

American University in Cairo

AUC Knowledge Fountain

Archived Theses and Dissertations

November 2021

The impact of delayed computer-mediated discussion on grammatical accuracy of Egyptian EFL learners' writing

Rasha R.A.A. Sengar

The American University in Cairo AUC

Follow this and additional works at: https://fount.aucegypt.edu/retro_etds



Part of the [Language and Literacy Education Commons](#)

Recommended Citation

APA Citation

Sengar, R. R. (2021). *The impact of delayed computer-mediated discussion on grammatical accuracy of Egyptian EFL learners' writing* [Thesis, the American University in Cairo]. AUC Knowledge Fountain.

https://fount.aucegypt.edu/retro_etds/2551

MLA Citation

Sengar, Rasha R.A.A.. *The impact of delayed computer-mediated discussion on grammatical accuracy of Egyptian EFL learners' writing*. 2021. American University in Cairo, Thesis. *AUC Knowledge Fountain*.

https://fount.aucegypt.edu/retro_etds/2551

This Thesis is brought to you for free and open access by AUC Knowledge Fountain. It has been accepted for inclusion in Archived Theses and Dissertations by an authorized administrator of AUC Knowledge Fountain. For more information, please contact fountadmin@aucegypt.edu.

The American University in Cairo
School of Humanities and Social Sciences

**The Impact of Delayed Computer-Mediated Discussion on
Grammatical Accuracy of Egyptian EFL Learners' Writing**

A Thesis Submitted to

The Teaching English as a Foreign Language Department
The English Language Institute

In partial fulfillment of the requirements
for the degree of Master of Arts

by

Rasha Ramzy Aly Ahmed Sengar

May 2004

The American University in Cairo

The Impact of Delayed Computer-Mediated Discussion on Grammatical
Accuracy of Egyptian EFL Learners' Writing

A Thesis Submitted by

Rasha Ramzy Aly Ahmed Sengar

to

The Teaching English as a Foreign Language Department

The English Language Institute

May 2004

in partial fulfillment of the requirements for
the degree of Master of Arts

Has been approved by

Dr. Amira Agameya

Thesis Committee Chair -----

Affiliation: The American university in Cairo and Cairo University

Dr. Paul Stevens

Thesis Committee Reader-----

Affiliation: The American University in Cairo

Dr. Robert Williams

Thesis Committee Reader-----

Affiliation: The American University in Cairo

Program Director

Date

Dean

Date

To
MUM AND DAD,
MY GUARDING ANGELS

ACKNOWLEDGEMENTS

Many people have had a hand in this thesis. I would like to express my gratitude and appreciation to all those who encouraged and helped me to complete my thesis. It would not have come into existence without their love and kind assistance.

Pages and pages would not suffice to express my deepest gratitude for my thesis chair Dr. Amira Agameya. I am greatly indebted to her enlightened suggestions, insightful comments and constructive feedback. She guided me throughout the stages of this thesis starting the very early drafts of my pre-proposal and also during the 570 course. She is an ideal model of moral and academic discipline. I will always appreciatively remember her endless encouragement, warm hospitality, deep understanding and lovely smile that kept me going. She was always available with her sincere advice and effective help. Without her support and guidance, I would have never been able to carry out this thesis.

Though thanks and appreciation can never be well enough expressed, I would like to thank Dr. Stevens for his academic guidance, invaluable advice, tremendous help and constant encouragement. His wonderful sense of humor and witty remarks always cheered me up in the hardest of times. Working with him has been quite an experience. I learnt a lot from his outstanding academic professionalism in thesis writing and as his research assistant.

My sincere thanks go to Dr. Williams for his illuminating remarks on my thesis drafts, as well as his valuable comments on the pre-proposal drafts. I deeply appreciate his constructive feedback and support.

Many thanks go to my raters Dalia Senara, Maha El Hindawy and Reem Ater. Thanks a lot for the huge effort you exerted in my data and for doing your best to give me the rating in perfect shape and as fast as you can. I really appreciate your love, support and encouragement; a big bunch of flowers for you guys.

Special thanks go to my dear friend Aliaa Mansour. I would like to thank her for her kind assistance and support and for putting up with me all the time I was disturbing her class. I also thank her for keeping me informed about the English course of the subjects.

Thanks are also due to the Dean of the Faculty of Nursing, Dr. Bassamat Omar, the Vice Dean for Education and Students Affairs Dr. Nagah and the Vice Dean for Graduate Studies and Research Dr. Yousreya for allowing me to conduct my experiment at the faculty and helping me, despite their numerous responsibilities. I would like also to thank the students who volunteered to participate in the study in spite of their very busy schedule.

Last but not least, I would like to thank my family who nurtured my work with their love, patience and support. Their compassion and concern kept me going despite all problems. The support and guidance they provided me with represented the stepping-stones for this endeavor. I would like to thank my father who was the main reason for me to join this program. Thanks for having faith in me, hoping you will always be proud of me. Mum, words fail to express my gratitude. Thank you for being there for me in every step of the way, for helping me to pull through and backing me up with love and support. Without my family, this thesis would not have come to life and I would not be the person I am now.

I Thank God for Helping Me Through

ABSTRACT

EFL learners face many problems when it comes to grammatical accuracy in writing; Egyptian EFL learners are no exception. Students learn new grammatical rules by heart, but in practicing writing, they are unable to put their knowledge of grammar to work. The learners continue to make basic errors in grammar after years of studying English. The weak grammatical competence of EFL learners may hinder their academic development. Exploring innovative ways to help EFL learners acquire grammatical accuracy more effectively represents a vital need, especially in the Egyptian educational setting. Writing via Computer-Mediated Communication (CMC) might create an authentic purpose and a real audience for writing. When the learners are given the opportunity to discuss topics in CMC, they might be motivated to improve their writing skills to meet the demands of that authentic task. Delayed Computer-Mediated Discussion (DCMD) is an asynchronous form of CMC, which carries the benefits of CMC while incorporating the many advantages of writing via computers. Editing output is much easier in computer than in paper-and-pencil writing. The ease with which revision can be carried out on screen seems to encourage the learners to proofread more, and hence may be improve their grammatical accuracy.

The present study researched the impact of DCMD on the grammatical accuracy of Egyptian EFL learners' writing. The aim was to compare the effect of composing using the DCMD mode and the paper-and-pencil mode on grammatical accuracy. Grammatical accuracy was examined in terms of four grammatical features, namely subject/verb agreement, articles, prepositions and tenses. The study followed an exploratory quasi-experimental design where a sample of volunteers from second year students at the Faculty of Nursing constituted the subjects in the study. Thirty students were randomly assigned to an experimental and a control group, with 15 students in each.

The experimental and control groups were given a pretest, which included one essay prompt on a topic related to the field of nursing. Then, the experimental group participated in DCMD, which constituted the treatment in the study, two times a week for a period of three weeks. The experimental group responded to nine discussion topics. The

subjects in the control group wrote on the same topics but in paper-and-pencil discussion (PPD). After the three weeks of administration of the treatment, both groups were given a posttest, in which they responded to another essay writing task. The written products of the two groups were compared before and after exposure to these two different modes of writing to examine the effect of each on grammatical accuracy.

The results of the study showed that DCMD did not have a significant impact on the performance of the experimental group in terms of the target grammatical features. Lack of significance could be attributed to the short duration of the treatment, as well as the small number of the participants. However, a close inspection of the data through frequency analyses suggested that, even though the results were not statistically significant, the subjects who participated in DCMD showed a tendency to make fewer errors in using articles, prepositions and tenses. More research is needed to investigate the impact of DCMD on the grammatical accuracy of EFL learners.

Table of Contents

I. Introduction	1
1.1 Computer Technology.....	1
1.2 Computer-Mediated Communication	2
1.3 Statement and Rationale of the Problem	3
1.4 Purpose of the Study	5
1.5 Research Question	5
1.6 Definitions of Variables	6
1.7 Theoretical Definitions.....	7
1.7.1 Computer-Mediated Communication	7
1.7.2 Synchronous Computer-Mediated Communication	7
1.7.3 Asynchronous Computer-Mediated Communication	7
1.7.4 Paper and Pencil Discussion.....	7
1.7.5 Delayed Computer-Mediated Discussion	8
1.7.6 Grammatical Accuracy	8
1.7.7 Second Language Learning	9
1.8 Delimitations	9
1.9 The Importance of and Need for the study.....	9
II- Literature Review	12
2.1 Introduction	12
2.2 Computer-Mediated Communication and Second Language Learning	13
2.3 Computer-Mediated Communication and SLA.....	17
2.3.1 The Role of Interaction	17
2.3.2 The Role of Output	18
2.3.3 Focus on Form	20

2.4	Computer-Mediated Communication and Second Language Writing.....	22
2.4.1	Synchronous CMC and Second Language Writing	24
2.4.2	Asynchronous CMC and Second Language Writing	27
2.5	Delayed Computer-Mediated Discussion.....	31
2.5.1	Delayed Computer-Mediated Discussion and Grammatical Accuracy in EFL Writing	32

III- Research Methodology and Design..... 34

3.1	The Proposed Design of the Study.....	34
3.2	Subjects	34
3.3	Treatment.....	35
3.4	Instruments of Measurement	36
3.4.1	The Pretest and Posttest	36
3.4.2	The Scoring Rubric.....	37
3.5	Procedures	37
3.5.1	The Pretest.....	40
3.5.2	The Raters	40
3.5.3	The Experimental Group.....	41
3.5.4	The Control Group.....	43
3.5.5	The Posttest	44
3.6	Data analysis and interpretation.....	44
3.6.1	Data Needed to Answer the Research Question.....	44
3.6.2	Procedures Used to Analyze the Data.....	45
3.7	The Pilot Study	45

IV- Results 48

4.1	Introduction	48
4.2	Descriptive Statistics: Frequency Analyses	48
4.2.1	Subject/Verb Agreement .	49
4.2.2	Articles.....	53

4.2.3	Prepositions.....	57
4.2.4	Tenses.....	61
4.3	Inferential Statistics.....	64
4.3.1	The Impact of DCMD Verses PPD on Grammatical Accuracy: In Group Differences	65
4.3.1.1	Subject/Verb Agreement	65
4.3.1.2	Articles.....	67
4.3.1.3	Prepositions.....	68
4.3.1.4	Tenses	69
4.3.2	The Impact of DCMD Verses PPD on Grammatical Accuracy: Differences between Groups	70
4.3.2.1	Subject/Verb Agreement	72
4.3.2.2	Articles.....	73
4.3.2.3	Prepositions.....	74
4.3.2.4	Tenses	75
4.4	Conclusion.....	76
V- Discussion		77
5.1	Introduction	77
5.2	The Impact of DCMD on Grammatical Accuracy of Egyptian EFL Learners’ Writing	77
5.3	Other Factors	78
5.4	Summary of the Findings	81
5.5	Comparing the Results with Other Studies in the Literature.....	82
5.6	Limitations.....	84
5.7	Future Research	85
References.....		87
Appendices		94

List of Tables

1. Experimental Group: Subject/Verb Agreement.....	49
2. Control Group: Subject/Verb Agreement	51
3. Experimental Group: Articles.....	53
4. Control Group: Articles.....	55
5. Experimental Group: Prepositions.....	57
6. Control Group: Prepositions.....	59
7. Experimental Group: Tenses	61
8. Control Group: Tenses	63
9. Dependent t-test for Subject/Verb Agreement	66
10. Dependent t-test for Articles	67
11. Dependent t-test for Prepositions.....	68
12. Dependent t-test for Tenses	69
13. Levene Test for Equality of Variance	71
14. Independent t-test for Subject/Verb Agreement	72
15. Independent t-test for Articles	73
16. Independent t-test for Prepositions	74
17. Independent t-test for Tenses.....	75

Abbreviations Used in the Study

CALL: Computer Assisted Language Learning.

CMC: Computer-Mediated Communication.

DCMD: Delayed Computer-Mediated Discussion.

PPD: Paper and Pencil Discussion.

TEFL: Teaching of English as a Foreign Language.

TOEFL: Test Of English as a Foreign Language.

AUC: The American University in Cairo.