fashion' (1997:147). Also, 'the learning curve for a single item is not linear either. The curve is filled with peaks and valleys, progress, and backsliding' (1997:151). Thus, fluctuations as the ones observed when analysing learners' performance in SCMC are not indicative of learning not occurring but, on the contrary, it is an indication that the learners' grammar system is open. If the system is open, then learning is possible, and the restoration of order from the chaos represented by these fluctuations is supported and facilitated through feedback (1997:152). Variability shows that the system is adjusting and may indicate a change in behaviour (Fogal, 2019:579). Consequently, continuous practice with text-based online chat might be encouraged and advised to learners, so that how fluctuations evolve and end up being produced accurately or not, can be monitored.

According to what has been discussed so far, there is a clear lack of use of SISR/SR in indicative-subjunctive-related structures, which is the main focus of RQ1 of this study. Such result could be due to several factors observed in the results of this study:

-Inability to create the necessary cognitive dissonance (Festinger, 1975) to notice the error due to lack of clear understanding of the indicative-subjunctive rule. Such inability could, therefore, have led to the need for more tutor's elicited feedback prompting SR. However, it was not possible for the tutor to provide such elicitation whenever required, since the tutor was monitoring different conversations of different groups taking place at the same time.

-Unclear wording in tutor's elicitation. If the tutor was not using the 'statement/indicative' 'non-statement/subjunctive' wording to prompt participants' reflection and thus facilitate cognitive dissonance, participants might have been slightly confused on how to proceed with the SR. In this sense, tutor's elicitation should be clear and aligned with explicit instruction to effectively trigger learners' ability to create cognitive dissonance.

-Covert self-repair leading to accurate output of indicative-subjunctive-related structures without the need to resort to SISR/SR might have played a role. According to Smith (2008:90) covert self-repair occurs when the message is typed but a self-initiated repair or correction takes places before sending the message to the online chat. In relation to this, it might be necessary to use screen capture technology as suggested by Smith (2008) and used by Sauro and Smith (2010) to find out whether accurate output without the use of SISR/SR could be due to cover self-repair.

-The participants' level of proficiency. According to Van Hest and Kormos (1996, 1999, cited in Smith, 2008:88), advanced learners correct themselves less, more specifically, advanced learners self-corrected linguistic errors less than learners at other lower levels. Since participants in this study are post-intermediate to advanced learners of Spanish, this could explain the lower occurrence of SISR.

On the other hand, it must be noted that the 10 out of the 25 participants who attended the grammar workshop focusing on the explanation of this rule, produced slightly

more instances of SISR/SR in indicative-subjunctive structures overall, and in a smaller number of weeks than those who did not attend the grammar workshop. However, those participants attending the grammar workshop also produced slightly more instances of missing SISR/SR than those participants who did not attend the grammar workshop, but they also produced more instances of accurate use of indicative-subjunctive-related structures without resorting to SISR/SR. Thus, there seems to be a correlation between attendance to the grammar workshop and the tendency to use more complex structures, namely, indicative-subjunctive-related structures. Such increased use of these complex structures would explain the fluctuations but also the higher overall number of instances of accurate production without resorting to SISR/SR. In this sense, this would support Ellis' (2015) statement that explicit knowledge can contribute to performance or at least to raise awareness or direct learners' attention to specific linguistic structures. Aligned with this, Suzuki and De Keyser (2007) emphasize the role of awareness to access explicit knowledge. Moreover, Krashen (1981) also argued that learning is an intentional process, and this is, in turn, related to the previously mentioned concept of orientation proposed by Tomlin and Villa (1994). Therefore, if learners are not oriented or voluntarily focusing their attention (Schmidt, 2001) on indicative-subjunctive-related aspects, explicit knowledge related to this will not be retrieved or activated. In relation to this, most participants' reflective logs show that the most beneficial aspect of the text-based online chat activity was the exchange of ideas and arguments to prepare for the FTF oral debate. This might explain why some participants might have been more oriented towards content rather than grammatical accuracy when using SCMC, and hence, why explicit instruction was not used in some instances.

Finally, however limited the contribution of SCMC to SISR/SR of indicative-subjunctive-related structures might seem, what the results of this study show is that the amount of accurate production of indicative-subjunctive-related structures in the text-based online chat without resorting to SISR/SR significantly exceeds the number of instances of accurate SISR/SR, or the lack of it. Additionally, all 25 participants have produced indicative-subjunctive-related structures accurately and without resorting to SISR/SR, and these instances are particularly more prevalent in new structures, which were not used by participants during S1, than in other types of structures. All this data might also explain the low amount of use of SISR/SR overall,

since participants might have been focusing on planning and producing these structures accurately. These results are also consistent with responses from the reflective logs, since most participants perceived that the practice with text-based online chat had contributed to improve or increase awareness of their use of indicative-subjunctive modes. This also confirms previous research by Sotillo (2009), Warschauer (1997), Salaberry (2000), and Fiori (2015) stating that SCMC amplifies noticing of linguistic forms and improves the use of Spanish past tense endings as well as use of Spanish prepositions *por/para*, and verbs *ser/estar*. This could be due to one or more of the following factors:

-More time available for online planning: This aspect has been mentioned in five reflective logs as a contributing factor to improve accurate use of indicative-subjunctive-related structures, and would explain the higher amount of accurate output without resorting to SISR/SR in comparison to the instances of SISR/SR. These results thus support the claim made by previous researchers that the slower pace of the SCMC conversation facilitates learners' noticing of the errors and the chance to make output modifications (Chun and Zhao, 2006; Lee, 2009; Sauro and Smith, 2010). Similarly, Skehan (2009) argued, that more time available would allow learners to draw on their rule-based knowledge. This means that SISR/SR may not even be necessary if the time afforded by SCMC allows for the noticing, the creation of cognitive dissonance, and the application of explicit knowledge, even before the message is shared in the conversation. In relation to this, Sauro and Smith (2010) showed through video enhanced chat scripts, that learners of German participating in text-chat produced higher amounts of complex structures, and that those complex structures were the result of text, which was edited prior to being posted on the chat conversation. Such covert self-repair, which has not been recorded in this study, might explain the amount of accurate output without resorting to SISR/SR, and constitutes evidence of how the time available by text-based online chat allows for more online planning.

-Participants' assumptions about the writing mode: In two reflective logs participants link the use of writing with a more formal register, and hence, the use of high-level structures or more complex structures. This is in tune with Ellis and Beattie's (1986:201) statement, that the language of writing contains longer and more

grammatically complex sentences than the language of speech, when describing writing communication as opposed to oral communication. Also, according to Tavakoli (2014:229), L2 users responding to the same task under similar conditions are more likely to produce more complex language in writing than in speaking even if the task complexity involved in the written task is different. These assumptions could constitute an additional benefit of writing for speaking, since the formality and complexity perceived by learners may lead to produce high quality language or more complex structures when writing, which, in turn, might be reproduced in the FTF oral context.

-A safe space to practice and experiment: In five reflective logs the text-based online chat is described as a safe space in which to experiment with structures. Additionally, two reflective logs mentioned the text-based online chat as an opportunity to practice new grammar structures learned in the grammar lectures. All this would account for the higher number of new structures used in the text-based online chat in comparison to oral debates in S1. This is also related to the concepts of pre-task planning and online planning, and how these conditions influence performance (Byrnes and Manchón, 2014). While the planning involved in the text-based online chat might be regarded as online planning because learners have to use the time available to perform the task, the SCMC text-based online chat may have also been regarded by learners as a pre-task planning opportunity before the FTF oral debate. This may account for the use of SCMC text-based online chat as an experimental field to carefully plan for the performance that will follow in the FTF oral debate, and hence, the use of more new structures. These results support Beauvois argument that the relaxed environment of CMC facilitates more experimentation with the second language (1997:108) while refuting both Meunier (1997) and Kormos' (2014) conclusions that students do not experiment more with the language in CMFLC or that writing benefits those grammatical structures in which students already show high mastery. Finally, this supports Warschauer's claim that 'electronic discussion might be used effectively as a prelude to oral discussion' (1996:16).

-Emphasis on grammatical accuracy in assessment's criteria: As shown in the assessment criteria in the oral feedback sheet ([Appendix 1](#)) 'range and accuracy of grammatical constructions' is the first component of those criteria, and one of the

aspects most emphasized in the lectures of the SPPO3010 module. Therefore, participants might have decided to draw more attention to this type of errors, since they are a relevant part of the assessment.

-Positive feedback provided by the tutor: During the text-based online chat session, the tutor provided not only feedback on unnoticed errors but also on accurate use of complex structures (indicative-subjunctive structures). Such feedback might have oriented learners' attention to the importance of those structures, while reinforcing and encouraging participants to keep on using them in future debates.

-Attendance at the grammar workshop: In one reflective log, the participant refers to the grammar explanation presented at the grammar workshop when explaining the contribution of the text-based online chat to improve the uses of indicative-subjunctive modes. In this sense, attendance at the workshop might have also contributed to a clearer understanding and application of the rule without the need to resort to SISR/SR. This would support both Ellis' statement (2015) that clear explicit knowledge contributes to performance, and Bueno's argument (2021), that the creation of neural connections, that will not need to be re-established or relearn because the explanation is accurate would contribute to better learning.

-Syntactic alignment and expansion of ZPD: Although the social aspect of SLA has not been explored in this study due to the limitations of this research, some data in this respect has also been recorded. In three reflective logs, the participants mentioned learning from other participants' contributions as one of the factors that made them improve their use of indicative-subjunctive structures in the text-based online chat. However, no specific instances of such phenomenon have been identified in the transcripts of the online conversation of these participants, although structures used in the text-based online chat were used in the FTF oral debates by different participants as has been recorded in this study. This proves the creation and expansion of ZPDs happening in the FTF oral debates.

Once the results answering to RQ1 have been discussed, the next section will discuss the results of RQ2.

5.2 RQ2. How, if at all, can SCMC text-based online chat facilitate automaticity of SISR/SR of indicative-subjunctive-related structures?

This section discusses the results that answer RQ2, that is, whether text-based online chat facilitates automaticity of SISR/SR of indicative-subjunctive-related structures. According to Schumann, Crowell, and Jones (2004) automatization occurs through a domain-general learning mechanism in the brain that is used not only for language but also for motor and other cognitive skill learning and is acquired through the repeated execution of a task. Accordingly, to answer this question results from three participants who participated at least in four or more text-based online chats will be the focus of the discussion. For the purposes of this research, recurrent use of a structure has been considered as the use of that specific structure by the same participant in half + one of the weeks of participation or the production of instances of that same structure for that same amount or higher. All these aspects will also be explored in relation to data gathered from the grammar workshop, and the reflective logs linked to those participants. On the other hand, since there is not much research linking the use of SCMC text-based online chat and automatization of learning, contrasting data gathered in this study with previous data is limited.

According to the data gathered and shown in section 4.2 of this study, overall, the use of SISR/SR in indicative-subjunctive-related structures is low for the three participants, and low in comparison to participants who did not take part in the text-based online chats in so many weeks. Additionally, one of the participants did not even use SISR/SR in any of the five weeks of participation in SCMC text-based online chat. Moreover, the amount of accurate SISR/SR is also lower than the number of inaccurate/unnecessary or missing SISR/SR, although such difference is not very significant. However, such hesitations reflected in the inaccurate/unnecessary or missing SISR/SR, could be indicative of adjustments occurring while the participants are developing their linguistic repertoire and eventually leading to the proceduralization of knowledge.

On the other hand, the instances of accurate use of repair are mostly linked to SR (elicited by the tutor), while most of the instances of missing repair correspond to

SISR. As far as the type of structures is concerned, most of the instances of both accurate repair and missing repair are related to new structures rather than to structures that needed repair in S1. All this data seems to indicate that even though there is some noticing, awareness of errors still needs to be facilitated by the tutor, and when not facilitated by the tutor, it is likely to be missed. However, instances of repair of new structures are higher than other type of structures, which might explain why the tutor's elicitation was necessary, since new structures might be unknown and might not have been practiced before by the participants during S1.

In this sense, if automatization is understood as 'the transformation of the knowledge presented in declarative format to the final stage of fully spontaneous, effortless, fast and errorless use of that rule and often without being aware of it anymore' as proposed by De Keyser (2007:3), it seems that regular participation in text-based online does not seem to contribute to the automatization of SISR/SR in general, or SISR/SR of specific structures that might repeat over time, since the amount of instances of SISR/SR in any type of structure is not significant for all three participants.

However, the instances of accurate output of an indicative-subjunctive-related structure without resorting to SISR/SR significantly exceed the instances of accurate or missing SISR/SR. Moreover, although this number is notably higher in new structures than in structures that needed repair in S1, there are also some instances of repeated accurate output of the same structures that needed repair during S1 without resorting to SISR/SR. The occurrence of that structure across most or all weeks of participation of the same participant seems to indicate that text-based online chat contributes to the accurate output of structures, which were used inaccurately in S1 but without the need to resort to SISR/SR. Repeated accurate production of the same structures, which were already used accurately in S1 has also been observed all across the period of participation in SCMC text-based online chat. Finally, the higher amount of repeated accurate output of the same indicative-subjunctive-related structures over the extended period of participation occurs in new structures. These examples of repeated use would support the idea that practice with specific activities aimed at developing knowledge and skill in the second language (DeKeyser, 2007), and more

opportunities given to students to automatize knowledge (Schumann, Crowell, and Jones, 2004) contribute to proceduralization.

On the other hand, although there are some instances, which have not been considered repeated used because they do not occur in half + one of the weeks of participation, they are relevant to analyze because they contribute to understand how different structures are incorporated by learners into their linguistic repertoire. This is the case of '*Es interesante que + Subj.*' 'It is interesting that + Subj.', which has been used by one of the participants consistently for 4 weeks to respond to another speaker's post and take the turn. These instances are relevant because they show how the participant is using the same subjunctive structure to summarize, but not to make a statement or to declare (hence the use of subjunctive) what the previous speaker has said while taking the turn to add their own thoughts and contribution to the discussion. This is one of the uses of subjunctive as non-statement/non-declaration, which were explained in the grammar workshop, and that the participant had not previously used during S1. In this sense, the use of this structure with the same discursive function in all instances (to recap, taking the turn, and add something new) shows understanding of the explicit rule and actual appropriate application of that rule in the context of communication while also giving priority to meaning as suggested by Llopis-García, Real-Espinosa and Ruiz-Campillo (2012:121). This supports previous research on how guided careful planning (Amhadian, 2012) whereby the participant has used explicit instruction (grammar workshop information) to plan their participations with unlimited time (from week to week of participation in SCMC text-based online chat) has contributed to a better and more accurate language performance.

Aligned with this, is the observation that both participants who attended the grammar workshop produced more instances of recurrent use of the same structures over time than the participant who did not attend the workshop. As far as analysis of reflective logs is concerned, the two participants who attended the grammar workshop are also the ones who made specific reference to indicative-subjunctive structures in their responses in the reflective logs after participation in the text-based online chat. This contributes to the idea that attendance to the grammar workshop and explicit instruction (Ellis, 2015) raises awareness on using these modes, while also guiding or orientating learners to notice more those structures (Tomlin and Villa, 1994). It also

contributes to the concept of elaborative rehearsal proposed by Robinson (2003, cited in Ellis, 2015:186), whereby activation of symbolic knowledge by the learner is necessary to make changes in long-term memory. Explicit instruction given through the grammar workshop would constitute the symbolic knowledge required to activate such changes in the long-term memory.

On the other hand, it is also interesting and relevant that grammar lectures and learning from other participants are mentioned in the reflective logs as contributing factors to improve indicative-subjunctive use. Such perceptions recorded by participants, show that, explicit instruction through lectures and the co-construction of knowledge afforded by the text-based online chat also contribute to the improvement in the use of indicative-subjunctive modes.

Such results are consistent with those discussed in the previous section and responding to RQ1, meaning that most of the factors explaining results for RQ1 would also apply to RQ2. More specifically, the contribution of this study with respect to RQ2 supports both Anderson's skill-learning theory (1993) and De Keyser's interface position (2017), whereby practice would lead to transforming declarative knowledge into procedural knowledge. In addition to this, such consistent production without resorting to SISR/SR would also align with the above-mentioned De Keyser's definition of automatization (2007) as the effortless and errorless transformation of declarative knowledge into procedural knowledge.

However, why the instances of recurrent use of the same structures over time are few might be due to some factors already mentioned when discussing RQ1, namely:

-Lack of orientation or voluntary attention. Participants need to plan and purposely and consistently incorporate over time the specific structures they want to automatize. They also need to be oriented by the tutors on the concept of automatization and how such process might be possible. This is an aspect that has not been explained or addressed in the module program with participants before. Thus, if participants are unaware of the concept of automatization, they won't be able to plan their participations over time accordingly.

-Large number of indicative-subjunctive-related structures. The wide range of subordinate structures followed by indicative-subjunctive demands from participants careful planning, and selection of those specific structures they want to use most frequently.

-Assessment criteria establishing not only accurate grammatical production but also use of a wide variety of complex or subordinate structures. If participants are expected to use as many different structures as possible to get a higher mark, they will tend not to focus on a few of those structures but try to use different ones, thus losing focus on the repetition or recurrent use of the same ones.

Once the results answering to RQ2 have been discussed, the next section will discuss the results of RQ3.

5.3 RQ3. How, if at all, can SCMC text-based online chat facilitate the transfer of knowledge and abilities from the writing online setting to the FTF speaking context?

This section discusses the results in relation to RQ3, that is, how, if at all, can text-based online chat facilitate the transfer of knowledge and abilities from the writing online setting to the FTF speaking context? Accordingly, the discussion will be focused on the different uses of SISR/SR or lack of it in both settings, specially, with regards to the use of the same exact structures. Thus, if the same structure is used in both settings, and has been subject to any type of repair, that will be considered evidence of transfer of knowledge.

The discussion addresses overall transfer of knowledge from the online to the FTF context for all participants in the study. A separate subsection will focus on the three participants with higher participation in the text-based online chat, to respond to how abilities and knowledge acquired, if any at all, through practice with text-based online chat over time, have been transferred or not to the FTF oral context.

All these aspects are also discussed in relation to results from the grammar workshop and the reflective logs.

5.3.1 Transfer of knowledge from the writing online context to the FTF oral debates

According to the results shown in section 4.3.1 of this study, overall, the amount of accurate SISR/SR is slightly higher in the text-based online chat than in the FTF oral context, although the difference is not significant. Additionally, the amount of missing use of SISR in the FTF oral debate is significantly higher than in the text-based online chat. This is aligned with previous research emphasizing the benefits of SCMC to increase learners' attention to linguistic form (Warschauer, 1997; Sotillo, 2009), and to promote more noticing of their own mistakes (Chuan and Zhao, 2006). More specifically, these results support Sotillo's findings that text-based SCMC contributes more to error noticing than voice chat SCMC (2009:363).

As far as the type of structures is concerned, the amount of accurate self-repair is very similar in both settings for all types of structures, and it is higher in new structures than in other type of structures in both settings. However, the amount of the exact same structures used in both contexts is relatively low, and none of those instances correspond to a structure, which needed repair in S1. This seems to indicate, that there is no clear transfer of successful use of self-repair from SCMC to FTF in any structures in general, but most particularly, in those, which needed repair in S1, and which are the ones object of this study.

On the other hand, the number of the same structures, which were accurately repaired in the text-based online chat but missed SISR in the FTF oral debates, is low. Additionally, all those instances correspond to SR, that is, repair elicited by the tutor, meaning that tutor's elicitation was not enough in these instances to facilitate SISR of the same structure in the FTF oral debate. In addition to this, all the participants missing repair in the FTF oral debate had read the transcript of the text-based online chat before participations in the FTF oral debate according to their respective reflective logs. Thus, as discussed above, it seems that there is some transfer of

accurate use of self-repair from one setting to the other, but this is quite low, and participants' perceptions about the use of the transcript are not quite correlated with performance in the FTF oral debate regarding self-repair.

As far as the inaccurate/unnecessary use of SISR/SR is concerned, there is a case, in which the same structure has been inaccurately repaired in the text-based online chat but has been accurately repaired in the FTF oral debate. The participant used the same structure and the same content or idea in the same week, and while discussing the same topic. This specific example shows transfer of knowledge from the text-based online chat to the FTF oral debate to produce an accurate output. Such transfer could be due to careful reading of the transcript, since despite the inaccurate use of SR, the tutor provided feedback after that inaccuracy, and that was reflected in the transcript. In this sense, analysis of the participant's reflective log with regards to question one after participation in the FTF oral debate, confirms that this participant did read the transcript before having the oral debate. Such successful transfer of knowledge might be due to a better revision process afforded by the page-to-page presentation of the transcript than the revision quality provided by a scrolling presentation as suggested by Olive and Passerault (2012).

On the other hand, the instances of missing repair in the same exact structures in both settings are low. Moreover, all those instances correspond to miss SISR in the text-based online chat, meaning, that the tutor did not elicit repair or contributed to the noticing of such errors. This might be the reason why those errors were persistent and were not subject to SISR in the FTF oral debate. Thus, it seems that SISR is less prone to be transferred or not transferable at all to the FTF oral debate if not elicited by the tutor through SR in the text-based online chat. However, as discussed before, even if the tutor is eliciting repair through SR, this does not mean that participants will use SISR in the FTF oral debate following SR in the text-based online chat.

Consequently, why a straightforward transfer from the text-based SCMC to the FTF oral setting with respect to the use of SISR is not clearly happening, might be due to one or more of the following factors:

-Less time available in the oral setting to noticing the errors, and the lack of tutor's feedback, which would elicit SISR/SR in the FTF oral setting. According to Skehan's trade-off hypothesis (2009), due to limited attention resources, if the learner is focusing on accuracy, then fluency might be affected. Conversely, if the learner is focusing on fluency, then accuracy and complexity of structures might be negatively impacted. This could be a plausible explanation why SISR is still missing in the FTF oral debate.

-Lack of participants' orientation or focus on indicative-subjunctive-related structures when reading the transcript of the text-based online chat. Although all participants completing the reflective log admitted having read the text-based online conversation transcript prior to participation in the FTF oral debate, a majority of participants used the transcript to collect new ideas or different points of view about the topic, meaning, using the transcript with a focus on content rather than focusing on morphological aspects.

In summary, text-based online chat promotes more noticing, awareness and self-repair of errors than FTF oral communication as already stated by Beauvois (1997) and Sotillo (2009). However, such noticing and repair in the SCMC setting needs to be supported by tutor's elicitation to be successfully transferred to the FTF oral context. Also, more participants' orientation towards self-repair in the FTF oral setting might contribute to more SISR with respect to indicative-subjunctive-related structures.

On the other hand, results with respect to RQ3 are consistent with results for RQ1 as far as the accurate output of indicative-subjunctive-related structures without resorting to SISR is concerned. In this regard, the amount of accurate output of indicative-subjunctive-related structures without resorting to SISR is higher in the FTF oral debate than in the text-based SCMC. Additionally, most of the structures, which were subject to accurate SISR/SR in the text-based online chat, were used accurately in the FTF oral debate without resorting to SISR, including structures, which needed repair in S1. This clearly indicates that there is a positive transfer of knowledge from one context to the other.

As far as missing self-repair is concerned, some structures in which SISR/SR was missing in the text-based online chat have been used accurately in the FTF oral debate without resorting to SISR. However, there are also instances of accurate output without resorting to SISR/SR in the text-based online chat, which missed SISR in the FTF oral debate. The number of instances in this category is significantly higher than the amount of missing SISR/SR in the text-based online chat but accurate output in the FTF oral debates. This consistently supports the previously discussed idea that text-based online chat enhances awareness and noticing of errors. In this particular case, it seems that there is no positive transfer of knowledge from the text-based online chat to the FTF oral debate in the form of accurate output.

Finally, the highest number of matching structures used in both settings correspond to structures, which were used accurately and without resorting to SISR/SR in the text-based online chat. The number of instances in this category is notably higher than the number of instances in all other categories analyzed in this study. Moreover, some of the matching structures of accurate output without resorting to SISR/SR in both settings correspond to structures, which also missed SISR in the FTF oral debate. Such hesitations or variability in learners' language (Ellis, 2015) in the accurate use of indicative-subjunctive modes show the adjustments, which are occurring while learners develop their linguistic repertoire. This aligns with the dynamic, adaptive and self-organising nature of language as a complex system, and which was proposed by Larsen-Freeman (1997). However, it must also be noted that the amount of accurate output without resorting to SISR in the FTF oral debate for these structures, is higher than the number of missing uses of SISR for those same structures. This could be seen as oscillations leaning towards a proceduralization of the accurate form, rather than proceduralization of the error.

In this same respect, a higher number of matching structures followed by the same verb and the same idea has been also identified in this category of accurate output without resorting to SISR/SR than in other categories. This shows transfer of knowledge due to planning of the FTF oral debate through careful reading of the transcript of the text-based online conversation.

All this data seems to clearly indicate, that text-based online chat contributes to the accurate output without resorting to SISR of a higher and wider number of indicative-subjunctive-related structures in the FTF oral context, including some instances of missed repair and structures, which needed repair in S1. This is aligned with participants' perceptions of how the use of indicative and subjunctive modes was improved in the FTF oral debates following using text-based SCMC. Most participants admitted in their reflective logs to have improved their use of indicative and subjunctive modes for several reasons, including remembering and repeating the same structures in both settings, and an increase in confidence.

Thus, all this supports the hypothesis posed in this study, that there is a positive transfer of knowledge from one setting to the other. On the other hand, these results contradict to some extent Abrams' claim (2003) that SCMC does not lead to higher and richer syntactic diversity or complexity. Although the methodology used in this study differs from the one used by Abrams in that this study compares individual participants' performance before and after using SCMC, instead of using a control group not using SCMC at all, some parallels might be drawn. In this sense, the present study shows that, overall, the amount of diversity and complexity of structures used in the FTF oral debates is higher than the amount used in S1 and prior to practice with SCMC for all participants in general. These results support Warschauer's study (1996), that electronic discussion produces more linguistically complex language than FTF oral debates. However, it goes beyond Warschauer's conclusions whereby FTF oral debates following SCMC text-based online chat show even higher levels of language complexity than the online discussion.

In summary, such transfer of knowledge from the text-based online setting to the FTF oral context might be due to one or more of the following factors, some of them noted by participants in their respective reflective logs:

-More time available to carefully plan the FTF oral participations. Text-based online chat could be regarded as a pre-task involving guided careful planning. How guided careful online planning yields more grammatical accuracy and syntactic complexity in oral production has already been reported (Ahmadian, 2012). Although in the context of this research text-based online chat practice is not performed immediately before

oral production and, thus, may not constitute online planning, it can still be considered as a type of guided careful pre-planning task with a positive impact in delayed oral practice.

-Increase in self-confidence provided by prior practice with text-based SCMC. In relation to this, Skehan (1998, cited in Tavakoli, 2014:219) argues that both accuracy and fluency are increased when learners talk about well-known information. Thus, the alleged self-confidence could be related to the participants' familiarity with the topic, the arguments, and the grammatical structures.

-Similar task design. The fact that both the text-based online chat and the FTF oral task involved small group discussions of the same topics seems to have facilitated the transfer of a more formal, more varied, and more complex use of indicative-subjunctive-related structures from the text-based online chat to the FTF oral debate. This supports Tavakoli's argument that although written task performance is generally linguistically more complex and accurate than oral task performance, an oral task of a particular design can encourage performance of higher syntactic complexity and/or accuracy. Thus, by manipulating task design it is possible to help learners develop their linguistic repertoire in certain directions (Tavakoli, 2014:230-231).

-Co-construction of knowledge derived from the exchange of grammatical structures during the text-based online chat and working on the transcript of the online debate. In this respect, instances of some participants using the same structures and the same ideas in the FTF oral debate, that other participants used previously in the text-based online chat in which they were all participating, are evidence of the creation of ZPDs among learners. Such examples support Vygotsky's concept of ZPD (1978:86), and supports previous research (Michel and Stiefenhöfer, 2019) on peer alignment of Spanish subjunctive through the use of SCMC, which, in this case would also positively affect oral production and not only written output.

-More participants' motivation or orientation in the FTF oral debate towards the production of accurate indicative-subjunctive-related structures. All FTF oral debates, which took place over S2, were assessed, and the best three marks awarded in those debates constituted 15% of the final grade of the module. This might have been a

strong extrinsic motivation for participants to work and carefully plan the use of indicative-subjunctive-related structures.

Once overall results from comparison of text-based SCMC and FTF oral performance have been discussed, the next subsection addresses comparison of performance in both settings over time.

5.3.3 Transfer of knowledge from the writing online context to the FTF oral debates over time

This section focuses on the three participants' who took part in at least four text-based online chats prior to the FTF oral debates. As mentioned in section 2.4.2 of this study, Abrams' (2003) suggests, that the use of CMC over an extended period, and how this practice influences oral performance should be further researched. Accordingly, comparison of these three participants' performance in both the online and the FTF settings will shed light on whether regular participation over time in text-based online chat contributes to the recurrent accurate output of indicative-subjunctive-related structures in the text-based online chat, the transfer of knowledge and skills from one context to the other, and, ultimately, to the proceduralization/automatization of those structures in the FTF oral context. For the purposes of this research, recurrent use of a structure has been considered as the use of that specific structure by the same participant in half + one of the weeks of participation or the production of instances of that same structure for that same amount or higher in both the text-based online chat and the FTF oral debate.

According to the analysis of results for these three participants, the use of SISR in the FTF oral debates following practice with text-based online chats is low or even non-existent, and when it has happened, it does not correspond to structures previously repaired in the text-based online chat. This might be due, as already discussed for the whole cohort of participants, to less time available to notice the errors and provide SISR in the FTF oral debate. Also, the lack of tutor's elicitation, which was available in the online setting, might have played a role in the absence of SISR in the FTF oral

debates. Finally, lack of participants' orientation (Tomlin and Villa, 1994) towards those specific structures, might also explained such results.

On the other hand, the amount of missing SISR is higher in the FTF context than in the online context for all three participants, even when SR was provided in the text-based online chat, and even when that same exact structure was used accurately by the participant, and without resorting to SISR/SR in the text-based online chat. As already observed for the whole cohort of participants, this seems to indicate that the tutor's elicitation is not enough for the learners to notice the error in another context, in this case, the FTF oral debate. Also, this phenomenon or learner's variability (Ellis, 2015) shows how adjustments in the participants' linguistic repertoire are happening over time. However, as also observed for the whole cohort of participants, the number of instances of accurate output of these same structures without resorting to SISR in the FTF oral debate for these participants is the same or even higher than the instances of missing SISR. This seems to indicate, that practice with text-based online chat prior to FTF oral debates might contribute to open the learner's linguistic repertoire (illustrated by learner's variability) and end up by facilitating accurate output of those structures. In other words, practice over time might trigger instability in the learner's system until a stability phase (represented by accurate output of a structure previously used with hesitations) is reached. This is aligned with the principles of complex systems theory proposed by Larsen-Freeman (1997). In this sense, this study shows that comparison of practice with text-based online chat followed by FTF oral debates could be used by learners as a tool to identify and monitor their learning process according to their specific needs.

As far as the accurate output without resorting to SISR is concerned, the number of instances in the FTF oral debate is higher than the amount of accurate SISR, inaccurate/unnecessary or missing SISR. The number of instances in this category is also higher in the FTF oral debate than in the text-based online chat, and significantly higher than in the FTF oral debates of S1 for all three participants. Additionally, these three participants have produced more accurate indicative-subjunctive-related structures without resorting to SISR/SR in both settings over 22 weeks of participation than those participants who did not took part in the text-based online chat during so many weeks individually, but as a whole, accumulated 34 weeks of

participation. On the other hand, such accurate output without resorting to SISR has occurred consistently over all weeks of participation. However, when it comes to recurrent accurate use of the same structures in both contexts, results are not consistent for the three participants. While two of the participants show recurrent use and automatization of the same structures, and hence, positive transfer from the text-based online chat to the FTF oral debate, one of the participants does not show such recurrent use or automatization of any specific structure, but overall accurate use of a wide range of indicative-subjunctive-related structures. This might be due to lack of orientation or focus on specific structures by that specific participant. In this sense, it could be relevant to further ask participants who show recurrent use of certain structures, whether they carefully and purposefully planned the use of those structures in both contexts, and how such planning was carried out (analysis of feedback from S1, reading of the transcript of the online discussion, etc.).

Accordingly, this data shows that continuous practice with text-based online chat promotes transfer of knowledge from one context to the other. Additionally, in some cases and with participants' orientation and voluntary control (Schmidt, 2001), it consolidates the automatization that might have been developed in some structures while using the text-based online chat. Similarly, the significant higher amount of accurate output without resorting to SISR in the FTF oral debate over time is evidence of automatization as proposed by DeKeyser (2007), and it is also evidence of how declarative knowledge can be transformed into procedural knowledge through practice (Anderson, 1993; Suzuki and DeKeyser, 2017). From a neurobiological point of view, it seems that extensive practice in both the online and the FTF contexts has facilitated the creation of more neural connections (Brizendine, 2008) or the bypassing of the already existing connections, which were wrong (Bueno, 2021), thus leading to the transformation of declarative knowledge into procedural knowledge (Schumann, Crowell, and Jones, 2004).

On the other hand, these results support Abrams' claim that future research might reveal that increased amounts, and long-term use of SCMC are a significant contributor to success in oral communication (2003:165), and Warschauer's statement that electronic discussion serves effectively as a prelude of oral discussion (1996:16). In this sense, the present study shows that, overall, the amount of diversity and

complexity of structures accurately used in the FTF oral debates is higher than the amount used in S1, and prior to practice with SCMC for those participants who took part in SCMC text-based online chat over time.

Finally, it seems that SCMC text-based online chat offers several benefits in addition to gathering ideas in preparation for the FTF oral debates, according to participants' reflections. Some of these benefits include:

- Being exposed to more or new grammar structures, which would have not been used otherwise by the participant. This is evidence of co-construction of knowledge and expansion of ZPDs happening, according to Vygostky (1978:86).

- Having more time and being more relaxed to think and plan.

- Increase in confidence, which, in turn, has been linked to better competence in the target language due to reduced anxiety levels (Clément, Gardner and Smythe, 1980:294).

- Getting immediate feedback and explanations.

Once the discussion of results for all three participants has been addressed, the next chapter will present the conclusions and contributions of this research project, the limitations and constraints of this study, and suggestions for further research.

Chapter 6: Conclusions

The learning and acquisition of Spanish indicative and subjunctive modes are one of the most challenging aspects for learners of Spanish. In addition to this, the way that dichotomy has been explained over the years was based on traditional approaches, in which memorisation was emphasized, and the rules proposed were confusing and, sometimes, even contradictory. All this might explain why advanced students still make recurrent errors and are not sure when to use one mode or the other, even though they have been learning for several years.

On the other hand, the benefits of computer-mediated communication, more specifically, synchronous computer-mediated communication in the form of text-based online chat for language learning, have been reported in several studies. Some of these benefits are linked to the affordances that this medium offers, such as, time availability, the permanence of the written mode for reading, and a more relaxed environment. However, there are not so many studies, which linked the use of text-based online chat and the development of oral skills, and none of them focused on the specific aspect of repairing indicative-subjunctive-related errors.

In line with this, this research project was aimed at finding out whether synchronous computer mediated communication in the form of text-based online chat could be used as a tool to notice and self-repair recurrent errors in indicative-subjunctive-related structures by advance learners of Spanish. Such an assumption was based on the following considerations about how learning, and thus, re-learning in the form of self-repair occurs:

-The strong interface position and skill learning theory, whereby explicit knowledge or learning can be transformed into proceduralized knowledge or acquisition through practice and clear explicit instruction (DeKeyser, 2007). This could mean that even if learners have proceduralized the inaccurate uses of indicative and subjunctive modes, through clear explicit instruction of the rules (such as a cognitive grammar approach to the explanation of indicative and subjunctive modes as implemented in this research) and practice, new explicit knowledge could be proceduralized. This position is also supported by research on how learning occurs from a neurobiological point of view.

-Automatization of the proceduralized knowledge. Extensive practice can lead to automatization, that is, use of the declarative and proceduralized rule spontaneously, effortlessly, without errors, and often without being aware of it anymore (De Keyser, 2007). This could mean, that once learners have proceduralized the new rule through self-repair, continuous practice could lead to repeated production of such self-repair and hence final accurate output of the indicative-subjunctive-related structure.

Thus, the alleged affordances of the text-based online chat led the researcher to hypothesize that learning, acquisition, and automatization of new and accurate uses of indicative and subjunctive modes could be facilitated through this medium. This hypothesis was not only addressed at testing occurrence of self-repair in the written chat but also in face-to-face oral conversations following practice with text-based online chat. In this sense, further affordances of text-based online chat such as the visualization of the conversation and the nature of the task, which is exactly the same in both contexts, were considered and hypothesized to facilitate transfer of skills from the written online environment to the oral face-to-face one.

In summary, the researcher considered the following stages in the design of the study:

-Participants are given clear explicit instruction by the researcher on the uses of indicative and subjunctive modes from the point of view of a cognitive grammar. This would correspond with the concept of learning mentioned before.

-Participants use text-based online chat to notice and repair indicative-subjunctive-related errors based on that explicit instruction. The self-repair could be initiated by the learners themselves (self-initiated self-repair) or could be elicited by the tutor (self-repair) during the online written conversation. This would correspond to the concept of acquisition or proceduralization mentioned before.

-Participants practice extensively with text-based online chat until they automatize the noticing and self-repair of the errors. This would correspond with the concept of automatization explained before. The difference between proceduralization and automatization would be a question of numbers. The repair of an error would be considered proceduralized if it has been performed even just once. For automatization to happen, more than one instance of repair of the same structure needs to be identified, and preferably, over an extended period of time.

-Participants transfer the ability to self-repair, which has been acquired and automatized in the text-based online chat, to the face-to-face oral discussion.

Accordingly, this research has proposed the following 3 research questions: Firstly, how, if at all, can synchronous computer-mediated communication text-based online chat facilitate noticing and self-initiated self-repair or self-repair of errors in indicative-subjunctive-related structures? Secondly, how, if at all, can practice over time with synchronous computer-mediated communication in the form of text-based online chat facilitate automaticity of self-initiated self-repair or self-repair? Finally, how, if at all, can synchronous computer-mediated communication text-based online chat facilitate the transfer of knowledge and abilities (such as repair of errors in indicative-subjunctive-related structures) from the text-based online setting to the face-to-face oral discussion?

In addition to these research questions, this study also sheds light at the role of explicit instruction, and more specifically, the effectiveness of a cognitive grammar approach to explain indicative and subjunctive modes.

In order to present the conclusions of this research, this chapter is divided in the following subsections. Subsection 6.1 addresses the contributions of this research study to the field of SLA. Subsection 6.2 shows the pedagogical implications of these findings for both teachers and learners. Finally, subsection 6.3 identifies the main constraints and limitations of this project and suggests areas of further research linked to this project.

6.1 Contributions of the research to the field of SLA

According to all that has been discussed in previous chapters, the contributions of this research to the field of SLA are various and are presented in different subsections.

6.1.1 Noticing and SISR/SR in the online discussion

SCMC text-based online chat contributes to higher noticing of errors related to linguistic forms and not only lexical or syntactical ones. This finding supports previous studies (Warschauer, 1997; Sotillo, 2009), while questioning previous statements that SCMC is mainly promoting the noticing and repair of lexical and

syntactic errors, and no other type of errors such as morphological ones (Smith, 2012).

6.1.2 Noticing and SISR/SR of indicative-subjunctive-related errors in the online discussion

SCMC text-based online chat does not significantly contribute to SISR/SR of indicative-subjunctive-related errors. The number of instances of accurate SISR/SR in such errors is lower than the number of missing SISR/SR of those same errors. Moreover, the accurate instances of SISR/SR in indicative-subjunctive-related structures were mostly the product of tutor's elicitation and orientation so that the learner will notice the error, rather than initiated by the participants.

6.1.3 Grammatical development: Higher amount and accurate output of indicative-subjunctive-related structures in the online discussion

SCMC text-based online chat contributes to a significant higher accurate use of indicative-subjunctive-related structures without resorting to SISR/SR in the online discussion than when speaking and without prior use of SCMC text-based online chat. This finding challenges Blake's (2000) statement that the contribution of SCMC to grammatical development is questionable.

The written mode offered by text-based online chat is associated by learners to higher formality and, therefore, has promoted the use of more complex structures, such as indicative-subjunctive-related structures in order to improve the quality of language. This finding aligns with and adds information to previous studies showing that L2 learners produce more complex language in writing than in speaking regardless of task complexity (Byrnes and Manchón, 2014:229).

On the other hand, the positive feedback provided by the tutor on complex structures, and the emphasis in the marking criteria towards the use of such complex structures might have orientated learners' attention to carefully plan the accurate use of more complex structures, such as indicative-subjunctive-related structures. This finding

supports Tomlin and Villa's statement (1994:191-192) that orientation is needed if we want learners to attend to grammatical information.

6.1.4 Range of grammatical constructions: Accurate output of new indicative-subjunctive-related structures in the online discussion

SCMC text-based online chat promotes the accurate production of new indicative-subjunctive-related structures without resorting to SISR/SR in the online discussion. New structures are those structures that participants had not used previously, during S1 oral debates either inaccurately or accurately.

A combination of several factors could have favoured such results. On the one hand, participants perceive SCMC text-based online chat as a safe space to experiment with language as already stated by Beauvois (1997:108). This may explain why the noticing and self-repair of indicative-subjunctive-related structures mainly affects new structures rather than structures that were used previously by participants and needed repair. On the other hand, the fact that the use of a wide range of structures is included in the marking criteria, might have also contributed to participants preparing and testing structures beyond those they already knew. Finally, the visualization of other, and more proficient, participants' contributions has allowed less proficient participants to incorporate structures they had not used previously. This also proves and supports previous research about the contribution of SCMC text-based online chat to expanding learners ZPDs through scaffolding and collaboration as already stated by Beauvois (1997:108).

6.1.5 Application of explicit knowledge on the use of indicative-subjunctive in the online discussion

SCMC text-based online chat facilitates the application of explicit knowledge related to the use of indicative (making a statement) and subjunctive (not making a statement of previously shared or already known information but passing judgement on it) modes. The visualization of other participants' contributions and the more time available by text-based online chat contributed to this. If learners see what

information other participants have already stated, they are in a better position to assess whether they need to use indicative or subjunctive because the permanence of the written text makes it easier to process the information than the fluidity of the oral mode. This finding would support Sauro and Smith's research (2010) whereby the more time available in SCMC was used by participants to carefully plan and produce more linguistically complex and accurate constructions.

6.1.6 Automatization of SISR/SR in the online discussion

The use of SCMC text-based online chat over time does not promote automatization of SISR/SR of indicative-subjunctive-related errors. The number of accurate SISR/SR in these structures was, overall, quite low and even lower than the number of inaccurate/unnecessary or missed used of SISR/SR in these structures.

6.1.7 Automatization of accurate output of new indicative-subjunctive-related structures in the online discussion

The use of SCMC text-based online chat over time promotes automatization of accurate output of indicative-subjunctive-related structures without the need to resort to SISR/SR in the online discussion. Those structures include not only indicative-subjunctive structures, which needed repair because they had been used inaccurately by the participant prior to online practice, but also structures, which were already used accurately, and new structures, which had not been used previously by the participants. Additionally, on average, those participants who used SCMC text-based online chat over time produced more accurate indicative-subjunctive-related structures in the online discussion than those participants who did not use SCMC text-based online chat in so many weeks.

Finally, explicit instruction combined with continuous practice with SCMC text-based online chat contributes to the incorporation and automatization of new structures with specific uses. For example, the use of *although/aunque* followed by subjunctive to take the turn according to communicative intentions and discourse functions, such as not stating the previous participant's opinion because it is already known (Ruiz-Campillo, 2007:308).

These conclusions are very relevant since there is no previous data on the use of SCMC text-based online chat over time in general or specifically related to the use of indicative-subjunctive-related structures. Thus, this research significantly contributes to filling that gap in SLA literature.

6.1.8 Accurate use and automatization of SISR/SR in indicative-subjunctive-related structures in the FTF oral discussion

SCMC text-based online chat does not contribute to accurate use of SISR/SR in indicative-subjunctive-related structures in the FTF oral discussion. This is applicable both in the case of participants who had limited prior practice and extended prior practice with text-based online chat. This means that it does not contribute either to the automatization of SISR/SR of indicative-subjunctive-related errors in the FTF oral discussion.

The number of accurate SISR/SR in these structures in the FTF oral discussion was lower than the number of SISR/SR produced in the SCMC text-based online chat. Additionally, the number of instances of accurate SISR/SR of the same structures in both settings was also very low. Finally, the number of inaccurate/unnecessary or missed used of SISR/SR in these structures in the FTF oral discussion was significantly higher than the number of accurate SISR/SR.

6.1.9 Grammatical development: Higher amount and accurate output of indicative-subjunctive-related structures in the FTF oral discussion

SCMC text-based online chat contributes to a significant higher accurate use of indicative-subjunctive-related structures without resorting to SISR/SR in the FTF oral discussion. The number of accurate output of these structures in the FTF oral discussion in S2 was higher than the number of accurate output in the FTF oral debates in S1 and without prior use of SCMC text-based online chat. The number of accurate output of these structures in the FTF oral discussion in S2 was also higher than the number of accurate output produced in the SCMC text-based online chat.

Thus, this finding supports previous studies (Kern, 1995; Warschauer, 1996; Beauvois 1997; Payne and Whitney, 2002; Blake 2009) reporting improved oral performance with previous use of written CMC.

6.1.10 Range of grammatical constructions: Accurate output of new indicative-subjunctive-related structures in the FTF oral discussion

SCMC text-based online chat promotes the accurate production of new indicative-subjunctive-related structures without resorting to SISR/SR in the FTF oral discussion. New structures are those structures that participants had not used previously during S1 oral debates either inaccurately or accurately. Moreover, the number of new structures accurately used in the FTF oral discussion is also higher than the number of new structures produced in the SCMC text-based online chat.

6.1.11 Automatization of accurate output of new indicative-subjunctive-related structures in the FTF oral discussion

The use of SCMC text-based online chat over time promotes automatization of accurate output of indicative-subjunctive-related structures without the need to resort to SISR/SR in the FTF oral discussion. Those structures include not only indicative-subjunctive structures, which needed repair because, they had been used inaccurately by the participant prior to online practice, but also structures, which were already used accurately, and new structures, which had not been used previously. Additionally, on average, those participants who used SCMC text-based online chat over time produced more accurate indicative-subjunctive-related structures in the FTF oral discussion than those participants who did not use SCMC text-based online chat in so many weeks.

Given that there are only few studies exploring how SCMC text-based online chat influences FTF oral production, and no studies specifically related to the use of indicative-subjunctive modes in Spanish, the conclusions drawn in this research are very relevant to fill that gap in SLA literature.

6.1.12 Confidence

SCMC text-based online chat promotes overall confidence in the FTF oral discussion. According to participants' reflective logs, the exchange of ideas, arguments and the practice of a wider range of grammatical structures helped them to feel more confident and prepared in the FTF oral discussion.

Once the contributions of this research have been presented, the next subsection explores the pedagogical implications of such findings.

6.2 Pedagogical implications of this research

This subsection addresses the specific actions that both teachers and learners could take in the light of the findings of this study, and its contribution to the field of SLA.

Teachers and learners could use this research with different pedagogical purposes depending on learning objectives, the level of proficiency of the learner, and whether SCMC text-based online chat is used on its own or in combination with subsequent face-to-face oral practice. Accordingly, if tutors' and learners' goal is the proceduralization and automatization of knowledge, then, practice with SCMC text-based online chat should be carried out regularly and over an extended period of time.

On its own, regular use of SCMC text-based online chat could be used in general as a tool to orientate or direct learners' attention to specific aspects of language that have not been acquired yet or need repair. In this sense, the use of text-based online chat in combination with explicit instruction on that specific aspect of language, and the provision of tutor's feedback would serve this learning purpose, while also offering a strategy that adapts to individual learners' needs. Such use could be suggested to both high proficient students and less proficient students. For high proficient students, the use of text-based online chat would be oriented to the consolidation of already existing knowledge but, mainly, to the incorporation of new knowledge and structures. Less proficient students would benefit from using text-based online chat for the repair of already inaccurately acquired uses of different language aspects,

including the use of indicative-subjunctive modes, for example, and among others. This specific type of student would also benefit from the input of more proficient students participating in the online chat, allowing them to expand their knowledge, and incorporating new uses and structures.

As far as the teaching/learning of indicative-subjunctive modes is concerned, this research has shown that explicit instruction according to the approach proposed by Llopis-García, Real-Espinosa and Ruiz-Campillo (2012) followed by practice with text-based online chat contribute to both a better understanding and a more efficient application of that rule. Accordingly, text-based online chat may be used after explicit instruction provided in lectures about indicative-subjunctive modes to experiment, and subsequently, incorporate that new explicit knowledge. Tutor's elicitation of repair (if necessary) should also be clear in this respect for such explicit instruction to be activated during the online discussion.

Finally, with regards to the positive psychological aspect of using SCMC text-based online chat, both high proficient and less proficient learners who lack confidence in using the language would benefit from its use in increasing their self-esteem. The relaxed atmosphere that SCMC text-based online chat provides in combination with the provision of positive feedback by the tutor would serve this purpose.

On the other hand, if SCMC text-based online chat is used, especially for an extended period of time, in combination with subsequent face-to-face oral practice, it could help increase learners' grammatical accuracy when speaking, more specifically when using indicative-subjunctive-related structures. Similarly, it could increase learners' oral repertoire of complex structures, more specifically, subordinate structures involving the use of indicative and subjunctive modes. Both proficient and less proficient students would benefit from this practice. More proficient students would consolidate already existing knowledge and broaden their range of structures, while less proficient students would amend already inaccurately used structures and incorporate new ones.

Given the increasing levels of anxiety among students, especially when delivering oral presentations in front of an audience, the benefits of using SCMC text-based

online chat as a rehearsing or pre-planning activity to boost confidence are significant. Therefore, extended practice with text-based online chat may be used and advised to increase learners' self-confidence by reducing anxiety levels and thus leading to a better oral performance.

Ultimately, practice with text-based online chat both during a limited, but most significantly over an extended period, may be used as a tool to increase learners' accuracy when speaking in combination with orientation. Orientation might be directed at specific aspects that need to be improved by the learner but could also be directed at rising awareness on learners' intentionality and agency in their own learning process. According to Ellis (2015:23) 'learners can shape the interactions they participate in and what they consciously choose to learn'. Transcripts of the text-based online discussions allow learners to capture the adjustments happening while they are developing their linguistic repertoire. If tutors emphasize the importance of working on the transcript and provide some orientation, learners could decide which aspects of their Spanish they want to improve and plan their own interventions to accomplish those improvements. SCMC text-based online chat is, thus, assisting learners with a tool to take control, agency and own their own learning process. In doing this, not only will they become more autonomous learners, but they will also gain a sense of control over the learning process, which could also have a positive impact in motivation and self-confidence.

In summary, SCMC text-based online chat should be regarded as a strategic tool, as a medium with the potential to achieve different and various objectives. The versatility and adaptability of this tool to individual learner's needs makes it a practice that should be considered, and ideally, introduced in language courses as already proposed in previous studies (Michel and O'Rourke, 2019). According to Ellis (2015:23) we should look for 'insights' rather than 'answers' due to the complex nature of language learning. If not a definite 'answer', practice with SCMC text-based online chat clearly seems to give insights into how the learner's linguistic repertoire may be shaped and changed, hence the significant pedagogical potential.

Although this research has shown many benefits of SCMC for SLA, there have also been some limitations, which need to be discussed. Similarly, these findings have also

opened a series of questions, which may be worth developing in further studies. The next and final subsection addresses these aspects.

6.3 Constraints and limitations of the study and recommendations for further research

There are several factors, which have been identified as potential limitations of this study, and which should be considered in the design of further research:

First, the sample of participants is small and might not be representative. Also, the lack of regular participation of most participants might have limited the conclusions of this study. Participation by individual learners in just one to three weeks might not lead to sound conclusions. This could also be linked to undergraduates' motivation and to the limited time available in their academic agendas for extra practice. All the participants invited to this study were in the final year of their degree. This implies an intense workload for them, including the compulsory module of a final year project. In this sense, having advanced students of Spanish as participants in this study may have its benefits but it may also pose a challenge on the research due to timetabling and workload constraints. Thus, further research should aim at collecting more data from a larger cohort of participants and for an extended period, so that the study can yield more sound and consistent results. Those participants could be from different levels of proficiency and be at difference stages of their degree. Ideally, the study would be carried out with the same participants over different years of their learning itinerary while being at the University of Leeds.

Secondly, some data might have been missed both in the text-based online transcripts and the FTF oral debates due to issues when making the copy of the online discussion, and the non-availability of recordings due to industrial action.

Thirdly, lack of collection of covert deleted text, that is, amendments and self-repair, which might have happened before the text was finally posted in the text-chat. The lack of such information could be the reason why the number of instances of SISR/SR is so low according to this study. Future research might use screen capture technology

to identify any repairs or message planning processes happening before posting the message as done in previous studies (Smith, 2008; Sauro and Smith, 2010). Eye-tracking devices (Michel and Smith, 2018; Michel and O'Rourke, 2019) could also be used to gather data on the noticing of indicative-subjunctive-related structures.

Anyhow, and despite the potential limitations of this research, this study has highlighted some additional benefits not related to the self-repair of the less salient and more evasive grammatical errors, which is the primary focus of this study, but linked to other aspects. Those aspects might include the learning of vocabulary, the exchange and sharing of ideas and arguments among participants, and the learner's perception of their self-esteem and self-confidence when performing the task in the oral FTF context. In this sense, further research could address these aspects through the following proposals:

-How does text-based online chat increase learners' self-confidence? Which specific features and affordances of this medium facilitate such confidence? Does the use of emojis to provide positive feedback influence the occurrence of that confidence?

-How do learners use the transcript of the text-based online chat to prepare for the FTF oral debate? Which type of information are they looking at? Which strategies, if any at all, are they using to retrieve that information in the FTF oral debate? How could AI assist learners in working with the transcript of the online conversation in effective ways?

This research project has underscored the important role of writing for learning in general, and more specifically, for speaking. This idea becomes key, -and even revolutionary- in the current context, in which AI is already being used to produce texts with minimal human intervention. In this sense, and irrespective of the affordances of AI for learning, the ability of writing and the interaction involved in written dialogue should be more promoted among learners, and not only for learning and communication, but also to process thoughts and monitor acquisition. As Daniel Everett said, language is a tool for us and designed by us. And language is for talking and for thinking (2012:117).

References:

Abrams, Z. 2003. The effect of synchronous, and asynchronous CMC on oral performance in German. *The Modern Language Journal*. 87(ii), pp.157-67. [Online]. Available from: <https://onlinelibrary.wiley.com/doi/pdfdirect/10.1111/1540-4781.00184>

Ahmadian, M.J. 2012. The effect of guided careful online planning on complexity, accuracy, and fluency in intermediate EFL learners' oral production: The case of English articles. *Language Teaching Research*. 16(1), pp.1-21. [Online]. Available from: <http://ltr.sagepub.com>

Anderson, J.R. 1982. Acquisition of cognitive skill. *Psychological Review*. 89(4), pp.369-406. [Online]. Available from: <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&AN=00006832-198207000-00003&D=ovft>

Anderson, J.R. 1993. *Learning and Memory: An Integrated Approach*. New York: Wiley.

Arnold, K., Umanath, S., Thio, K., Reilly, W., Mcdaniel, M., & Marsh, E. 2017. Understanding the Cognitive Processes Involved in Writing to Learn. *Journal of Experimental Psychology: Applied*. 23(2), pp.115–127. [Online]. Available from: <https://doi.org/10.1037/xap0000119>

Ausubel, D. 1963. *The Psychology of Meaningful Verbal Learning*. New York: Grune & Stratton.

Bárkányi, Z. 2024. Ansiedad y aprendizaje virtual. In: Muñoz-Basols, J. Fuertes Gutiérrez, M. and Cerezo, L. ed. *La enseñanza de español mediada por tecnología. De la justicia social a la inteligencia artificial*. [Online]. Available from: <https://library.oapen.org/handle/20.500.12657/88271>

Beauvois, M. 1997. Write to speak: The effects of electronic communication on the

oral achievement of fourth semester French students. In: Muyskens, J.A. ed. *New ways of learning and teaching: Focus on technology and foreign language education*. [Online]. Boston: Heinle & Heinle, pp.93-116. Available from: <https://files.eric.ed.gov/fulltext/ED482490.pdf>

Blake, C. 2009. Potential of Text-Based Internet Chats for Improving Oral Fluency in a Second Language. *The Modern Language Journal*. **93**(2), pp.227-240. [Online]. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-4781.2009.00858.x/abstract>.

Blake, R. 2000. Computer-mediated communication: A window on L2 Spanish interlanguage. *Language Learning & Technology*. **4**, pp.20-36. [Online]. Available from: <http://ilt.msu.edu/vol4num1/blake/default.html>

Brizendine, L. 2008. *El cerebro femenino*. Barcelona. RBA.

Bueno, D. 2019. Genetics and Learning: How the Genes Influence Educational Attainment. *Frontiers in psychology*. **10**, pp.1622. [Online]. Available from: https://libkey.io/libraries/1912/articles/329607524/full-text-file?utm_source=api_751

Bueno i Torrents, D. 2021. *Neurociencia para educadores*. Barcelona. Octaedro – Rosa Sensat.

Byrnes, H. and Manchón, Rosa M. 2014. *Task-Based Language Learning – Insights from and for L2 Writing*. John Benjamins Publishing Company.

Campbell, R., Goodman-Williams, R., Feeney, H., & Fehler-Cabral, G. 2020. Assessing Triangulation Across Methodologies, Methods, and Stakeholder Groups: The Joys, Woes, and Politics of Interpreting Convergent and Divergent Data. *American Journal of Evaluation*, **41**(1), pp.125-144. [Online]. Available from: <https://doi.org/10.1177/1098214018804195>

Castro, M. 2018. Quería que otros estaban siempre interesados en mí: un estudio de casos sobre el uso del subjuntivo en aprendices polacos de ELE. *Tonos Digital*. **35**,

pp.1-23. [Online] Available from:
<http://www.tonosdigital.com/ojs/index.php/tonos/article/view/1992/1002>

Chun, D.M. 1994. Using computer networking to facilitate acquisition of interactive competence. *System*. **22**, pp.17-31. [Online]. Available from:
<https://www.sciencedirect.com/science/article/pii/0346251X9490037X?via%3Dihub>

Chun, Lai. and Zhao, Y. 2006. Noticing and Text-based chat. *Language Learning & Technology*. **10**(3), pp.102-120. [Online] Available from:
<http://llt.msu.edu/vol10num3/laizhao/>

Clément, R., Gardner, R. and Smythe, Padric C. 1980. Social and individual factors in second language acquisition. *Canadian Journal of Behavioural Science*. **12**(4), pp.293-302. [Online]. Available from:
https://www.researchgate.net/publication/232604230_Social_and_Individual_Factors_in_Second_Language_Acquisition

Collentine, J. and Collentine, K. 2013. A corpus approach to studying structural convergence in task based Spanish L2 interactions. In McDonough, K. and Mackey, A. ed. *Second Language Interaction in Diverse Educational Contexts. Language Learning and Language Teaching*. **34**, pp.167-187. John Benjamins Publishing Company. [Online]. Available from: [Second Language Interaction in Diverse Educational Contexts | John Benjamins \(jbe-platform.com\)](https://www.jbe-platform.com/Second-Language-Interaction-in-Diverse-Educational-Contexts)

Collins, A. Brown, J.S. and Newman, S.E. 1987. Cognitive Apprenticeship: Teaching the craft of reading, writing, and mathematics. *Technical Report No. 403*. January 1987. Xerox Palo Alto Research Centre. University of Illinois. [Online]. Available from:
https://www.ideals.illinois.edu/bitstream/handle/2142/17958/ctrstreadtechrepv01987i00403_opt.pdf?sequence=1

Council of Europe. 2001. Common European Framework of Reference. Cambridge University Press. [Online]. Available from: <https://rm.coe.int/16802fc1bf>

Council of Europe. 2020. Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Available from: [The CEFR Levels - Common European Framework of Reference for Languages \(CEFR\)](#)

DeKeyser, R.M. 1998. Beyond focus on form: Cognitive perspectives on learning and practicing second language grammar. In: Doughty, C. and Williams, J. ed. *Focus on form in classroom second language acquisition*. New York: Cambridge University Press, pp.42-63.

DeKeyser, R.M. 2007. *Practice in a Second Language. Perspectives from Applied Linguistics and Cognitive Psychology*. Cambridge: Cambridge University Press.

De Smet, Milou J.R., Leijten, M. and Van Waes, L. 2018. Exploring the Process of Reading During Writing Using Eye Tracking and Keystroke Logging. *Written Communication. SAGE Publications*. **35**(4), pp.411-447. [Online]. Available from: <https://journals.sagepub.com/doi/pdf/10.1177/0741088318788070>

Ellis, A. and Beattie, G. 1986. *The Psychology of Language and Communication*. London. Weidenfeld and Nicolson.

Ellis, R. 2005. Measuring implicit and explicit knowledge of a second language. A Psychometric Study. *Studies in Second Language Acquisition*. **27**(2), pp.141-172. [Online]. Available from: <https://doi.org/10.1017/S027226310505014X>

Ellis, R. 2015. *Understanding Second Language Acquisition*. Oxford University Press.

Everett, D. 2012. *Language: The cultural tool*. London: Profile Books.

Ferris, D. and Roberts, B. 2001. Error Feedback in L2 Writing Classes: How Explicit Does It Need to Be? *Journal of Second Language Writing*. **10**(3), pp.161-184. [Online]. Available from: [https://doi.org/10.1016/S1060-3743\(01\)00039-X](https://doi.org/10.1016/S1060-3743(01)00039-X)

Fiori, M.L. 2005. The development of grammatical competence through synchronous computer-mediated communication. *CALICO Journal*. 22(3), pp.567-602. [Online]. [Accessed 29 January 2024]. Available from: <https://www.jstor.org/stable/24147938>

Fogal, G. 2019. Investigating Variability in L2 Development: Extending a Complexity Theory Perspective on L2 Writing Studies and Authorial Voice. *Applied Linguistics* 2020. 41(4), pp.575-600. [Online]. Available from: <https://academic.oup.com/applij/article/41/4/575/5316425>

Gass, S.M., Spinner, P., and Behney, J. 2017. *Saliency in Second Language Acquisition*. Routledge. [Online]. Available from: [ProQuest Ebook Central - Reader](#)

González-Lloret, M. 2009. CA for Computer-Mediated Interaction in the Spanish L2 Classroom. *Talk-in-Interaction: Multilingual Perspectives*. In: Nguyen, H.T. and Kasper, G. ed. National Foreign Language Resource Center. University of Hawaii at Manoa. [Online]. Available from: <https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/db82cbe4-f4cb-46db-a91b-42d0f1f7eccc/content#page=296>

Grice H. P. 1975. Logic and Conversation. In Cole, P. and Morgan, J. ed. *Syntax and semantics. 3: Speech acts*. [Online] New York: Academic Press, pp. 41-58. Available from: http://www.communicationcache.com/uploads/1/0/8/8/10887248/logic_and_conversation.pdf

Hantrais, L. 2009. *International Comparative Research: Theory, Methods and Practice*. London: Palgrave Macmillan.

Hayes, J.R. 2012. Modelling and Remodelling Writing. *Written Communication*. SAGE Publications. 29(3), pp.369-388. [Online]. Available from: <https://journals.sagepub.com/doi/pdf/10.1177/0741088312451260>

Instituto Cervantes. 2012. *Competencias clave del profesorado de lenguas segundas y extranjeras*. October 2012. [Online]. Available from:

https://cvc.cervantes.es/ensenanza/biblioteca_ele/competencias/competencias_profesorado.pdf

Kellogg, R.T. 1994. *The Psychology of Writing*. Oxford. Oxford University Press

Kern, R.G. 1995. Restructuring Classroom Interaction with Networked Computers: Effects on Quantity and Characteristics of Language Production. *The Modern Language Journal*. **79**(4), pp.457-476. [Online] Available from: <https://www.jstor.org/stable/329999>

Kormos, J. 1999. Monitoring and self-repair in L2. *Language Learning*. **49**(2), pp.303-342. [Online]. Available from: <https://doi.org/10.1111/0023-8333.00090>

Kormos, J. 2000. The role of attention in monitoring second language speech production. *Language Learning*. **50**(2), pp.343-384. [Online]. Available from: <https://doi.org/10.1111/0023-8333.00120>

Kormos, J. 2014. Differences across modalities of performance: An investigation of linguistic and discourse complexity in narrative tasks. In: Byrnes, H. and Manchón, Rosa M. ed. *Task-Based Language Learning – Insights from and for L2 Writing*. John Benjamins Publishing Company.

Korvesi, E. and Michel, M. 2022. Chatting with Your Peers across Modalities: Effects of Performing Increasingly Complex Written Computer-Mediated Tasks on Oral L2 Development. *Languages*, **7**(4), pp. 276. Available from: [Chatting with Your Peers across Modalities Effects.pdf](#)

Krashen, S.D. 1981. *Second language acquisition and second language learning*. Oxford. Pergamon Press.

Krashen, S.D. 1982. *Principles and Practice in Second Language Acquisition*. London: Phoenix ELT.

Larsen-Freeman, D. 1997. Chaos/complexity science and second language acquisition. *Applied Linguistics*, **18**(2), pp.141–65. [Online]. Available from: <https://doi.org/10.1093/applin/18.2.141>

Larsen-Freeman, D. 2002a. Language acquisition and language use from a chaos/complexity theory perspective. In: Kramsch, C. ed. *Language acquisition and language socialization*. [Online]. London: Continuum. Available from: https://ebookcentral.proquest.com/lib/leeds/detail.action?docID=436651#goto_toc

Larsen-Freeman, D. 2007. Reflecting on the cognitive-social debate in second language acquisition. *The Modern Language Journal*. **91**(1), pp.773–787. [Online]. Available from: <https://doi.org/10.1111/j.1540-4781.2007.00668.x>

Larsen-Freeman, D. 2013. Complexity Theory. In: Gass, Susan M. and Mackey, Alison. ed. *The Routledge Handbook of Second Language Acquisition*. [Online]. Available from: <https://www.taylorfrancis.com/books/e/9780203808184>

Larsen-Freeman, D. 2017b. Complexity theory: The lessons continue. In: Ortega, L. and Han, Z.H. ed. *Complexity theory and language development: In celebration of Diane Larsen-Freeman*. Amsterdam: John Benjamins.

Larsen-Freeman, D. 2018. Looking ahead: Future directions in, and future research into, second language acquisition. *Foreign Language Annals* 2018, **51**(1), pp.55-72. [Online]. Available from: <https://onlinelibrary.wiley.com/doi/pdfdirect/10.1111/flan.12314>

Lee, L. 2009. Exploring native and non-native interactive discourse in text-based chat beyond classroom settings. In: Abraham, Lee B. and Williams, L. ed. *Electronic Discourse in Language Learning and Language Teaching*. Amsterdam/Philadelphia. John Benjamins Publishing Company.

Levelt, W.J.M. 1983. Monitoring and self-repair in speech. *Cognition*. **14**(1), pp.41-104. [Online]. Available from: [https://doi.org/10.1016/0010-0277\(83\)90026-4](https://doi.org/10.1016/0010-0277(83)90026-4)

Liu, Y. 2008. The Effects of Error Feedback in Second Language Writing. *Journal of Second Language Acquisition and Teaching*. **15**, pp.65-79. [Online]. Available from: <https://journals.librarypublishing.arizona.edu/jslat/article/id/229/>

Llopis-García, R. 2009. *Gramática Cognitiva e Instrucción de Procesamiento para la enseñanza de la selección modal: un estudio con aprendientes alemanes de español como lengua extranjera*. Tesis doctoral. Universidad Nebrija. [Online]. Available from: <https://www.cervantesvirtual.com/nd/ark:/59851/bmcwd5x6>

Llopis-García, R., Real-Espinosa, J.M. and Ruiz-Campillo, J.P. 2012. *Qué gramática enseñar, qué gramática aprender*. Madrid. Edinumen.

Lövdén, M., Wenger, Elisabeth., Mårtensson, J., Lindenberger, U. and Bäckman, L. 2013. Structural brain plasticity in adult learning and development. *Neuroscience and Biobehavioral Reviews*. **37**, pp.2296-2310. [Online]. Available from: <http://dx.doi.org/10.1016/j.neubiorev.2013.02.014>

Manchón, R. 2011. *Learning-to-Write and Writing-to-Learn in an Additional Language*. John Benjamins Publishing Company.

Massery, L.A. 2009. Syntactic development of the Spanish subjunctive in second language acquisition: Complement selection in nominal clauses. *ProQuest Dissertations Publishing, 2009*. University of Florida. [Online]. Available from: <https://search.proquest.com/docview/304883012/abstract/DF89FBDDF5C94EB9PQ/1?accountid=14664>

Meunier, Lydie E. 1997. Personality and Motivational Factors in Computer-Mediated Foreign Language Communication (CMFLC). In: Muyskens, J. A. ed. *New ways of learning and teaching: Focus on technology and foreign language education*. [Online]. Boston: Heinle & Heinle, pp.145-197. Available from: <https://files.eric.ed.gov/fulltext/ED482490.pdf>

Michel, M. 2018. Practicing online with your peers: The role of text chat for second language development. In: Jones, C. ed. *Practice in Second Language Learning*. Cambridge University Press, pp.164-196. [Online]. Available from: [dokumen.tips_7-practising-online-with-your-peers-the-role-of-text-after-reviewing-earlier.pdf](#)

Michel, M. and O'Rourke, B. 2019. What drives alignment during text chat with a peer vs. a tutor? Insights from cued interviews and eye-tracking. *System*. **83**, pp.50-63. [Online]. Available from: <https://www.sciencedirect.com/science/article/pii/S0346251X1830589X?via%3Dihub>

Michel, M. and Smith, B. 2018. Measuring lexical alignment during L2 chat interactions: An eye-tracking study. In: Gass, S.M., Spinner, P. and Behney, J. ed. *Saliency in second language acquisition*. pp. 244-267. [Online]. Available from: <https://core.ac.uk/download/pdf/211246353.pdf>

Michel, M. and Stiefenhöfer, L. 2019. Priming Spanish Subjunctives During Synchronous Computer-Mediated Communication. *Evidence-Based Second Language Pedagogy*. Routledge.

Molina-Vidal, I. 2016. The impact of using online written chat in oral fluency and accuracy in advanced learners of Spanish as a foreign language. *New Trends in Learning and Teaching Speaking Skills*. Cambridge Scholars. [Online]. Available from: <https://www.cambridgescholars.com/resources/pdfs/978-1-5275-5628-7-sample.pdf>

Molina-Vidal, I. 2019. Are our students ready for a shift in how grammar is taught and the format in which is presented for practice? *The Language Scholar Journal Issue 5*. [Online]. Available from: <https://languagescholar.leeds.ac.uk/journal/issue-5/>

Molina-Vidal, I. 2020. ¿Indicativo o subjuntivo? Elige tu propia aventura: una actividad digital para fomentar el aprendizaje de una gramática cognitiva. *MarcoELE*, *31*, Julio-Diciembre 2020. [Online]. Available from: <https://marcoele.com/descargas/31/08.molina.pdf>

Moon, J. 2004. *A Handbook of reflective and experiential learning: theory and practice*. [Online]. Available from: <https://r2.vlereader.com/Reader?ean=9780203416150>

Muñoz-Basols, J. and Fuertes Gutiérrez, M. 2024. Interacción en entornos virtuales. In: Muñoz-Basols, J. Fuertes Gutiérrez, M. and Cerezo, L. ed. *La enseñanza de español mediada por tecnología. De la justicia social a la inteligencia artificial*. [Online]. Available from: <https://library.oapen.org/handle/20.500.12657/88271>

Okon-Singer, H., Hendler, T., Pessoa, L. and Shackman, A.J. 2015. The Neurobiology of Emotion-Cognition Interactions: Fundamental Questions and Strategies for Future Research. *Frontiers in Human Neuroscience*, 01 February 2015, Vol.9. [Online]. Available from: <https://www.frontiersin.org/articles/10.3389/fnhum.2015.00058/full>.

Olive, T. and Passerault, J.M. 2012. The Visuospatial Dimension of Writing. *Written Communication*. SAGE Publications. **29**(3), pp.326-344. [Online]. Available from: <https://journals.sagepub.com/doi/pdf/10.1177/0741088312451111>

Payne, S.J. and Whitney, P.J. 2002. Developing L2 oral proficiency through synchronous CMC: Output, working memory, and interlanguage development. *CALICO Journal*. **20**(1), pp.7-32. [Online]. Available from: <https://www.jstor.org/stable/24149607>

Pinker, S. 1995. *El instinto del lenguaje*. Madrid. Alianza.

Pinker, S. 2001. *Cómo funciona la mente*. Barcelona: Destino.

Quinlan, T., Loncke, M., Leijten, M. and Van Waes, L. 2012. Coordinating the Cognitive Processes of Writing: The Role of the Monitor. *Written Communication*. SAGE Publications. **29**(3), pp.345-368. [Online]. Available from: <https://journals.sagepub.com/doi/pdf/10.1177/0741088312451112>

Ramón y Cajal, S. 2005. *Reglas y consejos sobre la investigación científica: los tónicos de la voluntad*. Madrid: Consejo Superior de Investigaciones Científicas. [Online]. Available from: http://libros.csic.es/product_info.php?products_id=533

Rodriguez-Fornells, A., De Diego Balaguer, R. and Münte, T.F. 2006. Executive Control in Bilingual Language Processing. In: Gullberg, M. and Indefrey, P. ed. *The Cognitive Neuroscience of Second Language Acquisition*. Oxford: Blackwell Publishing Ltd.

Ruiz-Campillo, J.P. 2007. El concepto de No-declaración como valor del subjuntivo. Protocolo de instrucción operativa de la selección modal en español. *Actas del programa de formación para profesorado de ELE 2005-2006 del Instituto Cervantes de Múnich 2005-2006*, pp.284-327. [Online]. Available from: https://cvc.cervantes.es/ensenanza/biblioteca_ele/publicaciones_centros/PDF/munich_2005-2006/04_ruiz.pdf

Ruiz-Funes, M. 1999. The Process of Reading-to-Write Used by a Skilled Spanish-As-a-Foreign-Language Student: A Case Study. *Foreign Language Annals*. **32**(1), pp.45-58. [Online]. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1944-9720.1999.tb00880.x>

Salaberry, R.M. 2000. L2 morphosyntactic development in text-based computer-mediated communication. *Computer Assisted Language Learning*. **13**(1), pp.5-27. [Online]. Available from: https://www.researchgate.net/publication/228548185_L2_Morphosyntactic_Development_in_Text-Based_Computer-Mediated_Communication

Sanchez-Naranjo, J. 2009. L2 learners' difficulties in the interpretation of the Spanish subjunctive: L1 influence and misanalysis of the input. *Dissertation Abstracts International, A: The Humanities and Social Sciences*. University of Toronto (Canada). [Online]. Available from: <https://search.proquest.com/docview/1018382907/8CE804E4B24D4ED0PQ/10?accountid=14664>

Sauro, S. 2009. Computer-mediated corrective feedback and the development of L2 grammar. *Language Learning and Technology*. **13**(1), pp.96-120. [Online]. Available from: <http://llt.msu.edu/vol13num1/sauro.pdf>

Sauro, S. 2011. SCMC for SLA: A research synthesis. *CALICO Journal*. **28**(2), pp.369-391. [Online]. Available from: [SCMC for SLA: A Research Synthesis \(jstor.org\)](#)

Sauro, S. and Smith, B. 2010. Investigating L2 Performance in Text Chat. *Applied Linguistics*. **31**(14), pp.554-577. [Online]. Available from: <http://applied.oxfordjournals.org>

Schmidt, R.W. 1990. The role of consciousness in second language learning. *Applied Linguistics*, **11**, pp.129-158. [Online]. Available from: <https://nflrc.hawaii.edu/PDFs/SCHMIDT%20The%20role%20of%20consciousness%20in%20second%20language%20learning.pdf>

Schmidt, R.W. 2011. Attention. In: Robinson, P. ed. *Cognition and second language instruction*. New York: Cambridge University Press, pp.3-32.

Schumann, John H., Crowell, Sheila E. and Jones, Nancy E. 2004. *The Neurobiology of Learning. Perspectives from Second Language Acquisition*. London. Routledge.

Shekary, M. and Tahririan, M.H. 2006. Negotiation of meaning and noticing in text-based online chat. *The Modern Language Journal*. **90**(4), pp.557-573. [Online]. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-4781.2006.00504.x/abstract>

Sherman, L. E., Michikyan, M. and Greenfield, P. M. 2013. The effects of text, audio, video, and in-person communication on bonding between friends. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*. **7**(2), Article 3. [Online]. Available from: <https://cyberpsychology.eu/article/view/4285>

Skehan, P. 1998. Processing perspectives to second language development,

instruction, performance, and assessment. In: Dörnyei, Z. and Skehan, P. ed. *Working Papers in Applied Linguistics*. **5**, pp. 70-88.

Skehan, P. 2009. Modelling second language performance: Integrating complexity, accuracy, fluency, and lexis. *Applied Linguistics*, **30**(4), pp. 510-32. [Online].

Available from: <https://doi.org/10.1093/applin/amp047>

Slobin, D. 1996. From thought and language to thinking for speaking. In: Gumperz, J. and Levinson, S.C. ed. *Rethinking Linguistic Relativity*. Cambridge. Cambridge University Press. pp. 70-88.

Smith, K.L. 1990. Collaborative and interactive writing for increasing communication skills. *Hispania*. **73**, pp. 77-87. [Online]. Available from: <https://www.jstor.org/stable/342962>

Smith, B. 2008. Methodological hurdles in capturing CMC data: The case of the missing self-repair. *Language Learning and Technology*. **12**(1), pp.85-103. [Online]. [Accessed 2 March 2020]. Available from: <https://www.lltjournal.org>

Smith, B. 2012. Eye tracking as a measure of noticing: A study of explicit recasts in SCMC. *Language Learning and Technology*. **16**(3), pp. 53-81. [Online]. Available from:

https://scholarspace.manoa.hawaii.edu/bitstream/10125/44300/1/16_03_smith.pdf

Smith, B. and González-Lloret, M. 2021. Technology-Mediated Task-Based Language Teaching: A Research Agenda. *Language Teaching*. **54**(4), pp.518-534. [Online]. Available from:

https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sQdQsqQAAAAJ&citation_for_view=sQdQsqQAAAAJ:3s1wT3WcHBgC

Solá-Simón, E. (2020). Una aplicación empírica de la gramática cognitiva-operativa a la enseñanza del contraste modal en español (como lengua extranjera). *MarcoELE. Revista de Didáctica Español Lengua Extranjera*. **31**, pp.70-90. [Online]. Available from: <https://marcoele.com/descargas/31/05.sola.pdf>

Sotillo, S. 2009. Learner noticing, negative feedback, and uptake in synchronous computer-mediated environments. In: Abraham, L.B. and Williams, L. ed. *Electronic Discourse in Language Learning and Language Teaching*. Amsterdam/Philadelphia. John Benjamins Publishing Company.

Sotillo, S. 2010. Quality and type of corrective feedback, noticing, and learner uptake in synchronous computer-mediated text-based and voice chats. In: Pütz, M. and Sicola, L. ed. *Cognitive Processing in Second Language Acquisition*. Amsterdam/Philadelphia. John Benjamins Publishing Company.

Suler, J. 2004. The online disinhibition effect. *CyberPsychology & Behavior*. 7(3), pp.321-326. [Online]. Available from: <https://onlinelibrary.wiley.com/doi/epdf/10.1002/aps.42>

Suzuki, Y. and DeKeyser, R. 2017. The Interface of Explicit and Implicit Knowledge in a Second Language: Insights From Individual Differences in Cognitive Aptitudes. *Language Learning*. 67(4), pp.747-790. [Online]. Available from: <https://doi.org/10.1111/lang.12241>

Swain, M.K. 1985. Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In Gass, S.M. and Madden, C.G. ed. *Input in second language acquisition*. Rowley, MA: Newbury House. pp.235-253.

Tavakoli, P. 2014. Storyline complexity and syntactic complexity in writing and speaking tasks. In: Byrnes, H. and Manchón, R. ed. *Task-Based Language Learning – Insights from and for L2 Writing*. John Benjamins Publishing Company.

Teng, X. 2015. Languaging in cyberspace: a case study of the effects of peer-peer collaborative dialogue on the acquisition of English idioms in task-based synchronous computer-mediated communication. Ph.D. thesis, Iowa State University. [Online]. Available from: <https://dr.lib.iastate.edu/server/api/core/bitstreams/698e537c-870b-45b6-b4ea-cf7b4ed083c4/content>

The Douglas Fir Group. 2016. A Transdisciplinary Framework for SLA in a Multilingual World. *The Modern Language Journal*. **100**(1), pp.19-47. [Online]. Available from: <https://onlinelibrary.wiley.com/doi/pdf/10.1111/modl.12301>

Tomlin, R.S and Villa, V. 1994. Attention in cognitive science and second language acquisition. *Studies in Second Language Acquisition*. **16**(2), pp. 183–203. [Online]. Available from: *JSTOR*, <http://www.jstor.org/stable/44487723>.

Van Hest, E. 1996b. *Self-repair in L1 and L2 production*. Tilburg: Tilburg University Press. [Online]. Available from: [mmubn000001_233334955.pdf \(ru.nl\)](mmubn000001_233334955.pdf)

VanPatten, B. 1990. Attending to form and content in the input. *Studies in second language acquisition*. **12**(3), pp. 287-301. [Online]. Available from: <https://www.jstor.org/stable/44488301>

Vygotsky, L. 1978. *Interaction between learning and development. Mind and Society*. Cambridge, MA. Harvard University Press. [Online]. Available from: www.psy.cmu.edu/~sieglervygotsky78.pdf

Warschauer, M. 1996. Comparing face-to-face and electronic discussion in the second language classroom. *CALICO Journal*, **13**(2), pp.7-26. [Online]. Available from: <https://journals.equinoxpub.com/index.php/CALICO/article/view/23397/19402>

Warschauer, M. 1997. Computer-mediated collaborative learning: Theory and practice. *Modern Language Journal*, **81**(4), pp.470-48. [Online]. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-4781.1997.tb05514.x/epdf>

Williams, J. 2012. The Potential Role(s) of writing in second language development. *Journal of Second Language Writing*. **21**(4), pp.321-331. [Online]. Available from: <http://dx.doi.org/10.1016/j.jslw.2012.09.007>.

Yuan, F. and Ellis, R. 2003. The effect of pre-task planning and online planning on fluency, complexity, and accuracy in L2 oral production. *Applied Linguistics*. **24**(1), pp.1-27. [Online]. Available from: <https://applied.oxfordjournals.org>

Ziegler, N. 2016. Synchronous Computer-Mediated Communication and Interaction. *Studies in Second Language Acquisition*. **38**(3), pp.553-586. [Online]. Available from: [S027226311500025X.indd \(cambridge.org\)](#)

Websites and apps

SurveyMonkey.co.uk Online tool to create online surveys

Appendixes

Appendix 1: Feedback sheet for FTF oral debate (criteria)

ASSESSMENT SHEET FOR SPPO3010
SPANISH, PORTUGUESE AND LATIN AMERICAN STUDIES - SESSION 2019/2020

Week/date: _____
Tutor: _____

Student:	Fail 0-39	Third 40-49	2:2 50-59	2:1 61-69	First 70-100
GRAMMATICAL AND LEXICAL STRUCTURES					
Range & Accuracy of Grammatical Constructions					
Range and control of vocabulary					
ORAL PRODUCTION					
Phonology (pronunciation and intonation)					
Fluency and communicative effectiveness					
Interaction					
Appropriateness and flexibility					
CONTENT					
Relevance of contributions to the debate					
Sophistication and relevance of ideas					
Comments which justify the mark:	Mark (0-100): _____				

DEBATE: STUDENT:

Necesita mejorar:

- Concordancias
- Tiempos del pasado
- Oraciones condicionales
- Precisión léxica
- Conjunciones
- Variedad léxica
- Variedad de construcciones
- Concordancia subjuntivos
- Contenido
- Contribución
- Entonación
- Segmentación
- Interacción

Puntos fuertes:

-
-
-
-

Mark (0-100): _____

Appendix 2: Pre-Workshop Questionnaire

Experiencia con indicativo y subjuntivo

1. ¿Has aprendido la diferencia entre el uso de indicativo y subjuntivo antes de este año?

- Yes
 No

2. Si la respuesta a la pregunta 1 es "sí" ¿Qué regla o reglas has aprendido para diferenciar indicativo y subjuntivo?

3. ¿Crees que tienes clara esta diferencia y usas los tiempos con corrección a la hora de escribir y hablar?

Appendix 3: Screen shots of indicative/subjunctive online activity

There is a story and learners need to choose between the two forms (indicative-subjunctive) highlighted in blue for the story to progress



Lucas no puede llegar tarde al concierto. Si llega tarde y el concierto ya ha empezado no le dejarán entrar y no tendrá la oportunidad de entrevistar al cantante. Lucas va corriendo por el pasillo de la sala y escucha a dos chicas que están hablando pero no está seguro de lo que dicen porque hay mucho ruido alrededor. ¿Qué tiene que escuchar Lucas para poder entrar al concierto? **está cantando** **esté cantando**

This screen shot shows the feedback if the learner has chosen indicative and how the story cannot progress



Si las chicas han dicho que "está cantando" (indicativo) están declarando que eso es así y, por lo tanto, que el concierto ha empezado. Si el concierto ha empezado Lucas no puede entrar y pierde la oportunidad de entrevistar al cantante de "Trump Cards". Fin de la aventura :(

This screen shot shows the feedback if the student has chosen subjunctive and how the story progresses and a new situation with two options is given:



Si las chicas dicen "esté cantando" (subjuntivo) significa que no están declarando que eso es así y existe la posibilidad de que el concierto no haya empezado. Lucas puede entrar a la sala.

Una vez en la sala, Lucas escucha al organizador del evento hablar con unos periodistas sobre el músico pero una vez más el ruido ambiental le impide escuchar con claridad. ¿Qué tiene que decir el organizador para que Lucas tenga oportunidades de entrevistar a Mark Davies? **no concede entrevistas** **conceda entrevistas**

Appendix 4: Post-Workshop Questionnaire

¿Indicativo o subjuntivo? 2

1. ¿Crees que después de este taller te ha quedado clara la diferencia entre el indicativo y el subjuntivo?

- Yes
 No

Appendix 5 Transcript of text-based online chat

Transcripción grupo 2 chat en línea maternidad subrogada

ChatW4/29 13:11 Hola
ChatW2/11 13:11 Hola
ChatW3/25 13:12 Hola
ChatW2/11 13:12 Puedo copiar el texto al final si queréis?
ChatW4/29 13:12 Si vale 13:13 Empezamos?
ChatW2/11 13:13 Perfecto, pues, para empezar ¿cuál es vuestra opinión sobre la maternidad subrogada?
ChatW3/25 13:14 Pienso que la maternidad subrogada es un tema muy complejo, hay varios aspectos que necesitamos considerar
ChatW4/29 13:15 Personalmente, creo que debes hacer lo que te hace feliz, es una buena manera para las parejas de la comunidad LGTB para tener hijos genéticos, pero puedo ver dos lados del argumento- 13:16 e.g - ¿Por qué no adoptas en vez de gastar miles de euros criando un bebe solamente porque quieres un bebe con sus genéticos? 13:16 hay miles de bebes y niños que están en hogares de acogido. ¿Ustedes piensan que en una manera es un poco egoísta?
ChatW2/11 13:17 Si estoy de acuerdo. Mis ideas están en conflicto sobre la maternidad subrogada. Por un lado, puede ser un proceso muy útil para que las personas puedan tener sus propios hijos biológicos. Sin embargo, por otro lado, temo el carácter comercial del proceso porque las mujeres involucradas podrían ser explotadas
Chat W3/25 13:20 ah si, estoy de acuerdo, tu punto sobre LGTB es verdad y muy importante, pero no estoy de acuerdo con el punto sobre "la manera es un poco egoísta" - en mi opinion, es normal querer un hijo biológico porque muchas personas quieren su hijo tener las mismas características o rasgos.
Chat W2/11 13:21 La cuestión de adopción es un asunto muy interesante porque parecería más lógico que los padres que no puedan tener hijos, ayúdarán a los huérfanos. Sin embargo, con las parejas homosexuales es un poco más difícil dado que para ellos no es posible tener hijos biológicos.
Isabel Molina-Vidal 13:21 Chat W3/25: ¿quieren su hijo tener las mismas características" es una estructura del inglés, ¿cómo es en español esta estructura?
Chat W2/11 13:22 ¿podrían
Isabel Molina-Vidal 13:22 ChatW2/11: buena estructura "parecería lógico que " subjuntivo" [emoticono aplauso]
Chat W3/25 13:22 ¿tenga ?
Isabel Molina-Vidal 13:22 ChatW3/25: sí, "quieren QUE TENGA [emoticono aplauso]
ChatW3/25 13:23 ah gracias!
Chat W4/29 13:24 Con respecto a las consecuencias psicológicas de la madre, a mi modo de ver siempre habrá un vínculo entre una madre y su bebe, físicamente a través del cordón umbilical y mentalmente, porque por nueve meses están conectando. En algunos casos la madre tendrá que ir a terapia. ¿Ustedes piensan que el daño de la salud mental es vale la pena de criar una vida por otra mujer? A mi modo de ver, el sacrificio de la madre gestante es la principal razón porque yo no estoy de acuerdo con la financiación de la maternidad subrogada. No opino que las mujeres deban tener un hijo para otra persona y arruinen su salud mental porque necesitan dinero. Por ejemplo, he leído en un artículo del país, en el que describió una mujer ucraniana que decidió ser un útero del alquiler para ganar el dinero para tener un piso. En sus palabras, fue "la única forma de lograrlo." Opino que es fundamentalmente injusto que se sienta esta presión financiera para ser una madre subrogada 13:28 Además, deseo subrayar que hay muchos intermediarios que se lucran de la desesperación de los dos lados, tanto los padres como las madres subrogadas por cobrar mucho dinero por conectar los dos. Lo habitual es que los intermediarios intervengan y obtengan comisiones muy grandes, lo que limita el lucro de las mujeres gestantes.
Chat W4/29 13:29 Sin embargo, diría que es normal y justo que las madres subrogadas merezcan compensación económica por gastos del embarazo como pruebas, desplazamientos o días de trabajo perdidos 13:30 reciban 13:30 estáis de acuerdo? 13:34 Con respecto a la salud mental de la mujer, me parece importante que una mujer solo pueda ser un útero del alquiler Siempre que un psicólogo haya dicho que es mentalmente estable y entiende las dificultades asociadas con la gestación subrogada.
Isabel Molina-Vidal 13:34 ChatW2/11: buen argumento [emoticono aplauso] 13:38 ¿Habéis hablado sobre si la subrogación debería ser altruista o lucrativa?
ChatW4/29 13:38 Estoy de acuerdo, con certeza las madres deben recibir alguna compensación, porque para llevar un bebe durante 9 meses cambiaría su cuerpo para siempre. Algunas mujeres pueden experimentar depresión durante el embarazo y postnatal. Si las madres consiguen depresión postnatal deberían recibir apoyo gratuito- compensación en forma de dinero o terapia gratuita
Isabel Molina-Vidal 13:38 ChatW4/29: "conseguir depresión" no funciona ¿puedes pensar en otra alternativa?
ChatW3/25 13:39 Personalmente, no puedo entender completamente, porque las mujeres querrian ser un útero sin incentivos financieros. Estoy de acuerdo con Amy "que las madres subrogadas merezcan compensación económica por gastos del embarazo como pruebas, desplazamientos o días de trabajo perdidos". También, espero que las mujeres reciban apoyo mental
ChatW4/29 13:39 sentir?
Isabel Molina-Vidal 13:40 ChatW4/29: sufrir de depresión o sufrir una depresión es mejor
ChatW4/29 13:40 ah gracias!
Chat W2/11 13:41 Si estoy de acuerdo, es importante que las mujeres reciban terapia gratuita si están sufriendo de la depresión postnatal. 13:43 habéis leído sobre los países en los que los padres homosexuales no pueden pedir a una madre subrogada. 13:45 A mi modo de ver, es penoso que haya países en el mundo que todavía no permiten que las parejas homosexuales adoptan o tener su hijos biológicos. 13:46 ¿sus
Isabel Molina-Vidal 13:47 ChatW2/11: el verbo "no permitir" es una declaración de que eso es así o no lo estamos declarando?
ChatW2/11 13:47 Si la maternidad subrogada es legal en un país, es imprescindible que sea accesible para cada pareja 13:47 ¿no permitan? no es una declaración.
ChatW4/29 13:48 Si estoy de acuerdo, en casos como así parejas se van a países diferentes para resolver la cuestión y adoptar/encontrar una madre subrogada allí
Isabel Molina-Vidal 13:48 ChatW2/11: no es una declaración porque si negamos algo no podemos declarar que ocurre
ChatW2/11 13:48 vale, muchas gracias.
Isabel Molina-Vidal 13:49 ChatW2/11: no permitan que adopten o tengan 13:49 Antes de terminar el debate, recordad que una de vosotras tiene que hacer una COPIA DE LA TRANSCRIPCIÓN de la conversación en word y me la mandáis por email. Aseguraos de que la copia incluye toda la conversación desde el minuto 13.05 hasta el final 13.55.
ChatW3/25 13:49 Si, es loco que muchos países en el mundo tener vistas extremas sobre los homosexuales. En estos países, es peligroso por los padres homosexuales, la madre sustituta y el niño. Pensáis que debería haber 'protección' por la familia? Como, debería la madre sustituta poder ponerse en contacto con el niño?
ChatW2/11 13:49 Perfecto gracias - Entiendo.
Chat W4/29 13:51 Algunas parejas españolas se van a Ucrania. He leído un artículo que dice que hay bebes que no pueden obtener el pasaporte para los bebés nacidos en Ucrania- así que están en limbo y no pueden regresar con sus padres nuevos para España
Isabel Molina-Vidal 13:51 CHatW4/29: exacto. Ese es un problema real que está ocurriendo en España
Chat W4/29 13:52 ¿no pueden obtener el pasaporte, los que nacieron en Ucrania-
Isabel Molina-Vidal 13:53 últimos 5 min. ¿Algunas conclusiones?
ChatW2/11 13:53 Por eso, opino que Ucrania necesita más regulación de la maternidad subrogada para evitar estos problemas. No creo que una niño debería ser traído al mundo sin una nacionalidad.
Chat W4/29 13:55 Para mi, entiendo los dos puntos del argumento, al fin y al cabo no se puede controlar lo que hace la gente, porque para tener un hijo es una situación muy personal, creo que la gente debería usar una madre subrogada si eso los hace felices 13:55 ¿lados
Chat W2/11 13:57 lo que más me llamó la atención es que la maternidad subrogada requiere legalización estricta para funcionar con justicia. 13:57 ¿llamó

Appendix 6: Reflective log

Reflective log


Your assigned identification number:


- You can complete this reflective log each time you participate in an online debate or just once at the end of all practice.
- Here are some questions that might help you collect your reflections, but you can add any information or category that you find relevant.
- You can copy and paste this table as many times as necessary.

<p>After participation in online chat:</p> <ol style="list-style-type: none"> 1. How did you feel about participating in the online chat? Can you identify any advantages or disadvantages of using this mode? 2. Have you used the * during the chat session to self-repair any of your posts. What specific aspects have you amended using this resource? 3. Do you think the written chat has contributed to improve your use of indicative and subjunctive modes? If yes, how?

<p>After participation in face-to-face chat:</p> <ol style="list-style-type: none"> 1. Did you read the transcript of the online chat prior to the face-to-face debate? 2. Do you think prior participation in online text-based debate helped you with the use of indicative and subjunctive modes in the face-to-face debate? Why? How? 3. Have you observed any other improvements of using the online text-based tool for your face-to-face oral debates? Which ones?
--

Appendix 7: Ethical approval

 Kaye Beaumont on behalf of
AHC Research Ethics
Wed 04/11/2020 15:29
To: Isabel Molina-Vidal
Cc: AHC Research Ethics

 Ethical review form Isabel Mo...
119 KB

[Show all 5 attachments \(557 KB\)](#) [Download all](#) [Save all to OneDrive - University of Leeds](#)

Dear Isabel

FAHC 20-011 Text-based online chat and repair of indicative/subjunctive recurrent errors in advanced learners of Spanish as a second language

I am pleased to inform you that the above research ethics application has been reviewed by AHC Committee and I can confirm a favourable ethical opinion based on the documentation received at date of this email.

Please retain this email as evidence of approval in your study file.

Appendix 8: Analysis of S1 oral feedback sheets

S1 Oral debates feedback sheets	
Participant: ChatW1/1	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
<p>Evitar que + escuchan/To prevent that + indic.</p> <p>Proponer a ustedes que + piensan/To suggest that you + indic.</p> <p>Les ruego que + piensan/I am asking you to + indic.</p> <p>Es normal que + aparecen/It is normal that + indic.</p> <p>Para que + hay/In order to + indic.</p> <p>La solución es que + invierte/The solution is that + indic.</p> <p>Por mucho que + le rogue/No matter how much I + wrong form</p> <p>Por más que + intentan/No matter how much + indic.</p>	<p>Aunque + es/Although + indic.</p> <p>Para que + se pudiera/In order to + subj.</p> <p>A menos que + quieren/quieran (self-correction)/Unless + subj.</p> <p>Es necesario que + protejamos/It is necessary that + subj.</p> <p>Para que + pueda/In order to + subj.</p> <p>Para que + contribuya/In order for them to + subj.</p>
Participant: ChatW1/4	

S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
No creo que + cambiare/I do not think that + indic. Me indigna que + indic/It makes me angry that + indic. No creo que la vacuna + debe/I do not think that + indic. No creo que + hay falta I do not think that + indic. No harán nada hasta que + sucede/They won't do anything until + indic.	Si hubieran tenido la oportunidad/If they had had the opportunity No creo que debamos/I do not think that + subj. Si invirtiera.../If they invested... (conditional sentence) Para que + puedan/In order to + subj. Si fuera.../If it was... (conditional sentence)
Participant: ChatW1/5	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
La verdad es que esto no + sea posible/The truth is that + subj. Es fundamental que + tenemos libertad de expresión/It is essential that + indic. No podemos negar que + existan/We can't deny that + subj. Quiero proponer que no + castigamos/I want to suggest that + indic. Pero + exista/But + indic. Si estuviera una chica que + conocería/If I was a girl that + conditional Pedir que + muestran/To ask to + indic. Hacer gente + volver/To make people + indic. Pedir + a contribuir/To ask to + indic. Es interesante que + has dicho/It is interesting that + indic. Sería mejor que + pagan/It would be better that + indic. No he visto a nadie que + lleva/ha llevado/I haven't seen anyone that + indic.	No pienso que + sea (self-correction)/I do not think that + subj. Sería fundamental que...+ implementara/It would be essential that + subj. Que la música no solo + sea/I wish music would not only + subj. Es importante que + permita/It is important that + subj. Es importante que + mantengamos/It is important that + subj. Alcanzar el punto donde + no exista/To reach a point where this law + subj. Es importante que + cambie/It is important that + subj. Es importante que + aprenda/It is important that + subj. Es una pena que + existan/It is a shame that + subj. Si fuera una chica...no + quisiera vivir/If I were a young girl, I wouldn't + subj. Aunque + recibiera/Although + subj. No quieres que + reciban/You do not want them to + subj. No creo que + sea/I do not think that + subj. Es importante que + reciban (self-correction)/It is important that + subj. Para los que no + hayan recibido la /For those who + subj. Tenemos que considerar que [...] + podamos/We have to consider that + subj. No creo que + sea/I do not think that + subj. Yo quiero que + reciban (self-correction)/I want them to + subj. No creo que + sea/I do not think that + subj. Si + tiene un código/If + indic. (conditional I possible) Si no tuviéramos no + tendríamos/If we + subj. ...we wouldn't Por mucho que + ha informado/No matter how much + indic. Aunque no + traigan riesgos/Although + subj. Para que + puedan/In order to + subj.
Participant: ChatW1/6	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
Para que los niños + pueden/In order to + indic. Si una persona no + quería/If a person didn't + conditional Si fuera posible...eliminará/If it were possible + past subj.	Para que no + puedan escuchar/In order to + subj. Por mucho que la vacuna + sea/No matter how + subj.
Participant: ChatW2/7	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
No pienso que + podemos compararlo/I do not think that + indic.	Si + pensamos/If + indic. (conditional I)
Participant: ChatW2/9	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
Es importante que + enseñamos a las /It is important that + indic. Es una injusticia que + quieren/It is unfair that + indic.	Si las músicas + desaparecieran/If + past subj (conditional II) Quizás personas diferentes no + tengan/Maybe + subj. Es importante que + pensemos/It is important that + subj. Si una mujer + tuviera/If + past subj (conditional II) Aunque quizás + sea una idea buena/Although maybe + subj. Quieren que + salven/They want that + subj. Quieren que + cambien/They want that + subj.
Participant: ChatW2/10	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
No creo que la religión + tiene/I do not think that religion + indic. Por mucho que + decimos/No matter how much + indic.	Si más gente + tuviera la mascarilla/If more people + past subj. (conditional II)
Participant: ChatW2/11	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
Es justo que + tiene/It is fair that + indic. El hecho de que ella no + está/The fact that she + indic.	Para que las mujeres + subj./In order to + subj. No creo que + sea justo/I do not think that + subj.

	Si + mejorara/If + past sub (conditional II) Os parece justo que + tenga/Do you think it is fair that he + subj. A menos que ella + tenga/Unless she + subj.
Participant: ChatW2/13	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
No indic./subj.-related structure identified	Es preocupante que + ignoren/It is worrying that + subj. Aunque + tenga/Although + subj. No creo que + deba ser/I do not think that + subj.
Participant: ChatW2/15	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
No Indic/sub-related structure identified	No Indic/sub-related structure identified
Participant: ChatW2/16	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
Es imperativo que + educamos/It is imperative that + indic. Es necesario que + apoyamos/It is necessary that + indic.	Es posible que + podamos/It is possible that + subj.
Participant: ChatW3/18	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
Es injusto que + prohíbe/It is unfair that + indic. Para que después + podemos/In order to + subj. No pienso que + van a hacer lo necesario/I do not think that + indic. Si una mujer + tenga/If a woman + present subj. ¿Es justo que + me han metido?/It is fair that + indic. A lo mejor + tenga y sufra/Maybe + subj.	Es hora de que + convierta/It is time that + subj. Aunque el cambio climático + exista/Although + subj. Aunque los indígenas + vivan/Although + subj. Para que + comprendan/In order to + subj. En vez de impedir que los países pobres + se desarrollen/To prevent that + subj. Es posible que + sea/It is possible + subj. Para que + podamos proporcionar/In order to + subj. Para que no + tengamos/In order to + subj. Para que + tengan/In order to + subj. Para que el país + tenga/In order to + subj. Una vida donde + tengan acceso/A life where + subj. Sin que el país + tenga más dinero/Without the country + subj. Aunque + sea el presidente/Although + subj. Para que no + vuelva a pasar/In order to + subj. Para que no + se llene/In order to + subj. Para que la ciudad de Leeds + declarara/In order to + subj. Vas a hacer que ella + sufra/You are making her + subj. Es mejor que no lo + tenga/It is better that + subj. Solo porque + estén prohibidos/Just because + subj. Causan la muerte de las mujeres que + los tengan/They cause the death of the women who + subj. Para que no + corran el riesgo/In order to + subj. Debemos hacer que + sean más seguros/We have to make that + subj. Si + tuvieras /If you + imperfect subj. (conditional II) Por algo que no + pueda /Due to something that + subj.
Participant: ChatW3/19	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
Es importante que + luchamos/It is important that + indic. Es importante que + encontramos/It is important that + indic. El hecho de que los países no + saben/The fact that + indic.	No creen que + vayan/They do not think that + subj.
Participant: ChatW3/20	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
No indic./subj.-related structure identified	No pienso que + sea ético/I do not think that + subj. Es vital que + pensemos/It is vital that + subj. Quiero que + se vacunen/I want that + subj.
Participant: ChatW3/21	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
No pienso que + es una buena idea/I do not think that + indic. No hay leyes que + permitir /There are no laws that + indic.	Es importante que + hagamos/It is important that + subj.
Participant: ChatW3/22	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
No es justo que + hay una norma/It is not fair that + indic.	No es justo que + tenga/It is not fair that + subj. Me indigna que + sub/I find upsetting that + subj. No es justo que + sub/It is not fair that + subj. Sería mejor que + aprobara/It would be better that + past subj. No creo que + entiendan/I do not think that + subj.
Participant: ChatW3/23	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
No indic./subj.-related structure identified	Dudo que + hayan pensado/I doubt that + subj. Es probable que no + influya/It is likely that + subj. Pueden decir lo que + quieren/They can say what + subj.

	<p>Permitir que su bebé + sea/To allow that + subj. Fomentar que las mujeres + salven /To promote that + subj. No es justo obligar a que + sigan /It is not fair that + subj. Para que estas cepas no + puedan/In order to + subj. No creo que + subj./I do not think that + subj. Espero que + subj./I hope that + subj. Para que + subj./In order to + subj.</p>
Participant: ChatW3/25	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
<p>Es posible que + va/It is possible that + indic. Es muy triste que no + tengo/It is sad that + indic. Es importante que + reciben/It is important that + indic.</p>	<p>Quiere que + se inyecte/To want that + subj.</p>
Participant: ChatW4/28	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
<p>Es posible que + puedes ir/It is possible that + indic. No es justo que + tienen/It is not fair that + indic. Es importante que + saben/It is important that + indic. No quieren sus hijos + aprender/They do not want that + indic.</p>	<p>Es necesario que + tengan/It is necessary that + subj. Si + tuvieran o estuvieran/If + past sub (conditional II) Para que + reduzcamos/In order to + subj.</p>
Participant: ChatW4/29	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
<p>¿Piensas que [...] que el niño no + tiene [...]/?Do you think it is a good idea that + indic. No tiene sentido que yo + tenía que /It makes no sense that + indic.</p>	<p>No indic./subj.-related structure identified</p>
Participant: ChatW4/31	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
<p>No indic./subj.-related structure identified</p>	<p>No indic./subj.-related structure identified</p>
Participant: ChatW6/35	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
<p>Había una gran posibilidad que + tenía /There was a possibility that + indic. Prevenir que este problema + existe/To prevent that + indic. Si los hombres + podrían/If men + conditional (conditional II) Si + había otro/If + past indic. (conditional II) Es posible que ella + puede/It is possible that + indic. Es probable que + van a decir/It is likely that + indic. No es importante que + pueden/It is not important that + indic. El Corán urge a + estar modestos/Koran dictates that + indic. Llegar a una situación que + permite /To reach a situation that + indic.</p>	<p>Para que + sea/In order to + subj. Como si + fuera/As if + subj. No quiero que + os equivoquéis/I do not want that + subj.</p>
Participant: ChatW7/38	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
<p>No indic./subj.-related structure identified</p>	<p>Mientras ambos + sean y ofrezcan/As long as + subj. Propongo que + vuelva/I suggest that + subj.</p>
Participant: ChatW7/39	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
<p>Por mucho que + reconozco/Despite + indic.</p>	<p>Esperan que + lo sacrifiquemos todo/They expect that + subj. Si + tuviéramos...sería/If + past sub (conditional II) Es una forma de que + mantengan/It is a way that + subj. Hay un riesgo que + muera/There is the risk that + subj.</p>
Participant: ChatW9/41	
S1NR (semester 1 Needs Repair)	S1A (semester 1 Accurate Output)
<p>A las mujeres que + sufran/The women who + subj. Es importante que + tiene/It is important that + indic. No querían que + llevan/They do not want that + indic.</p>	<p>Tengo miedo que + se únan/I am afraid that + subj. Es posible que + tenga/It is possible that + subj. No es un caso de que + haga/It is not the case that + subj.</p>

Appendix 9 Other than indicative-subjunctive-related SISR/SR in text-based online chat

Accurate SISR/SR other than indicative-subjunctive-related errors (Blue)	
Morphological (Liu, 2008)	
<p>Razones por la que – por las que* (SISR) W2T1Blue8 No estoy seguro - *segura (SISR) W5T1Blue22 Tener su hijos biológicos - *sus (SISR) W5T2Blue23 Lo que más me llamó la atención - *llamó (SISR) W5T2Blue26</p>	<p>Reasons because of which (singular) – because of which* (plural) I am not sure (masculine) – I am not sure (feminine) Have their (singular) biological children - *their (plural) What I called (first person) most my attention - *it called (third person)</p>

<p>Las mujeres involucrados - *involucradas (SISR) W5T3Blue29 & 29.1 ¿Qué quieres decir con beneficio? – quiere* (SISR) W6T1Blue30 & 30.1 creo que espana debe – debería* (SISR) W7T1Blue31 Sería una buena idea que hubiero – hubiera* (SISR) W7T2Blue35 Para educar mejorar – educar mejor* (SISR) W8T1Blue36 Las lengua indígenas - *lenguas (SISR) W9T1Blue40 & 40.1 Incorporando – incorporando* (SISR) W9T1Blue42 Han introducir – introducido* (SISR) W9T1Blue45 & 45.1 Esta concepto - *estee (SISR) W10T1Blue20 Gente no binario - *la gente no binaria (SR) W10T1Blue58 & 58.1 Condiciones espantosos - *condiciones espantosas (SR) W3T2Blue46 & 46.1 Que pensais ustedes sobre – que piensan ustedes* (SR) W3T2Blue47 & 47.1 Quizas hay un parte del codigo - *una parte (SR) W3T3Blue48 & 48.1 Es un tema muy complicada – complicado* (SR) W5T3Blue50 & 50.1 El red - *la red (SR) W5T3Blue51 Problemas medicas - *problemas medicos (SR) W5T3Blue52 Cada uno independizo - *se independizo (SR) W7T2Blue54 & 54.1 Un tema muy polémica – un tema polémico* (SR) W8T1Blue55 & 55.1 No permitiría - *permitiría (SR) W8T1Blue56 Que pensais ustedes sobre – que piensan ustedes** (SR) W9T1Blue57</p>	<p>The involved (masculine) women - *involved (feminine) What do you mean (you informal) – mean* (you formal) I think Spain must – should* It would be a good idea that there am (first person verb ending) - *there was In order to educate to improve - *better educate The (plural) indigenous language (singular) - *languages (plural) Incorporating – incorporating* They have introducing – introduced* This (feminine) concept – *this (masculine) Non-binary (masculine) people - *the non-binary (feminine) people Horrible (masculine) conditions - *horrible (feminine) conditions What do you (3rd person) think (2nd person) – What do you (3rd person) think* (3rd person) Maybe there is a (masculine) part of the code - *a (feminine) part It is a complicated (feminine) topic – complicated* (masculine) topic The (masculine) net – the* (feminine) net Medical (feminine) problems - *medical (masculine) problems Each one became independent – *made themselves independent A controversial (feminine) topic – a controversial* (masculine) topic I would not (spelling error conditional form) allow – I would not allow* What do you (3rd person) think (2nd person) – What do you (3rd person) think* (3rd person)</p>
Semantic repair (Levelt (1983), Van Helst (1996b) (Liu, 2008)	
<p>Aumentar el conocimiento - *sobre un tema tan tabú (SISR) W1T2Blue4 Una responsabilidad – una responsabilidad fundamental, eficaz y justo* (SISR) W2T1Blue10 Que no tengan las oportunidades y privilegios aquí en el mundo occidental – las mismas oportunidades y los privilegios que muchos tienen..* (SISR) W3T2Blue19 & 19.1 No se pueden olvidar – este parte de la historia de Espana* (SISR) W8T2Blue37 En estas comunidades hay mas respeto hacia el idioma y el idioma es mas respetado - *el idioma es mas respetado (SISR) W9T1Blue43 & 43.1 No hay presión para aprenderlo – aprender el Mapudungun* (SISR) W9T1Blue44 En una provincia saharai - *marroquí (SISR) W2T1Blue5 Hacer esto sería usar un “x” en palabras, por ejemplo “todos” - *todxs” (SISR) W10T1Blue33 & 33.1 No son adultos - *ahora son adultos * (SISR) W1T1Blue1 & 1.1 Las van a aparecer - las heridas* (SISR) W1T1Blue2 En una manera - *de (SISR) W2T1Blue11 Es vergonzante - *vergonzoso (SISR) W2T3Blue15 que es la opción - *qué (SISR) W2T3Blue16 En vez de los derechos – en vez de proteger* (SISR) W3T2Blue18 Una familia cristiana - *Cristiana (SISR) W4T1Blue21 Es normal y justo que las madres subrogadas merezcan - *reciban compensación (SISR) W5T2Blue14 Los dos puntos del argumento - *lados (SISR) W5T2Blue25 Puede costar unos 120 euros - *120 mil (SISR) W5T3Blue27 & 27.1</p>	<p>Raise awareness - *on such a taboo topic A responsibility – a fundamental, efficient and fair responsibility* That they do not have the opportunities and privileges here in the Western World – the same opportunities and privileges that many have..* Can’t be forgotten. This part of Spanish history* In these communities there is more respect towards the language and the languages is more respected - *the language is more respected There is no pressure to learn it – to learn the Mapudungun* In a Western Sahara province - *Moroccan Doing this would imply to use “x” in words, for example “todos” - *todxs” They are not adults - *now they are adults* The are going to appear – the wounds* In a manner - *of a manner It is shame-faced - *shameful That is the option - *What Instead of the rights – Instead of protecting* A cristina family - *Christian It is normal and fair that substitute mothers deserve - *get a compensation The two points of the argument - *sides Can cost around 120 euros - *120 thousand</p>

<p>En algun caso - *en todo caso (SISR) W5T3Blue28 & 28.1</p> <p>Reflexionemos en la historia para sobre los conflictos - *para combatir los conflictos (SISR) W7T2Blue34</p> <p>Una pareja fice un contrato – firmar por eso firme* (SR) W5T1Blue49</p> <p>Son obligados a – están obligados a* (SR) W7T2Blue53</p> <p>Y aunque existen situaciones –pero aunque** (SISR) W5T3Blue59</p> <p>Dolencias que acabaron con gran parte de –eliminaron una gran parte de...* (SISR) W7T2Blue60</p>	<p>In some case - *anyhow</p> <p>We reflect in history in order to about the conflicts - *in order to face the conflicts</p> <p>A couple clocks on - to sign, therefore sign*</p> <p>They are (ser) forced to – they are (estar) forced to*</p> <p>And although situations exist – but although**</p> <p>Illnesses that destroyed a great amount of – eliminated a great amount of</p>
Syntactic (Liu, 2008)	
<p>Fondos, dinero para que – y dinero* (SISR) W2T1Blue7</p> <p>Sensibilizar la gente – sensibilizar a* (SISR) W2T2Blue12</p> <p>Tengo un poco miedo que aquellos - *de que aquellos (SISR) W2T2Blue13</p> <p>Hay bebés que no pueden obtener el pasaporte para los bebés nacidos en Ucrania - *no pueden obtener el pasaporte, los que nacieron en Ucrania- (SISR) W5T2Blue24 & 24.1</p> <p>Deberían utilizarse [...] en los diputados - *por los diputados (SISR) W9T1Blue41</p>	<p>Funds, money in order to – and money*</p> <p>Raise awareness the people – to raise awareness to*</p> <p>I am afraid that those who - *of that those who</p> <p>There are babies who can’t get a passport for the babies born in Ukraine - *who can’t get a passport, those who were born in Ukraine</p> <p>Should be used [...] in the MPs - *by the MPs.</p>
Lexical repairs (spelling errors)	
<p>Preopisciones – preposiciones* (SISR) W1T2Blue3</p> <p>Responsibilidad? – responsabilidad* (SISR) W2T1Blue6</p> <p>Esxiste – *existe* (SISR) W2T1Blue9</p> <p>Hay doc caras - *dos (SISR) W3T2Blue17</p> <p>Mrar – mirar* (SISR) W7T2Blue32</p> <p>Mostrar – mostrar* (SISR) W8T2Blue38</p> <p>Es una league - *lengua (SISR) W9T1Blue39</p>	<p>Preopisciones – prepositions*</p> <p>Responsibilidad – responsabilidad*</p> <p>Esxists – exists*</p> <p>There are twc - *two</p> <p>Lok – look*</p> <p>To shw – to show*</p> <p>It is a league - *language</p>
Inaccurate Other than Indicative-Subjunctive SISR/SR (Pink)	
<p>Entender su historia indígena - *entender a (SISR) W2T2Pink1 & 1.1</p> <p>Una familia cristina no encuentra la exposición -*no encuentra con/a la exposición (SISR) W4T1Pink2</p> <p>Debería ser más apoyo político – debería estar*? (SR) W9T1Pink3</p>	<p>To understand their indigenous history -*to understand to</p> <p>A Christian family does not find the exhibition -*does not find with/to the exhibition</p> <p>Should be (verb ‘ser’) more political support – should be *? (verb ‘estar’)</p>
Asking for feedback (Dark Blue)	
<p>La lengua cambie con el sociedad - *l sociedad o el? W10T1DarkBlue1</p>	<p>The language changes with the (masculine) society - *the (feminine) society or the (masculine)?</p>
Accurate SISR/SR Other than indicative-subjunctive-related without using* (Grey)	
Morphological (Liu, 2008)	
<p>La Sahara – El Sahara (SR) W2T1Grey1 & 1.1</p> <p>Una referendun – un referendum (SR) W2T2Grey3 & 3.1</p> <p>Funcionara – funcionará (SISR) W6T2Grey10</p> <p>Continua ser – sigue siendo (SR) W7T2Grey5</p> <p>El sociedad – la sociedad (SR) W10T1Grey16 & 16.1</p>	<p>The (feminine) Sahara – The (masculine)</p> <p>A (feminine) referendum – A (masculine) referendum</p> <p>Worked (past subjunctive) – will work (future indicative)</p> <p>Keeps being – keeps on being</p> <p>The (masculine) Society – The (feminine) society</p>
Semantic repair (Levelt (1983), Van Helst (1996b) (Liu, 2008)	
<p>Balanza – equilibrio (SR) W3T1Grey4</p> <p>Obras ridiculosas – ridiculos/absurdos (SR) W4T1Grey8</p> <p>La media – los medios (SR) W4T2Grey9</p> <p>Irralista – poco realista (SR) W7T1Grey7 & 7.1</p> <p>Miscomunicación – falta de información (SR) W7T1Grey12</p> <p>Heridos – heridas (SR) W8T2Grey13</p> <p>Debería ser más apoyo político – haber (SR) W9T1Grey15 & 15.1</p> <p>Si fuera más ayuda – si hubiera (SR) W2T1Grey2 & 2.1</p>	<p>Weighing scales – balance</p> <p>Ridiculosas (non-existent word) – ridiculous/absurd</p> <p>Stocking – media</p> <p>Irralista (non-existent word) – little realist</p> <p>Miscomunicación (non-existent word) – lack of information</p> <p>Wounded people – wounds</p> <p>There should be (ser/to be) – There should be (haber/there is/are)</p> <p>If was more help – if there was</p>
Syntactic (Liu, 2008)	
<p>Conmemore sus familiares – conmemore a sus familiares (SR) W8T2Grey14</p>	<p>To pay tribute their relatives – to pay tribute to their relatives</p>
Lexical repairs (spelling errors)	
<p>Trabajr – trabajar (SISR) W3T3Grey6</p> <p>Inflifieron – infligieron (SISR) W7T2Grey11</p>	<p>To Wrk – to work</p> <p>Inflifieron (Spelling error) – Infligieron</p>

Appendix 10: SISR/SR of indicative-subjunctive-related structures in text-based online chat and FTF oral debates

Participant: ChatW1/1						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
1			-Por mucho que les piden (SISR/S1NR) - Está en el interés de todo el mundo que [...] serán (SISR/New)			-Merece la pena que el gobierno usa (New)
2			-Sería fundamental que el gobierno marroquí promete (SR/New)	-Me parece mal que estén celebrando (New)		-Entiendo que vosotros están (New)
3	-No es justo que les pagan/paguen (SR/New)					-Lo importante es que protegemos (New) -A menos que protegemos (S1A) -Él entienda (New) -No estoy diciendo que deben (New) -Si fuera un niño que elegiría (New) -Lo importante es que protegen (New)
4				-Para que podamos verlos (S1NR)		-Lo importante es que el arte está afrontado (New) -Me da grima que hay gente (New) -Me gustaría que todo el mundo las apreciaría (New) -Me gustaría que la gente las apreciaría (New) -Me alegro que habéis compartido (New)
6	-Es indudable que conflicto no sea/es una buena solución (SR/New)			-Hay un argumento que los residentes estén/están (New) -Una comunidad en la que pueden/ puedan (New)		-Hubiera sido mejor si creaban (New) -Me interesa mucho lo que hayas dicho (New)
7			-Por mucho que los españoles recozcan (SISR/S1NR) -Con vista a que los latinos americanos sientan entendidos (SR/New) -Sería buen día que España pide perdón (SISR/New)	-Es una comunidad en la que puede/puedan (New)		-Si los conquistadores entenderían...perderían/pederían (New) -No es justo que la persona...no los perpetró (New) -Quizás una unión en la que podían (New) -Me da rechazo que contiene (New)

8				-Me indigna que están/estén (New) -A menos que el gobierno pone/ ponga (S1A)		-Me parece espantoso que están (New) -Sería un paso adelante si más gente hablaba (New) -Si no sabía de dónde estaba mi abuelo, me gustaría (New) -Si fueras ahí, querías (New)
9						-Pero desde cuando dejan la educación la gente pueda (New) -Me preocupo que nadie va a (New) -Hacerlo obligatorio que todos los médicos saben (New) -Es inevitable que va a extinguir (New)
10	-Por mucho que intentan/intenten (SISR/S1NR)		-Por mucho que respete que los sustantivos excluyen a gente (SISR/New)		-Pienso que el RAE necesita/necesite (New)	-Por mucho que respete que los sustantivos excluyen a gente (New) -Me alegro que [...] puedes elegir (New)
Participant: ChatW1/4 (No audio recordings)						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
1						
3			-Es injusto que estos niños están trabajando (SISR/New) -La economía necesita que trabajan estos niños (SISR/New)			-Es injusto que estos niños están trabajando (New) -En el futuro cuando está más económicamente estable (New) -No creo que la ley suscitiera o provocaría (S1NR) -Si el gobierno podrá establecer ...sería (S1A)
Participant: ChatW1/5						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
2	-Afirmar que la intervención es/sea (SISR/New)		-Es importante que creamos (SISR/S1A) -Si no reciban la educación antes (SISR/S1A)			-Si implemente (S1A) -Decir que no hay muchos españoles que quieren (New) -Es imprescindible que los sahrauis reciben recursos (New) -Es muy interesante que has ilustrado (S1NR)
4	-No significa que la gente quiere/quiera (SR/New)		-No me cabe la menor duda de que sea (SISR/New) -Con vistas de que el museo	-Los museos necesitan mostrar este arte para que atrae/atraiga (S1A)	-Lo que más me fascina sea (New)	-Saber que exista (New)

	-Para que la familia no encuentra/encontrara (SR/S1A) -Para que la familia no encuentra/encuentre (SR/S1A)		permite (SISR/New)	-Siempre y cuando ofendemos/ ofendamos (New)		
Participant: ChatW1/6 (No audio recordings of weeks 1,2 and 3)						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
1	-Los primeros pasos es que el gobierno actúa/actúe (SR/New)	-No cree que los que fallecieron y estaban afectados [...] necesitan/necesitan (SISR/New)	-Voy a plantear la idea de que los temas dentro de la historia que los profes enseñan a los niños incluye (SR/New)			-Para que entendemos (S1NR) -Para que los niños aprenden (S1NR) -Sería más conciencia (S1NR) -Para que estas cosas no pasarán otra vez (S1NR)
2		-Una de las maneras de combatir este conflicto es que los poderes internacionales, como la ONU asumir (SR/New)	-Es imprescindible que los políticos y organizaciones internacionales como la ONU invirtan (SISR/New)			-Me indigna que reflejan (New)
3						-Es importante que recordamos (New)
9		-Debido a que las leyes están/estén en su lengua materna (SISR/New)				-Una diversidad que promueve (New) -Con la intención de que llegará (New) -Para que más familias tienen (S1NR) -Si los mapuche tuvieran mayor escenario, es probable que el prestigio sería mayor (New)
Week	Asking for feedback					
1	Algo necesita cambiar cuando hablamos sobre – hablamos o hablemos...!?! (New)					
Participant: ChatW2/7 (No Audio recording)						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
2			-Es una injusticia del gobierno marroquí ha tratado (SISR/New) -No os parece un poco injusto para los saharauis a ser controlados (SISR/New) -Si el gobierno marroquí vaya (SISR/S1A)			-No creo que es justo (S1NR) -Para que pueden (New) -Es inevitable que se convertiría (New)
3						-A menos que podemos (New)
5						-Significa que haya (New)

Participant: ChatW2/9						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
5						-Es obvio que la legalidad no disminuya (New)
Participant: ChatW2/10						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
2						-No me parece justo que España optaba (New) -Para evitar que España está aprovechando de los saharauis (New)
3			-No hay ninguna cláusula que enfocar (SISR/New)			-Por mucho sufrimiento que representa (S1NR)
4						-El hecho de que tenía estas esculturas (New)
6			-Cómo recomendarías que solucionamos (SISR/New)			-¿Consideráis importante que Argentina debería tener algún derecho? (New)
8			-Permitir los monumentos franquistas a permanecer (SR/New) -No considero que está reabriendo (SISR/New)			-Permitir que la figura del dictador deambula como (New) -En vistas a que ya tenga problemas (New) -No significa que el franquismo es (New)
Participant: ChatW2/11 (No Audio recordings)						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
2	-Para asegurar que este problema termina/termine (SISR/S1A) -Sería más útil que no trabajara y reconocer/en vez reconociera (SISR/New)					-Sería más fácil si tengan el control (S1A) -Sería esencial que la ONU sería involucrada (New)
5		-Los padres que no puedan/podrían (SISR/New) -Es penoso que haya países que todavía no permiten/permitan	-No permiten que las parejas adoptan (SR/New) -No creo que un niño debería (SISR/S1A)			-No es sorprendente que hay (New)

(SR/New)						
Participant: ChatW2/13						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
2						
5	-Solo se pueda/se puede recurrir a la gestación subrogada (SR/New)					
Participant: ChatW2/15 (no audio recordings of weeks 2,3)						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
2						-Es evidente que tengan (New)
3			-Hay la posibilidad que los padres quieren (SISR/New)			
5			-No puedo pensar en otra opción que permite (SISR/New)			-Me parece absurdo que es (New)
Participant: ChatW2/16 (no audio recording available)						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
2						-Provocó que se encerró (New) -No creo que sería (New)
Participant: ChatW3/18						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
3						-No significa que se erradicará (New) -Es crucial que construyen colegios (New) -Es muy importante que el gobierno invierte (New) -Al mismo tiempo que trabajen (New) -Es muy difícil hacer que las inversiones se van a los niños (New)
6						-Si Britania no luchó en la guerra...eso podría significar (New) -No creo que se va a hacer (New)
8	-No pienso que se deben/deban		-No creo que la gente les gustaría			-No creo que se puede mencionar (New)

	(SR/S1NR)		(SISR/New)			
Participant: ChatW3/19 (no audio recording available from week 3)						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
3						
7			-Espero que no pasara (SR/New)			-Solicitaba que [...] se disculparon (New)
Participant: ChatW3/20						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
3						-¿No es mejor que los niños tienen la protección? (New) -Es entendible que todavía hay (New) -No se puede sostener que trabajar no afecta su desarrollo (New)
Participant: ChatW3/21 (no audio recordings of weeks 3 and 6)						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
3						-Es difícil entender que los niños no tenían (New) -...los niños pudieran trabajar (New) -Es importante que los niños podían (S1A) -Es importante que los niños son (S1A)
6						
7						-España no piensa que es justo (S1NR) -Es justo que necesitan pedir perdón (New)
Participant: ChatW3/22 (No audio recording of week 3)						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
3						
7	-Sería fundamental que tanto el rey como el primer ministro debiera pedir/pidieran (SISR/New)					
Participant: ChatW3/23 (No audio recordings)						
Week	S2 SCMC transcripts			S2 FTF oral debate		

	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
3						
5	-No considero que sea justo que el sistema sanitario paga/pague (SR/New)					-Para que optan (S1A) -¿Creéis que es problemático que es ilegal? (New) -Es injusto que aquellos...no pueden (New)
Participant: ChatW3/25						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
3	-Es posible que las familias miran/ miren (SR/S1NR)					-Es posible que hay (S1NR)
5	-Muchas personas quieren su hijo tener/tenga (SR/S1A)		-Es loco que muchos países en el mundo tener vistas (SISR/New)			
7			-Es muy importante que...y seguimos educando (SISR/S1NR)			-Es importante que no olvidamos y seguimos (S1NR)
Participant: ChatW4/28						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
4						-No creo que tendría (New) -No me gustaría que (New)
5						
7		- Es como los españoles están celebrando (SR/New)		-Es como si están/ estuvieran celebrando (SISR/New)		
Participant: ChatW4/29						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
5						
Participant: ChatW4/31						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
4				-Sin importar que debemos/debamos		-Es necesario que se defiende el derecho del arte (New)

				(New)		-Cuando consideremos el papel de (New) -Sabiendo que la censura sea una herramienta (New) -Si consideremos el Guernica (New)
Participant: ChatW6/35						
Week	S2 SMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
6				-No hay una población preexistente local que está/esté luchando por sus derechos (New)		-No creo que la rendición de Argentina ante Gran Bretaña puede deshacerse (New) -Hacer que el país se vuelve en un nuevo país (New) -No pienso que tendría (New) -Es posible que tendría (S1NR) -Es interesante que los Estados Unidos apoyó (New) -No creo que tienen mejores derechos (New) -Es posible que las empresas petroleras traerían (S1NR) -Yo no veo que cambiar la soberanía de las islas es una buena idea (New)
Participant: ChatW7/38						
Week	S2 SMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
7	-Es importante que [...] recibiere/reciba (SR/New)	-Es importante que recibiere/recibe (SR/New)	-Para que evitará (SISR/New)			-Opino que sea obvio (New)
8						-Mientras que sean controvertidos (New) -Pienso que los nombres de las calles sean muy malos (New) -Es importante que mantener (New) -Opino que sea imprescindible que (New) -Es imprescindible que sigue aprender (New)
Participant: ChatW7/39						
Week	S2 SMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
7						-Sería una lástima que [...] no aprovechan (New)
8	-Es posible que perderíamos/					-Y si pongamos un enfoque (S1A)

	perdiéramos (SR/New)					-Se aseguró que las preguntas difíciles sobre la Guerra Civil quedaron sin respuesta (New) -Para que la gente puede ser (New)
Participant: ChatW9/41						
Week	S2 SCMC transcripts			S2 FTF oral debate		
	Accurate SISR/SR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR/SR (S1NR/S1A/New)	Missing SISR/SR (S1NR/S1A/New)	Accurate SISR (S1NR/S1A/New)	Inaccurate/ Unnecessary SISR (S1NR/S1A/New)	Missing SISR (S1NR/S1A/New)
9	- Es vital que los mapuches saben/ sepan (SR/New)			-Hay personas que sientan/sienten vergüenza (S1NR)		
Week	Asking for feedback					
9	Es vital que los mapuches saben – es vital que ellos saben o sepan? (New)					

Appendix 11 Accurate output of indicative-subjunctive-related structures without resorting to SISR/SR in text-based online chat and FTF oral debates.

Participant: ChatW1/1		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
1	-A menos que reciban (S1A) -A menos que el gobierno dedique (S1A) -Aunque sea caro (New) -No creo que tengamos (New) -Aunque haya otros asuntos (New) -El hecho de que haya 30.000 (New) -Si yo fuera...me gustaría (New)	-Es necesario que investiguemos (S1A) -Aunque sea caro (New) -Si yo fuera un niño...me gustaría (New)
2	-Por mucho que hayan intentado (S1NR) -Unirse con Marruecos para que pueda recibir (S1NR) -Para que puedan volver a su territorio (S1NR) -Es necesario que alcancemos (S1A) -Aunque España no tenga ningún derecho a la soberanía (New) -Aunque un referéndum sea la solución más democrática (New) -Aunque sea difícil (New) -En el caso de que se unan (New) -Sería fundamental que el gobierno marroquí tuviera (New) -¿No sería mejor que tenga...? (New) -Me parece penoso que los refugiados vivan en (New)	-Por mucho que la ONU haya intentado (S1NR) -Para que pueda recibir inversiones (S1NR) -Es posible que sea buena idea (New) -Me parece penoso que vivan fuera de su país en (New) -No creo que sepan lo realmente bueno para su gente (New) -Aunque España no tenga ningún derecho (New) -Si fuera parte del Polisario pensaría (New)
3	-A menos que les paguen la prestación de desempleo (S1A) -Quizás haya paro (New)	-No creo que todo el trabajo infantil sea injusto (New) -Aunque sea extraño para nosotros (New)

	<ul style="list-style-type: none"> -Es esencial que tengan más derechos (New) -No creo que todo el trabajo para niños sea malo (New) -Es importante que reconozcamos que hay (New) -Me sorprende que las niñas trabajadoras sean (New) 	<ul style="list-style-type: none"> -Es importante que pensemos (New) -Me parece penoso que sean (New) -Si fuera un niño...elegiría... (New) -Espero que cambien (New)
4	<ul style="list-style-type: none"> -Por mucho que el artista tenga (S1NR) -No creo que el arte deba ser (New) 	<ul style="list-style-type: none"> -Para que el público sepa (S1NR) -Por mucho que quiera combatir el racismo (S1NR) -Para que las generaciones venideras puedan reflexionar (S1NR) -Para que podamos reflexionar (S1NR) -A menos que mantengamos una mentalidad abierta (S1A) -Con la esperanza de que abran su mente (New) -No creo que entienda (New) -Es imprescindible que enfoquemos (New) -Aunque sea poco claro lo que (New) -Es inevitable que el arte provoque (New) -Sugerir que volvamos a censurar (New) -No digo que el arte no deba ser (New) -No creo que debamos ofrecer (New) -Afrontado por un público que pueda apreciarlo (New) -Es importante que preservemos (New) -Permite que la gente sea (New) -Da posibilidades a las personas de que muestren (New) -Una obra en la que mostrara (New) -Siempre y cuando utilicemos (New) -A pesar que esté en imperativo (New) -Hay gente que quieran (New) -Me produce rechazo que unos cuadros puedan (New)
6	<ul style="list-style-type: none"> -Por mucho que Argentina afirme (S1NR) -Para que no volvamos a luchar (S1NR) -A menos que Argentina reconozca (S1A) -Siempre y cuando la gente de estas islas estén (New) -Es interesante que hayas presentado este argumento (New) -Me parece espantoso que [...] hayan... y que se les haga (New) -Hubiera sido mejor si los veteranos recibieran (New) -Es imprescindible que haya unas (New) -Es importante que la situación no se convierta (New) 	<ul style="list-style-type: none"> -Aunque parezca justo (New) -Me indigna que sea de dinero (New) -Si yo fuera un residente, me gustaría ser parte de GB (New) -Lo que sea (New) -Me parece penoso que hayan sido (New) -No creo que tenga una organización (New) -Si fuera un residente me gustaría ser parte de GB (New)
7	<ul style="list-style-type: none"> -¿Quién propones que se disculpe [...]? (S1NR) -El hecho de que haya (New) -Es interesante que hayas abordado un concepto (New) -Si los conquistadores siguieran vivos y entendieran, pedirían (New) 	<ul style="list-style-type: none"> -Por mucho que hubiera atrocidades (S1NR) -Aunque respeto vuestras opiniones (S1A) -Existe el riesgo de que pueda abrir (New) -No es justo que la persona que pida disculpas...(New) -Sería una buena idea...si hubiera (New) -Aunque sea difícil formar uno (New) -Es interesante que hayas abordado (New) -Aunque no podamos cambiar (New) -Es importante que cambiemos (New)

8	<ul style="list-style-type: none"> -A menos que el gobierno dedique (S1A) -Aunque sea caro y consuma (New) -No creo que la ley de memoria histórica aborde (New) -Es importante que quitemos los monumentos (New) -Me parece penoso que haya fascistas (New) -Por muy duro que sea (New) -No me parece justo que esta persona no tenga (New) 	<ul style="list-style-type: none"> -No creo que aborde (New) -Aunque sea caro (New) -No creo que aborde las exigencias (New) -No creo que sea (New) -Si fuera una nieta de una de las víctimas...me gustaría (New)
9	<ul style="list-style-type: none"> -Para que la gente [...], pueda (S1NR) -A menos que el gobierno invierta (S1A) -Aunque la UNESCO reconozca (New) -Es esencial que la educación siga en la lengua mapuche (New) -Es inevitable que las lenguas se extingan (New) -Es interesante que hayas ilustrado los beneficios (New) -Es importante que el estado promocióne el Mapudungun (New) 	<ul style="list-style-type: none"> -Por mucho que quiera proteger las lenguas (S1NR) -Para que puedan comunicar con los mapuches (S1NR) -Me desagrada que muchas idiomas estén pasadas por alto (New) -Es inevitable que las lenguas se extingan (New) -Aunque sea importante (New) -Es inevitable que se extinga (New) -Es interesante que hayas mencionado (New) -No creo que hayan introducido tantas políticas lingüísticas (New)
10	<ul style="list-style-type: none"> -Por mucho que respete (S1NR) -A menos que esté empleado por (S1A) -Hubiera sido mejor que la lengua nunca tuviera género y no tuviera sustantivos (New) -Es imposible hacer que la lengua sea neutral (New) -No creo que el lenguaje sea sexista (New) -Sería fundamental que la lengua cambie (New) -Quizás...Es algo que podamos introducir a (New) -Es interesante que hayas mencionado sobre la evolución (New) -Es importante que la lengua reconozca (New) -No creo que sea fácil (New) 	<ul style="list-style-type: none"> -Por mucho que respete que los sustantivos excluyen (S1NR) -Por mucho que intentemos ser inclusivos (S1NR) -Es importante que reconozcamos que hay una diferencia (New) -Es difícil conseguir que tanta gente lo adopten (New) -Es interesante que hayas dicho (New) -Es interesante que hayas contado del caso de Italia (New) -Es lamentable que haya gente en el RAE que (New) -No creo que sea justo (New) -Quizás en el futuro debamos (New)
Participant: ChatW1/4 (No audio recordings)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR /SR	Accurate output without resorting to SISR
1	<ul style="list-style-type: none"> -Aunque cueste mucho (New) -De tal manera que puedan (New) 	<ul style="list-style-type: none"> -No creo que sea imposible (S1NR) -Aunque sea difícil (New)
3	<ul style="list-style-type: none"> -Para que no trabajen (S1A) -No tienen otra opción que no sea trabajar (New) -No estoy diciendo que esto sea (New) 	
Participant: ChatW1/5		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR /SR	Accurate output without resorting to SISR
2	<ul style="list-style-type: none"> -Es interesante que hayas dicho (S1NR) -Aunque sea difícil controlar (S1A) -No creo que sea útil enseñar a los saharauis (S1A) 	<ul style="list-style-type: none"> -Es interesante que hayas dicho (S1NR) -Aunque sea difícil gestionar (S1A) -No creo que sea justificado (S1A) -No creo que sea justificado (S1A) -Para que puedan (S1A) -Si el gobierno implementa...sería (S1A) -Es necesario que los saharauis reciban (New)

		<ul style="list-style-type: none"> -Cabe la posibilidad de que traiga (New) -Es probable que puedan ayudar a los campos (New) -Es posible que puedan (New) -En vista de que la situación mejore (New) -Es probable que tenga la intención (New)
4	<ul style="list-style-type: none"> -Es interesante que hayas dicho que España podría (S1NR) -No creo que + sea justificado limitar la expresión (S1A) -Aunque sea difícil gestionar (S1A) -No creo que + sea justificado limitar los precios (S1A) -Aunque sea polemico (S1A) -Es importante que mantengamos la libertad de expresión (S1A) -Cabe la posibilidad de que [...] traiga problemas sociales (New) -Me da grima que existan personas que quieren limitar (New) -Me produce rechazo que [...] se burle de las creencias (New) -¿Cómo podemos manejar lo que sea ofensivo y no ofensivo [...]? (New) -Me fascina que las mujeres pudieran crear una obra tan (New) -Por mucho que los museos hayan criticado el precio (New) -Es imprescindible que mantengamos la libertad de (New) -No me parece que sea razonable mostrar (New) 	<ul style="list-style-type: none"> -Es interesante que hayas mencionado (S1NR) -Para que la gente pueda saber (S1A) -Es importante que la gente tenga (S1A) -Para que puedan (S1A) -No creo que sea justificado (S1A) -Si existiera la censura...qué papel tendrá el museo (S1A) -No creo que sea posible (S1A) -Es importante que mantengamos la cajita de fósforos (S1A) -Siempre y cuando ofendamos (New)
Participant: ChatW1/6 (No audio recordings of weeks 1,2 and 3)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR /SR	Accurate output without resorting to SISR
1	<ul style="list-style-type: none"> -Para que las víctimas tengan la justicia (S1NR) -Para que muestren la historia verdadera y que (S1NR) -Me parece injusto que haya (New) -No creo que haya (New) -Es necesario que haya un cambio (New) -Es imprescindible que el estado tome (New) -Es probable que el gobierno no quiera (New) -Siempre y cuando haya un cambio (New) -Y que la educación sea más adecuada en los colegios (New) 	<ul style="list-style-type: none"> -Para que la gente sepa (S1NR) -Si hubiera habido (New) -Es importante que haya (New) -Me parece injusto que haya (New)
2	<ul style="list-style-type: none"> -Para que mejoremos (S1NR) -A pesar de que mucho del conflicto esta relacionado (New) -Me indigna que exista todavía este conflicto (New) -Me parece que es totalmente injusto que haya (New) -Con el fin de que haya [...] y que [...] asuman (New) 	<ul style="list-style-type: none"> -Aunque no tenga derecho (New) -Es imprescindible que hablemos (New) -Es injusto que haya (New)
3	<ul style="list-style-type: none"> -Para que los niños tengan más libertad (S1NR) -Me parece espantoso que haya un enfoque (New) -Me indigna que tantos niños no tengan las oportunidades (New) -Es muy probable que muchos no reciban sueldos (New) -Es una lástima que la pandemia haya azotado (New) -Es posible que muchos no tengan acceso a internet (New) 	<ul style="list-style-type: none"> -Me parece injusto que haya (New) -Me indigna que haya (New) -Si no hubiera pasado...es posible que hubiera (New) -Quizás haya tenido (New) -Es urgente que se tomen medidas (New) -Se debe gestionar con el objetivo de que + subjuntivo (New) -Cabe resumir que soslayan (New)
9	<ul style="list-style-type: none"> -Para que el idioma sea (S1NR) 	<ul style="list-style-type: none"> -Para que mantengamos este cultura (S1NR)

	<p>-Para que los niños aprendan (S1NR)</p> <p>-Me parece espantoso que todavía haya un mentalidad (New)</p> <p>-Mientras haya asimilación (New)</p> <p>-Mientras se siga imponiendo el monolingüismo (New)</p> <p>-No hay políticas lingüísticas que favorezcan su desarrollo (New)</p>	<p>-Para que los mapuches aprendan el español también (S1NR)</p> <p>-Para que mantengamos este idioma (S1NR)</p> <p>-Para que la otra persona aprenda la otra lengua (S1NR)</p> <p>-Es injusto que siga gobernando (New)</p> <p>-Es injusto que ni Chile ni Argentina reconozcan (New)</p> <p>-Es probable que haya desaparecido (New)</p> <p>-Es importante que entendáis (New)</p> <p>-Les insto a que inviertan y asignen más fondos (New)</p> <p>-Me parece útil que hagamos un cambio (New)</p> <p>-Es esencial que siga en gallego y catalán (New)</p> <p>-Mientras haya asimilación (New)</p> <p>-Mientras se siga infligiendo el (New)</p> <p>-Es importante que al fin y al cabo inviertan (New)</p> <p>-Me parece injusto que el estado chileno siga actuando así (New)</p> <p>-Es una lástima que no haya más respeto (New)</p>
Participant: ChatW2/7 (no audio recordings)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR /SR	Accurate output without resorting to SISR
2	<p>-Es esencial que ambos España y Marruecos ayuden (New)</p> <p>-No creo que la unificación resuelva (New)</p>	<p>-Es una tristeza que + subj. (New)</p> <p>-Es esencial que + sub (New)</p>
3	<p>-Para garantizar que no se abuse de la seguridad del niño (New)</p>	<p>-No pienso que + subj. (S1NR)</p> <p>-Acuerdos que + subj. (New)</p> <p>-Deben asegurar que en el futuro + sub (New)</p> <p>-No impediría que sucediera (New)</p> <p>-Para los empleadores que no lo respeten (New)</p> <p>-Hasta que + subj. (New)</p> <p>-Sea algo que quieran los niños (New)</p>
5	<p>-Es algo muy triste que estas madres quieran vender (New)</p> <p>-Si el sistema lo pagara (New)</p>	<p>-No me parece justo que + subj. (New)</p> <p>-Me parece interesante que + subj. (New)</p> <p>-Después de que + subj. (New)</p>
Participant: ChatW2/9		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR /SR	Accurate output without resorting to SISR
5	<p>-Si el gobierno español quisiera prohibirla (S1A)</p>	<p>-Si el gobierno quisiera proteger (S1A)</p> <p>-Si ustedes [...] quisieran defender, entenderían (S1A)</p> <p>-Si fuera más fácil...sería una buena opción (S1A)</p> <p>-No creo que deba ser legalizado (New)</p>
Participant: ChatW2/10		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR /SR	Accurate output without resorting to SISR
2	<p>-Tal vez la educación que enfoque (New)</p>	<p>-Si pudiéramos imponer estructuras urbanas...esto sería (S1A)</p> <p>-Para que puedan seguir luchando (New)</p> <p>-Y que tengan casa (New)</p> <p>-Desde el momento en el que cediera el territorio (New)</p>

		<ul style="list-style-type: none"> -Me parece importante que España trabaje (New) -Con la intención de que afirme (New) -Evitó que se involucrara en el conflicto (New) -Siempre y cuando presionen a Marruecos (New) -Espero que los otros poderes luchen en contra (New) -Aunque esta línea constituye (New) -Por muy controvertido que sea esta zona (New)
3	<ul style="list-style-type: none"> -Sería útil si una niña trabajara (S1A) -Sería mejor si construyera (S1A) -Quizás no sea adecuado para conseguir trabajo (New) -Tal vez fuera necesaria (New) -Es necesario que algo cambie (New) -Sería posible que otros países pudieran ofrecer apoyo (New) 	<ul style="list-style-type: none"> -Para garantizar que no se abuse de la seguridad de niños (New) -Es necesario que algo cambie (New) -Podría ser que consistiera en una detallada (New) -Tal vez fuera necesaria construir una escuela (New) -Fortalecer los sectores que se relacionen (New)
4	<ul style="list-style-type: none"> -Si consideráramos...entenderíamos (S1A) -Parece muy injusto que los abogados cristianos consideren (New) -Existe la necesidad de que el artista se conecte (New) 	<ul style="list-style-type: none"> -No me sorprendería si fuera porque (S1A) -Si evitáramos esa conversación estaríamos viviendo (S1A) -Después de que haya inaugurado una nueva colección (New) -Solicitar que se retire la pieza (New) -Me parece muy injusto que los abogados cristianos consideren necesario censurar la obra (New) -Me sorprendió que trabajaran por amor al arte (New) -Con el objetivo de que les eduquen sobre la pugna (New) -Me parece penoso que [...] se haya transformado (New) -Aunque no exista una razón concreta (New) -Existe una posibilidad de que la gente quiera (New) -De modo que subviertan las estructuras dominantes (New) -Baste como muestra (New) -Empoderar a quienes estén privados (New) -Siempre fascina que alguien ponga a prueba (New) -Aunque sea bien (New) -Lo importante es que hablen de ti (New) -Por muy rebatido que sea (New) -Con la intención de que personifique (New) -Para que se enfrente una reflexión profunda (New) -Demuestra la obligación de que el artista se conecte con (New) -Sería recomendable que esclareciera que la exposición (New) -Antes de que hubiera entrado en la exposición (New) -Con el fin de que aborden el tema (New) -Hasta que sea posible (New) -Con la finalidad de que termine esta presentación (New) -Recomendaría que previniéramos (New) -Es posible que provoque una reacción (New)
6	<ul style="list-style-type: none"> -Es necesario que acaten (New) -Siempre que Argentina asumiera la defensa...(New) -Quizás sea una gran parte (New) -Para que Inglaterra ganara el favor de los kelpers (New) 	<ul style="list-style-type: none"> -Aunque la mayoría de los residentes se consideren ingleses (New) -Me parece penoso que Argentina tenga un actitud (New) -Quizás una [carta] de reconciliación fuera necesaria como (New) -Encontrar un arreglo político que deje satisfecho a todos (New)

	-No me parece justo que nadie tenga el derecho de explotar (New) -Tal vez sea hora de considerer (New) -Encontrar un arreglo político que deje satisfecho (New)	-Es imprescindible que incluya (New) -No me parece justo que cualquiera tenga el derecho de (New) -Siempre y cuando hablemos de (New)
8	-No creo que sea suficiente (S1NR) -Con la intención de que evite la posibilidad (New) -Tal vez sea más apropiado en un museo (New) -Propongo que se haga un censo (New) -Es necesario que desmantele (New)	-Sería más agradable si reinterpretráramos la historia (S1A) -Se insta al ayuntamiento que trabaje (New) -Con miras a que esquiven (New) -Con el fin de que nunca se olvide la historia compleja (New) -Es menester que desmantele la mega obra (New) -Quizás al mismo tiempo puedan investigar (New) -Quizás otra solución fuera (New)
Participant: ChatW2/11 (No Audio recordings)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
2	-Para que haya un referendo (S1A) -Ayudaría si otros países reconocieran (S1A) -Para que los refugiados puedan (S1A) -Me parece importante que España trabaje con la ONU (New) -Es inaceptable que haya dos generaciones (New) -¿Os parece justo que España cediera su territorio [...]? (New) -Sería más útil que MINURSO no trabajara (New) -Me parece penoso que España haya optado (New) -Es vergonzante que haya (New) -Espero que no afecte la posibilidad de paz (New) -Siempre que Marruecos prometa y haya fronteras (New) -No me parece justo que Trump haya reconocido (New)	-No me parece justo que + subj. (New) -Espero que no + subj. (New) -Es intolerable que + subj. (New) -Me parece injusto que no tengan (New) -Para permitir que se celebre (New) -No quieren que + subj. (New)
5	-Para que las personas puedan tener sus propios hijos (S1A) -Parecería más lógico que ayudaran a los huérfanos (New) -Es importante que las mujeres reciban terapia (New) -Es penoso que haya países que todavía (New) -Es imprescindible que sea accesible (New)	-Es justo que + subj. (S1NR) -Si no funcionara (S1A) -Si fuera (S1A) -No creen que + subj. (S1A) -Es esencial que + subj. (New) -No opino que + subj. (New) -Puede ser que + subj. (New)
Participant: ChatW2/13		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
2	-Es esencial que se tengan en cuenta (New)	-Aunque pueda parecer (S1A) -No creo que sea (S1A) -Aunque ya haya (S1A) -Para que haya (New) -Es fundamental que se tenga (New) -Miedo a que se les obligue (New) -Estaría mal que fueran (New)
5	-Con la condición de que la pareja sea heterosexual (New) -Sería mejor si las reglas y regulaciones [...] fueran (New)	-Con la condición de que sea (New) -No juzgo inmoral que se produzca (New)

	-Esto se reduce a que las mujeres tengan derecho a elegir (New) -No estoy seguro de que la práctica deba ser altruista (New) -Si el proceso fuera gratuito (New) -¿Qué harías si no tuvieras ningún familiar que te sirviera de vientre de alquiler? (New)	-Siempre que esté (New) -Si no se produjera el pago (New)
Participant: ChatW2/15 (no audio recordings of weeks 2,3)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
2	-Es importante que haga más para los refugiados (New)	-No me parece justo que + subj. (New) -Es impensable que + subj. (New)
3	-Es posible que la familia necesite que el niño trabaje para que haya suficiente dinero (New) -Deben ser protegidos de cualquier actividad laboral que interfiera con su educación, involucre ambientes peligrosos e insalubres, o amenace el desarrollo del niño (New) -Quieren que el niño trabaje (New) -Si estuviera trabajando para otra empresa (New) -Esperan que el niño trabaje (New) -No impediría que sucediera (New)	-Podrían protegerlo más que si estuviera (New)
5	-Es fundamental que haya más infraestructura (New) -Es importante que reciban algún tipo de compensación (New) -Si alguien quisiera tener un hijo...debería...(New)	-Lo más común es que el embrión se forme (New) -Es fundamental que se lleve a cabo de la manera correcta (New) -En el caso de que uno de ellos sea infértil (New) -El hecho de que la gestación subrogada ofrezca una forma (New) -Existe la opción de que las parejas adopten (New) -No significa que no sea natural (New) -Hace posible que se cree un niño y se desarrolle (New) -Es justo que reciba algún tipo de ayuda económica (New) -No creo que la remuneración sea problemática (New) -Si alguien quisiera...tendría que (New) -Por muy difícil que sea (New) -Mientras haya apoyo para la madre de alquiler (New) -Es fundamental que haya más infraestructura (New) -Si quisiera prohibirlo (New) -Si fuera (New) -Antes de que comience (New)
Participant: ChatW2/16 (no audio recording available)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
2	-Es importante que apliquen sanciones (New) -Sugeriría que fuera atendida (New) -No es que les falte educación (New) -Tal vez con presiones [...] puedan hacer esto (New)	-Es inaceptable que haya (New) -Es importante que apliquemos (New) -Cuando haya (New) -Es obvio que necesitamos (New)
Participant: ChatW3/18		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
3		-Aunque se merezcan también una educación formal (S1A) -Para que puedan conseguir trabajos (S1A)

		<ul style="list-style-type: none"> -A no ser que + sub (New) -Cualquier tipo de trabajo donde no estén contratados (New) -Siempre que no interfiera con su educación (New) -¿No creen que es mejor que los niños estén protegidos [...]?(New) -¿No creen que es mejor que los niños estén protegidos [...]?(New) -No significa que la forma en que viven no valga (New) -Es muy fácil que este aspecto se olvide y que pierdan (New) -Impedir que los niños trabajen (New) -Es vital que los niños trabajen (New)
6	-Si Argentina comenzara a gobernar las islas, podría traer problemas (S1A)	<ul style="list-style-type: none"> -Si Argentina estuviera/tuviera el poder... (S1A) -Aunque estén hablando (S1A) -A menos que Argentina reconozca que los habitantes (New)
8	<ul style="list-style-type: none"> -Es hora de que España admita su mal (S1A) -No creo que sea justo dejar los monumentos (New) -Quizás sea mejor usar el dinero para educar (New) -Sería mejor que representase (New) -Es importante que las familias averigüen (New) 	<ul style="list-style-type: none"> -Para que puedan aclarar (S1A) -Aunque es importante ayudar a las familias (S1A) -Aunque fue construido y tiene (S1A) -Es hora de que admita lo que sucedió (S1A) -No les va a gustar que el gobierno empiece a cambiar (New) -Es importante para las familias que averigüen que les pasó (New) -¿Es posible que el Valle pueda representar...? (New) -No creo que la ley de memoria histórica aborde (New) -No creo que España lo deba ocultar (New)
Participant: ChatW3/19 (no audio recording available from week 3)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
3		<ul style="list-style-type: none"> -No creo que deba (S1A) -No creo + sub (S1A) -Por mucho que + sub (New) -Hasta que + sub (New) -No me parece que + sub (New) -Si fuera posible (New)
7	<ul style="list-style-type: none"> -No creo que vayan a cambiar de opinión (S1A) -No creo que quisieran (New) -Si España pidiera perdón tendrfa que admitir (New) -Sería un mejor país si pidiera perdón (New) 	<ul style="list-style-type: none"> -La mayoría de los ciudadanos no cree que sea beneficioso (S1A) -No creo que sea necesario insistir en este asunto (S1A) -No creo que una disculpa sea esencial (S1A) -No creo que valga la pena (S1A) -Solicitó que se pidiera perdón (New) -Si yo fuera española me avergonzaría (New) -Se pidió a México que adoptara (New) -No es sorprendente que España no se haya disculpado (New) -Necesitamos construir una nueva narrativa que ya no nos caracterice como víctimas (New) -Si eso fuera su principal prioridad trabajaría (New) -Para que España pida perdón (New) -Como mejicana hubiera agradecido el reconocimiento (New) -Por muy buen presidente que sea (New) -Me molesta que España siga glorificando la colonización (New)

		-Agradecería que se alterara la intención del día (New) -Para que se reconozca el daño (New)
Participant: ChatW3/20		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
3	-Garantizar que evitemos la explotación (New) -Hacer que sea algo seguro (New)	-Quieren que los niños sepan la diferencia (S1A) -No creo que sea tan mala (New) -La ley supone que puedan trabajar (New) -Siempre y cuando el trabajo no afecte su salud o educación (New) -Les guste o no (New) -Espero que este hecho les tranquilice (New) -Considerar el panorama completo para que entendamos (New) -Permitir que los niños trabajen (New) -Aunque los niños solo pueden (New) -Sería mejor que ningún niño tuviera que trabajar (New)
Participant: ChatW3/21 (no audio recordings of weeks 3 and 6)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
3	-Es importante que consideremos (S1A) -Estoy en contra de la idea de que los niños tengan que (New) -Dejar que los niños sean niños (New) -Buscar una solución que acabe (New) -Que los niños no tengan que preocuparse (New) -Para que los niños permanezcan en la educación (New) -Si hubiera...sería (New) -Si esta ley existiera...podría (New) -Si el gobierno pudiera...podría (New) -Consideremos formas en las que podamos (New)	-Es importante que consideremos (S1A) -Si existiera una ley que (New)
6	-Es importante que se cumpla (S1A) -Si tomaran el control...no habría (New) -Es como si Argentina tratara de perjudicar (New) -No creo que un referéndum de la población abarque este (New) -Esperar que actúen (New) -Hace falta que respalden (New)	-Es importante + sub (S1A) -Quizás podamos (New)
7	-Es importante que España pida disculpas (S1A) -Es difícil que se les recuerde (New) -Sin que España reconozca (New)	-Si se disculpara... (New) -Es muy probable que lo hiciera por (New)
Participant: ChatW3/22 (No audio recording of week 3)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
3	-No creo que sea justo (S1A) -Con el objetivo de que reciban (New) -Aunque no sea la misma situación (New) -Me parece fundamental que haya (New)	-Sería útil que implementaran (New) -Si estuviéramos en el pellejo de los niños (New)

	-Hace falta que trabajen (New) -Puede que COVID haya empeorado (New) -Me parece útil que hagamos (New)	
7	-No creo que pueda suceder (S1A) -Quiere que España reconozca (New) -Me gustaría que habláramos (New) -Para que se conmemore (New) -Hace falta que sea (New) -Para que los latinoamericanos reconozcan (New) -Hace falta que el día en España conmemore a los indígenas (New) -Me parece fundamental que se pida perdón (New) -Aunque no sea la España del pasado (New) -Hace falta que reconozcamos y que no olvidemos (New)	-No creo que eso sea colonialismo (S1A) -No creo que se pueda usar esta palabra (S1A) -No creo que todo sea en blanco y negro (S1A) -Yo no creo que abra heridas (S1A) -Me gustaría que abordáramos (New) -Para que recordemos lo que había pasado (New)
Participant: ChatW3/23 (No audio recordings)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
3	-No creo que se pueda subestimar el papel del gobierno (S1A) -Facilitar que sus familias superen la pobreza (New) -Parece cada vez más importante que encontremos (New) -Es necesario que evitemos (New) -Casos extremos en los que exista (New) -Si la implementación de esta medida fuera exitosa (New) -Siempre que se puedan proteger (New) -Puede ser que sea (New) -Evita que surja un mercado negro y que los niños tengan (New) -Ayudar a que su familia pueda mantenerse (New) -Es posible que se convierta (New) -No considero que sea justo (New)	-Para que + subj. (S1A) -Es esencial que + subj. (New) -Es importante que + subj. (New) -Es imprescindible que + subj. (New)
5	-Para que sepan (S1A) -Me produce rechazo que exista esta restricción (New) -Si pudiéramos imponer medidas (New) -Esto facilitaría que la práctica se lleve a cabo (New) -Sería mejor si fuera una práctica accesible (New) -Puede ser que una contribución sea (New) -Asegurarse de que sea compatible (New) -Siempre y cuando sea posible (New) -Es imprescindible que los padres vayan (New) -Evitar que haya (New) -Es necesario que el gobierno introduzca (New) -Es esencial que las madres ya hayan...y que [...] ya tenga (New)	-Para que + subj. (S1A) -Para que + subj. (S1A) -Asegurarse de que sean (New) -Como si fuera (New) -Hace que la práctica + subj. (New)
Participant: ChatW3/25		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
3		-Es posible que miren (S1NR)

		-Para que pudieran (New)
5	-Espero que las mujeres reciban (New)	-Quieren que tenga (S1A)
7	-Es muy importante que nunca olvidemos (S1NR)	
Participant: ChatW4/28		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
4	-Es importante que haya una separación (S1NR) -No querría que mis impuestos financiaran (S1NR) -Si yo fuera cristiana no querría (S1A)	-Si fuera un pintura (S1A)
5	-Es importante que todo el mundo tenga (S1NR) -Es importante que los padres vayan (S1NR) -Es posible que las mujeres puedan tener problemas (S1NR) -Para que evite la posibilidad (S1A) -Si yo fuera una persona...preferiría (S1A) -Para que el proceso funcione (S1A) -Aunque no sea biológicamente su hijo (New) -Es más probable que haya (New) -No estoy segura que quiera tener hijos (New) -Limita a las personas que no tengan familiares (New)	-Es importante que sepan (S1NR) -Es importante que continuemos (S1NR) -Para que esté en contra (S1A) -Si yo fuera...no me haría feliz (S1A) -Para que eviten la explotación (S1A) -Si hubiera vivido (New) -Es imprescindible que haya (New) -Es injusto que sea (New)
7	-Es muy importante que los países reconozcan (S1NR) -Para que eviten la posibilidad (S1A)	-Aunque pueden (New)
Participant: ChatW4/29		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
5	-No opino que las mujeres deban tener un hijo...y arruinen (New) -Es fundamentalmente injusto que se sienta esta presión (New) -Lo habitual es que [...] intervengan y obtengan (New) -Me parece importante que una mujer solo pueda ser útero (New) -Siempre que un psicólogo haya dicho que es mentalmente (New)	-Diría que sería [...] si el proceso fuera más fácil (New)
Participant: ChatW4/31 (No audio recording of the debate only of the presentation)		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
4	-Es posible que alguien se ofenda (New) -Que se hagan su propia idea (New) -Puedo entender que la iglesia se sienta (New) -No creo que una institución tan grande pueda (New) -Es necesario que entendamos (New)	-Me gustaría que todos echaran un vistazo a la obra (New) -Me gustaría que se formaran sus propias opiniones (New) -Para que retrate (New) -Suponiendo que se hubiera permitido [...], no habrían (New) -Es importante que todos sepan (New) -Es esencial que el arte ofrezca (New) -No querían que el pueblo viera (New) -El hecho de que se haya empleado para (New) -Hace que el espectador ponga en duda (New) -Para que la sociedad sea más (New)
Participant: ChatW6/35		
Week	S2 SCMC transcripts	S2 FTF oral debate

	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
6	<ul style="list-style-type: none"> -Es muy poco probable que las islas vuelvan (S1NR) -Si eso ocurriera (S1NR) -Es probable que el gobierno británico ofrezca (S1NR) -¿Qué pasaría si Argentina hubiera defendido? (S1NR) -¿Qué pasaría si nunca hubieran invadido? (S1NR) -Para que participen (S1A) -No creo que recupere nunca el control (New) -Quizás podamos acordar (New) -¿Cómo puede justificarse cualquier elección que haga el pueblo? (New) 	<ul style="list-style-type: none"> -Depende de si las islas fueran (S1NR) -Si eso fuera a pasar (S1NR) -La población no quiere que vuelva (S1A) -Dudo que se registrara una diferencia (New) -No creo que deban aplicarse los parámetros (New) -Antes de que se establecieran (New) -No es de extrañar que China apoye a Argentina (New) -Esto hace que sea muy difícil devolver las islas (New) -No hay una población que luche por su independencia (New) -No creo que este hecho vaya a (New) -Hacer que tanto el Reino Unido como Argentina vuelvan (New) -Crear un plan que permita (New) -Planteando unas preguntas que puedan abrir (New) -Ha resultado en que Argentina ahora sea (New)
Participant: ChatW7/38		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
7	<ul style="list-style-type: none"> -Es imprescindible que España enfrente (New) -Evitará que la historia se repita (New) -Para que reconozcan y enfrenten (New) -Es necesario que haya un cambio (New) -Para que no contenga las connotaciones (New) 	<ul style="list-style-type: none"> -El hecho de que necesiten (New) -Si España pidiera perdón no debería ser solo (New) -Sino un cambio de mentalidad en que cambie cómo (New) -Es importante que haga un (New) -Es importante que reconozca sus (New)
8	<ul style="list-style-type: none"> -Quizás una iniciativa para tener un compromiso fuera (New) -Es imprescindible que España mantenga (New) -Es importante que reconozcamos (New) 	<ul style="list-style-type: none"> -Es importante que sean guardados (New) -Si eliminaran...cambiará/cambiaría (New) -Pienso que fue construido como un lugar para recordar (New) -Es verdad que pueden abrir heridas (New) -Es muy importante que sean nombrados (New)
Participant: ChatW7/39		
Week	S2 SCMC transcripts	S2 FTF oral debate
	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
7	<ul style="list-style-type: none"> -Por mucho que reconozca (S1NR) -Para que se disculpe (New) -Existe el riesgo de que pueda (New) 	<ul style="list-style-type: none"> -Por mucho que reconozca la importancia de (S1NR) -Si España les diera... México traería muchos beneficios (S1A) -Es difícil imaginar si no hubiera tenido lugar en ese (S1A) -Si España invadiera...esperaría que [...] fuera (S1A) -Es necesario que España pida perdón de manera oficial (New) -Si el [...] ha sido presionado para que se disculpe (New) -Existe el riesgo de que pueda ser visto como poco sincero (New)
8	<ul style="list-style-type: none"> -Si tuviéramos que cavar (S1A) -Si limitáramos (S1A) -Es necesario que escuchemos (New) -Sería de mal gusto que mantuviéramos a Franco enterrado (New) 	<ul style="list-style-type: none"> -Una vez que retiremos los símbolos franquistas (New)
Participant: ChatW9/41		
Week	S2 SCMC transcripts	S2 FTF oral debate

	Accurate output without resorting to SISR/SR	Accurate output without resorting to SISR
9	-A pesar de que la globalización y la aculturación sean (New)	-Recomiendo políticas que promuevan el bilingüismo (New) -De allí que los mapuche apenas hablen su lengua native (New) -No me parece que esta política favorezca el aprendizaje (New) -Es aconsejable que el gobierno presione a las universidades (New) -Con el objetivo de que aumenten el número de grados (New) -Con el fin de que la educación bilingüe en Chile sea de (New) -Mientras se siga imponiendo el monolingüismo (New) -A menos que el gobierno invierta más en el Mapudungun (New)

Appendix 12 Reflective Log

Reflective log

Your assigned identification number: [chatW1/1](#)

<p>After participation in online chat:</p> <p>1. How did you feel about participating in the online chat? Can you identify any advantages or disadvantages of using this mode? Very interactive and everyone who goes contributes equally Good to learn new ideas regarding the topic Sometimes I am unsure if what I am saying is completely correct as the transcript is not corrected</p> <p>2. Have you used the * during the chat session to self-repair any of your posts. What specific aspects have you amended using this resource? Yes, to correct typing errors and errors when reading my contribution back</p> <p>3. Do you think the written chat has contributed to improve your use of indicative and subjunctive modes? If yes, how? Yes definitely. It has allowed me to have more time to think when using subjunctive structures, and consolidated my knowledge on this. I have learnt other subjunctive structures from the other participants too.</p>
<p>After participation in face-to-face chat:</p> <p>1. Did you read the transcript of the online chat prior to the face-to-face debate? Yes, and I picked out some key ideas and structures that would be helpful for the face-to-face chat</p> <p>2. Do you think prior participation in online text-based debate helped you with the use of indicative and subjunctive modes in the face-to-face debate? Why? How? Yes. Gave me more ideas to talk about, and validation that my ideas were correct and interesting.</p> <p>3. Have you observed any other improvements of using the online text-based tool for your face-to-face oral debates? Which ones? Given me more ideas to talk about</p>

Reflective log

Your assigned identification number: Chat W1/4

- You can complete this reflective log each time you participate in an online debate or just once at the end of all practice.
- Here are some questions that might help you collect your reflections, but you can add any information or category that you find relevant.
- You can copy and paste this table as many times as necessary.

After participation in online chat:
<p>1. How did you feel about participating in the online chat? Can you identify any advantages or disadvantages of using this mode? At first, it was a little strange as people took time to write their answers and questions and you feel a little awkward as you think no one has anything to say but it is just that writing a long answer takes a while. This is the only disadvantage I would say but a very minor one as I got used to it. I found the chat very beneficial as we got to share our ideas prior to debates and from that I was able to form a lot of counter points to other people's ideas. Also, the fact that we had to write our answers down meant that we had to write in formal Spanish which is great practice for the debates which are in formal oral Spanish.</p> <p>2. Have you used the * during the chat session to self-repair any of your posts. What specific aspects have you amended using this resource? I have used the * quite a few times during the chat to correct things that I have spelt wrong due to typing fast but also in places where I have used the wrong word or tense and after reading back my answer that I have sent off, I realise the gramatical mistakes that I made.</p> <p>3. Do you think the written chat has contributed to improve your use of indicative and subjunctive modes? If yes, how? I think it definitely has. The fact that you have the previous person's answer written down in front of you means that you can constantly refer back to their answer in the subjunctive form – acknowledging their answer but not repeating or declaring it.</p>

After participation in face-to-face chat:
<p>1. Did you read the transcript of the online chat prior to the face-to-face debate? Yes, I used other people's ideas and adapted them to my own or if it was something I didnt agree with, used as counter points</p> <p>2. Do you think prior participation in online text-based debate helped you with the use of indicative and subjunctive modes in the face-to-face debate? Why? How? Yes, definitely. Because with the online text-based chat, you are forced to write complete sentences and also have a record of what people prior to you have said. You also have more time to come up with an answer and really think about what you want to say rather than having to think about it on the spot. This means that you have more of a chance to think about your grammar/ the correct form of word to use.</p> <p>3. Have you observed any other improvements of using the online text-based tool for your face-to-face oral debates? Which ones? I feel more confident and prepared in the oral debates after having participated in the online chat, both in the type of language I am using and also I the points that I am making. I also, feel like I can anticipate what aguments other will make against my points and therefore can prepare the correct use of the subjunctive/ indicative to reiterate my point or counter theirs.</p>