



The Impact of Recasts Vs. Computer-Mediated Corrective Feedback on EFL Learners' Affective Variables in On-line Classes

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Abstract

The issue of feedback has been a controversial and much disputed subject within the field of foreign language learning and teaching because not only does the type of feedback affect learning outcome but it also impacts learners' emotional states especially in a foreign language classroom. As one of the recent modes of delivery, computer-mediated instruction has posed new challenges in instruction in view of the fact that it has affected the presentation and interaction pattern with the teaching tools available synchronously and asynchronously. However, relatively few studies have compared the effectiveness of various types of oral feedback provided in on-line classes. To address this gap, this study compares the effects of recasts versus computer-mediated oral feedback on the affective variables of EFL learners. To this end, 40 intermediate learners with the age range of 15-21 from a popular language school were selected. The participants were from two intact on-line classes with 20 students in each who were randomly assigned to two methods of feedback. One of the classes received recasts on pronunciation mistakes and the other one was corrected using google dictionary box. A questionnaire on affective variables (anxiety, attitude, motivation, and self-confidence) was administered at the end of the course to evaluate the impact of the two methods on these variables. The data was analyzed using Mann-Whitney and Wilcoxon. The results revealed that there was a significant difference between the two methods of corrective feedback (≤ 0.05). In other words, providing oral feedback through google dictionary box in comparison to recasts had a positive effect on alleviating the learners' anxiety and enhancing positive attitude, motivation and self-confidence in on-line classes. These results shed a light on the effectiveness of affordances provided by computers, and they also suggest how EFL teachers can use these tools to create positive emotional states in their learners.

Keywords: *Computer-mediated, Recast, Google dictionary box, Corrective feedback*

1. Introduction

Omnipresence of computer technology in different fields including education persuades practitioners to replace it with age-old practiced methods as it has opened up a vast world of information and has provided wide variety of affordances. As the medium of presentation has changed, it has brought up changes in the methods teachers adopt to present content and provide corrective feedback. Computer-mediated corrective feedback can be given through video, audio or text separately or a combination of modalities [1] synchronously or asynchronously. Corrective feedback can be of mixed blessing cognitively and emotionally depending on the type of feedback provided. Recasts have been considered to be suitable for face-to-face classroom situation because of being time-saving, less threatening to student confidence, and less intrusive to the flow of interaction during communication activities [2]; however, their effect may be affected by several internal and external factors. One of these external factors influencing feedback, in the digital era, is the change of learning environment from face-to-face to on-line mode. Several studies have been conducted about computer mediated recasts [1,3,4 to name a few]; however, there is scant research on the effect of recasts vs. computer-mediated feedback on learners' affective



variables in on-line classes. Therefore, this study set out to compare the effect of recasts versus computer mediated feedback on L2 learners' anxiety, motivation, self-confidence and positive attitude.

2. Method

2.1. Participants and Setting

The participants of the study were selected from two intact classes in a popular English Institute in Tabriz, Iran. They were taking an intermediate four-skill on-line English course and were all females with the age range of 15-21 some of whom were high school and some were university students. They had been taking English courses for approximately three years and had switched into an on-line mode after the pandemic. At present, the institute offers both on-line and face-to-face classes. The classes are being held in Adobe Connect Software. Each course in this institute takes 21 sessions the last session of which is the final exam held on-line for both face-to-face and on-line classes.

2.2. Instrument

The data was collected using a questionnaire (post-survey) designed by Lee [5]. The questionnaire was piloted on a similar group for reliability purpose and Alpha Cronbach (r) was 7.8. The questionnaire included 12 items addressing four affective variables: anxiety, attitude, motivation, and self-confidence. The Levels of each variable were measured using a 10-point Likert-type scale ranging from "Low" one to "High" ten.

2.3. Procedure

In this institute, the list of vocabulary, placed at the end of each unit in the book, is taught by the teacher having the learners listen to it and then repeat after the teacher. The learners are supposed to study the meanings provided at the end of the book by themselves. Despite the repetition of vocabulary, the learners usually have persistent mispronunciation problems. In this study, the two classes were randomly assigned to recast and computer-mediated feedback. Therefore, in one of the classes they received recast on the mispronounced words and in the other the dictionary box in google was shared by the researcher. The google dictionary box includes the phonetics, sound and motion picture which articulates the word. It also permits the learners to listen to the word slowly by pressing the slow button on, so it exposes the learners to the word from multiple modes (text, sound, and motion picture).

The learners in recast group were corrected immediately after the error by the teacher. However, in computer-mediated group, in order not to disrupt the flow of speech, the teacher made notes of the errors and waited for the communication activity to finish and then shared the screen, played the audio, shared the motion picture and slow articulation and had the learner repeat the mispronounced word. This procedure was repeated throughout the course whenever errors occurred. At the end of the term, after being informed of the purpose and content of the questionnaire on the affective variables, the learners completed it and delivered it through Telegram.

2.4. Data Analysis

The collected data from the questionnaire was fed into SPSS software. Since the data was ordinal or rank data, the non-parametric test of Mann Whitney U/ Wilcoxon was used to analyze it.

3. Results

To answer the research question, first, descriptive statistics were conducted before referential statistics (see table 1).



Table 1

Method	Variables	N	Minimum	Maximum	Mean	Std. Deviation
Recast	1. Anxiety	20	2.67	6.67	4.2333	1.02655
	2. Attitude	20	4.67	7.00	5.9167	.70814
	3. Motivation	20	4.00	6.00	4.9667	.69164
	4. Self-confidence	20	4.00	7.00	5.6333	1.08633
Computer Mediated Feedback	1. Anxiety	20	1.00	5.33	2.5833	.92322
	2. Attitude	20	6.00	10.00	8.4000	1.07931
	3. Motivation	20	4.67	10.00	7.9667	1.28827
	4. Self-confidence	20	2.67	9.33	7.1667	1.58391
Valid N (listwise)		20				

As it can be seen in Table 1, the mean for anxiety in recast group is higher than computer-mediated group. Also, the mean of attitude, motivation, and self-confidence is higher in computer-mediated group than the recast group. It means that computer mediated feedback was more effective in reducing the learners' anxiety and promoting positive attitude, motivation and self-confidence.

In the second step, Mann-Whitney U was conducted to compare the effectiveness of the two methods of providing feedback on the learners' affective variables (see tables 2 and 3).

Table 2

Ranks				
Variables	F	N	Mean Rank	Sum of Ranks
Anxiety	1.00	20	28.58	571.50
	2.00	20	12.43	248.50
	Total	40		
Attitude	1.00	20	11.18	223.50
	2.00	20	29.83	596.50
	Total	40		
Motivation	1.00	20	11.15	223.50
	2.00	20	29.85	597.00
	Total	40		
Self-confidence	1.00	20	13.93	278.50
	2.00	20	27.08	541.50
	Total	40		

Table 3. Test Statistics^a

	Anxiety	Attitude	Motivation	Self-confidence
Mann-Whitney U	38.500	13.500	13.000	68.500
Wilcoxon W	248.500	223.500	223.000	278.500
Z	-4.388	-5.069	-5.084	-3.578
Asymp Sig. (2 tailed)	.000	.000	.000	.000
Exact Sig. [2*(1 tailed Sig.)]	.000 ^b	.000 ^b	.000 ^b	.000 ^b



- a. Grouping variables
- b. Not corrected for ties

As table 3 indicates the median for anxiety in computer-mediated group is less than the recast group ($\text{sig} \leq 0.05$). In other words, computer-mediated corrective feedback with the significance level of 95% is effective in reducing the learners' anxiety. It also shows that there is a significant difference between the two methods in promoting positive attitude, motivation and self-confidence ($p. \leq 0.05$).

4. Discussion, Conclusion, Implication

This study examined the effect of recast and computer-mediated corrective feedback on EFL learners' anxiety, positive attitude, motivation, and self-confidence in on-line classes. The results of the study revealed that although recasts, in comparison to more explicit methods of feedback, are known to be less threatening to EFL learners' affective variables, they may not be as effective in on-line classes. In contrast, using google dictionary box to correct the learners' mispronunciations had a significant impact on reducing their anxiety, and increasing positive attitude, motivation and self-confidence. This discrepancy between these two methods of feedback may be due to the mode of presentation. As learners most often have affective problems in on-line classes, namely anxiety, demotivation, boredom [6], using creative ways and digital tools may minimize these affective problems. In this study Google dictionary box was found to be effective because it is a user friendly and multimodal tool. It provided several ways of presenting the pronunciation of the word (sound, motion picture, and text). It also had the ability of playing the audio in slow mode, which enabled the learners to distinguish the sounds from each other. In fact, the effectiveness of this tool is justified by Dual Coding Theory. This theory contends that while verbal associations and visual imagery are both effective learning methods, combining the two improves learning [7]. According to the dual-coding theory, the brain employs both verbal and visual information to represent information [8], but each channel in the human mind processes this information differently, resulting in unique representations for the information that it processes. The verbal system and the nonverbal/visual system are the two coding schemes now in use. Better recall is the outcome of the interaction between these two coding systems [9,10]. The verbal system organizes linguistic knowledge/units (such as text, sound, or even motor experience, such sign language) into logical groups termed "logogens.". The nonverbal/visual system organizes visual data/units (such as symbols, photos, or videos) and stores them in units referred to as "imagens." The terms "logogen" and "imagen" denote representational units of verbal and nonverbal information that, respectively, generate already-existing mental words and images and might work unconsciously to enhance cognitive performance [11]. To conclude, as the medium of presentation changes, adaptations are required on the part of teachers in order to be effective and facilitate learners' engagement and learning because as Carrier and Nye [12] stated rightly, "It is not the technology, but the pedagogy that makes digital learning interesting to us as educators and to teachers and learners who are trying to achieve the most successful outcomes" (p.209).

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