Undergraduate L2 Learners’ Perception and Preferences towards Error Correction Type on Pronunciation Errors: An Exploratory Study

Zulqarnain Abu Bakar and Muhammad Ridhuan Tony Lim Abdullah

Abstract—The present study is an exploratory survey to investigate learners’ perceptions and preferences to some proposed error correction methods, in response to mispronounced English words. A set of 36 error-correcting act video clips was developed to accompany a corresponding questionnaire survey in exploring respondents’ preferences for the different error correction types. Comparisons by their learning experience (year) and environment (institution) were carried out to study any effect on their preferences. The survey questionnaire was conducted on 88 undergraduate students. The analyses showed that the respondents seemed to share the same pattern of preferences disregarding their learning experience and types of higher institutions. Their evaluations were positive with greater appreciation for Explicit Correction, Visual Cues, Elicitation and Verbal Metalinguistic Feedback which may be viewed as being intrusive in nature as opposed to Repetition and Clarification Requests which are more communicative in their approach.

Keywords—Pronunciation, corrective feedback, correction types, preferences

I. INTRODUCTION

Most studies of error correction are driven by the interest to investigate the effectiveness of error correction on L2 interlanguage development. Studies have also been carried out to identify the circumstances in which it may function effectively. Such studies have mostly dealt with spoken errors in relation to a range of language problems including grammar, vocabulary and syntax in classroom settings. The current study, however, focuses on one aspect in language learning that has been largely neglected for quite some time, that is, pronunciation.

Pronunciation has a key role in successful communication both productively and receptively. It has been a common concern among L2 learners with regard to their confidence in oral communication (Bang, 1999). Operating at a sub-conscious level, it is often not easily amendable, though it is not impossible for an L2 learner to achieve an impressive performance (Munro & Derwing, 2008). Native listeners often use contextual cues to resolve ambiguity when a pronunciation feature impedes the intelligibility of a word. Non-native listeners, who might rely more on the acoustic signal, are prone to communication breakdown eventually (Jenkins, 2000). Nevertheless, considering the fact that L2 learners use English more often among non-native speakers than among native speakers (Jenkins, 2005), L2 learners may still need to master the basic segmental sounds of English for mutual intelligibility instead of the more complex suprasegmental qualities. Such limitations among L2 speakers can be frustrating and may need addressing. More soundly, the teaching of pronunciation is vital for L2 learners in the context of interaction between both non-native speakers and native speakers in general. Unfortunately, the topic of the teaching of pronunciation has been underdeveloped within the area of applied linguistics. As such, L2 teachers and instructors are frequently left to depend on their own intuition with minimal sense of direction. Hence, more research is needed to inform teachers of findings relevant to helping L2 learners to improve their pronunciation skills (Derwing & Munro, 2005). In order to address the issues involved in helping L2 learners improve their pronunciation skills, several areas of study are relevant. These include the theory of Speech production, the history and practice of teaching pronunciation, and the nature and effectiveness of different types of error correction. This study focused on the application of different types of error correction strategies in L2 language learning.

In the scope of error correction, Bang (1999) conducted a study investigating EFL learners’ reactions towards oral error correction. A questionnaire was administered to 100 EFL students in Spoken English classes at a university. In response to methods of error correction, respondents showed a preference for specific types of oral feedback. The study indicated that the learners had a positive perception towards error correction but were principally sensitive to the manner in which feedback was given. Relevant to the purpose of this study is the fact that only a very small number of the respondents felt that phonological error correction of pronunciation was a great concern. In contrast, Rajadurai...
(2001) surveyed a group of students in a TESL programme in Malaysia, investigating the effectiveness of teaching pronunciation. Findings showed that more than 85% of the subjects agreed that pronunciation training was essential, particularly on the segmental aspect of pronunciation. Derwing & Rossiter (2002) also used a survey approach in their study on learners’ perception of their pronunciation needs and strategies. The results disclosed segmental superiority over suprasegmental importance as perceived by their respondents. Considering the mixed results in these studies of which the survey approach was adopted to investigate learners’ concern for improvement in English pronunciation, the present aim is to explore learners’ preferences for different types of phonological feedback. To date very limited study on the perception and preference of error correction on pronunciation errors for Malaysian English learners has been conducted, although this aspect of the language has been quite a concern among the learners. Another interest in relation to the error corrective feedback is to find out if learners’ learning experience and learning environment have any impact on their perceptions and preferences for the proposed error-correction types. According to Rivers (2001), experienced learners tend to have their own autonomic decision as to how they would like to manage their learning process and activities. It is postulated that experienced learners exhibit good metacognitive behaviours that could assist them making assessment and decide what work best for them (Wendon, 1999). The same goes to the influence of environment in which it is postulated that a target-language rich environment would be much conducive for a learner to internalize the target input (Celce-Murcia, Brinton & Goodwind, 1996; Ellis, 2009) as opposed to the ones that are of L1-L2 mix or in L1 only. Thus, it is important to find out how learners perceive possible error correction methods from these perspectives.

There are numerous pronunciation training software packages on the market, many with attractive interactive activities. Nonetheless, few if any have a robust capacity to attend to individual pronunciation problems or offer meaningful constructive error correction (Neri, Cucchiari, & Strick, 2008). It is hoped that the present study may illuminate ways of correcting pronunciation errors that are appealing to L2 learners for use in future software packages for pronunciation training.

II. AIM/OBJECTIVE

This study is aimed at conducting exploratory survey to investigate learners’ perceptions and preferences to some proposed error correction methods, in the event of correcting a mispronounced English word. Thus, learners’ perceptions and preferences for the respective corrective feedback types may be analysed and understood how they interpret teachers’ corrections and the reasons for their preferences. The study is also extended to explore if learners’ learning experience (year) and environment (institution) affect their preferences.

A. Research Questions

Hence, in response to the earlier studies and the concerns on learners’ perception and preferences for the different corrective feedback types as well as the potential impact of learners’ learning experience and environment on their perceptions and preferences, the following research questions were constructed.

i. What are the learners’ perceptions and preferences with regard to the different error correction types, overall?

ii. What are the learners’ perceptions and preferences with regard to the different error correction types in relation to their learning experience (first year vs final students)?

iii. What are the learners’ perceptions and preferences with regard to the different error correction types in relation to their learning environment (Institution A vs Institution B)?

III. METHOD

Data collected will be analyzed to investigate the respondents’ evaluation of the different error correction types. The study adopted the survey technique to elicit the respondents’ perception and preferences. As formal pronunciation classes are not available in Malaysian colleges and universities, observation of phonological feedback classes is almost impossible. Pronunciation is integrated into the syllabus of most English classes at tertiary level. Videotaping those classes to capture phonological feedback would have been time consuming because feedback on pronunciation may be rare and unpredictable. An alternative approach of observing and studying learners’ reactions towards feedback in the context of commercially available packages was also dismissed, due to the inconsistency in the features of the feedback found in the available pronunciation software. Some do not provide feedback at all. The ones that do, consist of various intensities and approaches from responding to differences in discrete minimal pairs to providing spectrograms and waveforms. In other words, although there are a few programmes that provide quite technical support, on the whole, pronunciation feedback is not accorded much systematic attention. This has resulted in difficulties to set hard-and-fast rules that can be applied universally across different settings for categorization.

Hence, one of the workable, if not the best, alternative means for data gathering is to adopt a set of categories based on a database of classroom interaction between teachers and learners with regard to error correction. The researchers have therefore chosen to focus on five of the seven correction types identified by Lyster and Ranta (1997) namely, Explicit Correction, Clarification Requests, Verbal Metalinguistic
Feedback, Elicitation and Repetition. It was found that these error correction types to be most relevant to the provision of pronunciation feedback than the other two error correction types i.e., recast and multiple feedbacks. Another correction type that is common in pronunciation training is Visual Cues. It is an error feedback type adopted from most common approach adopted by pronunciation training workbooks and software. Based on the six error correction types, a set of 36 error-correcting act video clips was developed to accompany a set of corresponding questionnaire survey.

A. Participants

The survey questionnaire was conducted on 88 undergraduate students. The participants were first and final year students in private Institution A and public Institution B. In institution A, all subjects are taught in English and the language is commonly used by the lecturers and students for both academic and social purposes. While in institution B, the communication is of a mix between L1 and L2 for both academic and social purposes. Table 3.1 provides the breakdown of the participants in terms of institution, year and gender.

Table 1
Distribution of Respondents

<table>
<thead>
<tr>
<th>Institution</th>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>First</td>
<td>11</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>A</td>
<td>Final</td>
<td>9</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>B</td>
<td>First</td>
<td>14</td>
<td>8</td>
<td>22</td>
</tr>
<tr>
<td>B</td>
<td>Final</td>
<td>4</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>88</td>
</tr>
</tbody>
</table>

These students were all native speakers of Malay who had studied English for at least 10 years by the year they sat the national examination in high school. They had also met the entry requirements stipulated by the respective institutions.

The questionnaire had a 5-point Likert scale in a Likert format i.e., Strongly Agree, Agree, Don’t know, Disagree and Strongly Disagree. The respondents were asked to mark their perceptions by ticking one of the five boxes in response to a statement pertaining to an evaluation criterion in connection with the different error correction types. Thus the emerging data from the 5-point scales was numerical and analyzed quantitatively. The feedback questionnaire consists of two parts: Parts A and B. The participants were first asked to respond to Part A, which elicited their personal information and their general attitude towards pronunciation. Each of the statements in the questionnaire was translated in Malay, and although it was expected that the students would understand most of the statements in English, the translation was read to avoid uncertainties among the students. The students took between 25-30 minutes to complete the questionnaire.

IV. FINDINGS AND DISCUSSION

The analyses in this section are reported descriptively and the result of inferential statistical tests is included wherever applicable. The report will proceed in the following order. Firstly, a report on the overall results of the participants’ responses, followed by the analysis of their perceptions by different academic level (year of study), by institution and eventually by group. The basis of the analysis is their judgment expressed as a score on a continuum of 1-5; where ‘1’ denotes strong agreement and ‘5’ denotes strong disagreement. To report these results; means of 1.00 - 1.79 are considered positive, means of 1.80 - 2.59 are taken to reflect fairly positive, means of 2.60 – 3.39 are assumed to represent a neutral attitude, means of 3.40 – 4.19 signify a fairly negative perception and means of 4.20 – 5.00 are interpreted as a negative perception. The score is given in response to an item statement corresponding to the relevant evaluation criteria whilst viewing a video clip of an error correction type. The mean for each of the error correction types is the average mean across the three evaluation criteria.

A. Overview of the analysis of assessment to the error correction type

This subsection reports the overview of the analysis in relation to all the 88 participants.

Table 2
Means for All Correction Types

<table>
<thead>
<tr>
<th>Correction Type</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicit Correction</td>
<td>1.90</td>
<td>0.915</td>
<td>528</td>
</tr>
<tr>
<td>Visual Cues</td>
<td>1.96</td>
<td>0.902</td>
<td>528</td>
</tr>
<tr>
<td>Elicitation</td>
<td>2.10</td>
<td>0.921</td>
<td>528</td>
</tr>
<tr>
<td>Verbal Metalinguistic Feedback</td>
<td>2.37</td>
<td>0.954</td>
<td>528</td>
</tr>
<tr>
<td>Repetition</td>
<td>2.65</td>
<td>1.063</td>
<td>528</td>
</tr>
<tr>
<td>Clarification Request</td>
<td>2.86</td>
<td>1.044</td>
<td>528</td>
</tr>
<tr>
<td>Total</td>
<td>2.31</td>
<td>1.031</td>
<td>3168</td>
</tr>
</tbody>
</table>

Note: 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree
A high mean score indicates a less positive attitude and a low mean score indicates a more positive attitude
Means of students' overall rating of the six corrective feedback types

![Means of students' overall rating of the six corrective feedback types](image)

**Fig. 1.** Means of students’ overall ratings of six types of error correction

Table 2 and Fig. 1 show the means for all error correction types in relation to the evaluation from the 88 respondents. Since each respondent evaluated a set of 36 clips, the total number of clips (K) evaluated by all the respondents is 3168 or (88 x 36 clips). Thus there were 528 or (3168 / 6) clips evaluated for each error correction type. The same approach in dividing the clips by the six error correction types is applied for the assessment by year and institution. It should be noted that item statements in relation to some clips were reverse coded to maintain consistency of interpretation.

As a reminder, the value of a mean closer to 1.00 indicates a positive mean while a mean closer to 5.00 denotes a negative mean. The analysis shows that the means for the correction types range between 1.90 and 2.86 with the total mean of 2.31, which reflects a fairly positive rating throughout the population. It also shows that the means for Explicit Correction, Visual Cues and Elicitation are closer to 2.00, while the means for Repetition and Clarification Requests are closer to 3.00. The mean for Verbal Metalinguistic Feedback, however, seems to be midway between 2.00 and 3.00.

The overview reveals that the participants seemed to have a greater preference for Explicit Correction, Visual Cues, Elicitation and Verbal Metalinguistic Feedback which are more direct in nature as opposed to Repetition and Clarification Requests which are more indirect in nature.

**B. Analysis of the assessment to the error correction type by year**

This subsection analyses the results by year. The purpose of this analysis is to find out the similarities and differences between the responses of the different year groups. The aim is to find out if number of years of learning experience affects the respondents’ perceptions and preferences for the different types of error correction. The similarities and differences between the two year-groups are presented in Table 3 and illustrated in Fig. 2. The numbers of respondents for the first and final year are 43 and 45, respectively. Each student assessed a set of 36 clips that yielded a total number of 1548 clips or (43 x 36 clips) for the first year, and 1620 clips or (45 x 36 clips) for the final year. Since there are 6 error correction types in focus, each type has 258 clips or (1548 / 6) evaluated by the first year students and 270 clips or (1620 / 6) evaluated by the final year students. The following results were observed.

Table 3
Means for All Correction Types in Relation to The First and Final Year Respondents

<table>
<thead>
<tr>
<th>Correction Type</th>
<th>First Year Mean</th>
<th>First Year Std. Dev.</th>
<th>K</th>
<th>Final Year Mean</th>
<th>Final Year Std. Dev.</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPT</td>
<td>1.99</td>
<td>0.948</td>
<td>258</td>
<td>EPT</td>
<td>1.82</td>
<td>0.875</td>
</tr>
<tr>
<td>VCS</td>
<td>1.97</td>
<td>0.931</td>
<td>258</td>
<td>VCS</td>
<td>1.96</td>
<td>0.876</td>
</tr>
<tr>
<td>ELT</td>
<td>2.14</td>
<td>0.948</td>
<td>258</td>
<td>ELT</td>
<td>2.06</td>
<td>0.894</td>
</tr>
<tr>
<td>VMF</td>
<td>2.27</td>
<td>0.948</td>
<td>258</td>
<td>VMF</td>
<td>2.47</td>
<td>0.951</td>
</tr>
<tr>
<td>RPT</td>
<td>2.73</td>
<td>1.034</td>
<td>258</td>
<td>RPT</td>
<td>2.57</td>
<td>1.087</td>
</tr>
<tr>
<td>CLR</td>
<td>2.92</td>
<td>1.007</td>
<td>258</td>
<td>CLR</td>
<td>2.80</td>
<td>1.078</td>
</tr>
<tr>
<td>Total</td>
<td>2.34</td>
<td>1.035</td>
<td>1548</td>
<td>Total</td>
<td>2.28</td>
<td>1.027</td>
</tr>
</tbody>
</table>

Note: 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree
A high mean indicates a less positive attitude and a low mean indicates a more positive attitude
Abbreviations: EPT stands for Explicit Correction, VCS for Visual Cues, ELT for Elicitation, VMF for Verbal Metalinguistic Feedback, RPT for Repetition and CLR for Clarification Requests

![Means of correction types for the first and final year respondents](image)

**Fig. 1.** Means of the first year and final year students’ rating of six types of error correction
Table 3 and Fig. 2 generally reveal that both the First and Final Year respondents seem to show quite similar patterns of evaluation. Both groups of respondents have evaluated Explicit Correction, Visual Cues, Elicitation and Verbal Metalinguistic Feedback fairly positively with the means ranging between 1.82 and 2.47. The Final Year respondents seemed to have evaluated Repetition fairly positively with a mean of 2.57 as compared to those of the First Year respondents with the mean of 2.73. On the other hand, the First Year respondents evaluated Verbal Metalinguistic Feedback with a mean of 2.27, better than those of the Final Year’s evaluation with a mean of 2.47. Both groups seemed to have a neutral attitude for Clarification Requests. In other words, the results showed the somewhat similar pattern of preference at the year level as it was for the general overview.

To assess whether differences between the year groups reached statistical significance, a t-test was conducted. The t-test was performed to compare the means between the First and Final Year students as a whole. On running the t-test (Table 4) the result shows that there is a significant difference in their evaluation for Explicit Correction and Verbal Metalinguistic Feedback in which $t = 2.140$ (p-value = 0.033) and $t = -2.408$ (p-value = 0.016), respectively. Notice that the significant result for Verbal Metalinguistic Feedback also reveals that the First Year respondents were slightly more positive than the Final Year respondents.

The First Year respondents seemed to appreciate Verbal Metalinguistic Feedback more, as compared to those of the Final Year respondents. But the Final Year respondents seemed to appreciate Explicit Correction more than those of the First Year respondents. Like the result in the general overview, the means for Verbal Metalinguistic Feedback remain somewhere midway between 2.00 and 3.00, which are fairly positive.

Overall, the results suggest that both the First and Final Year respondents seem to prefer what are perhaps the more direct types of correction: Explicit Correction, Visual Cues and Elicitation. Their experience in learning does not seem to affect significantly the patterns and preferences for the different error correction types. In other words, the results seems to suggest that the metacognitive capabilities may not be much affected by the learners’ experience, perhaps in a difference of just about 4 years. Having looked at the means for the different error correction types and the patterns of preferences with regard to the different years, we next continue to investigate the means and patterns of preferences for the error correction types by institution.

C. Analysis of the assessment to the error correction type by institution

This subsection will present the results of analysis by institution; i.e. the respondents in English-medium, Institution A and the respondents in Institution B, where English and Malay are used. The language environment in the context of the present study refers to the language, the respondents are exposed to as a medium of instruction in learning and in other academically and socially related activities. Thus, the aim is to find out if the learning environment affects the respondents’ perceptions and preferences for the different error correction types. The result tabulated in Table 5 represents the mean scores for the six different error correction types as evaluated by 44 respondents from each institution. Thus the total number of clips evaluated for each correction type in each institution is 264. The following results were observed.

Table 5
Means for all correction types in relation to respondents from Institution A and B

Note: 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree. A high mean indicates a less positive attitude and a low mean indicates a more positive attitude

**Abbreviations:** EPT stands for Explicit Correction, VCS for Visual Cues, ELT for Elicitation, VMF for Verbal Metalinguistic Feedback, RPT for Repetition and CLR for Clarification Requests
The t-test was performed to compare the means between Institutions A and B for the combined group total. The t-test (Table 4.6) shows there is a significant difference in the respondents’ evaluation with regard to Elicitation, Repetition, and Clarification Requests, in which $t = 2.277$ ($p$-value = 0.023), $t = 3.899$ ($p$-value < 0.001) and $t = 3.323$ ($p$-value < 0.001), respectively. The total t-test also reveals a significant difference between the two institutions in which the $p$-value < 0.001. However, the difference does not represent an obvious contrast of positive-negative attitude toward the different error correction types, only the degree of preferences within the positive perceptions, depicting a favorable attitude from respondents of Institution B.

The analyses conducted in connection with the respondents of the different institutions show that both groups of respondents in Institution A and B retain similar patterns of preferences as depicted in the general overview and by year. Respondents of both institutions prefer Explicit Correction, Visual Cues and Elicitation which are relatively overt with minimal difference between them. However, respondents of Institution A have less preference for the relatively indirect feedback of Repetition and Clarification Requests as opposed to those of Institution B who appear to be more receptive to both direct and indirect feedback types, except for Clarification Requests with a mean closer to neutral. The result seems to suggest that learning environment does not have a significant effect on the respondents’ preferences for the different error correction types.

V. CONCLUSION

The analyses have shown that the respondents seem to share the same pattern of preferences. Their evaluations were positive with greater appreciation for Explicit Correction, Visual Cues, Elicitation and Verbal Metalinguistic Feedback which may be viewed as being intrusive in nature as opposed to Repetition and Clarification Requests which are more communicative in their approach. Regardless of the generally positive perceptions for all error correction types, the participants preferred the direct type as in Explicit Correction and Visual Cues more than the semi-direct type of Elicitation and Verbal Metalinguistic Feedback, followed by the indirect type of Repetition and Clarification Requests. The participants were pretty similar in their perceptions and preferences when compared by institution and by year. The present study has raised several stimulating questions, which could be explored further.

The present study focuses on perceptions of and preferences for different error correction types. A follow-up longitudinal study might be conducted to study how the different error correction types or the preferred types help the learners acquire the target sound or phoneme permanently.

A thorough piece of research using an observation approach can be carried out to study the actual real-life, in-class corrective exchanges between teachers and students in relation...
to pronunciation errors. Such a study may well take into consideration various factors i.e., intrinsic factors, which refers to learners’ interests, attitudes and preferences; and extrinsic ones, which relates to external influences, e.g. settings, teachers and approaches. Videotaping the exchanges in the correction moves for later viewing in a stimulated recall procedure could promise much richer data to understand learners’ perceptions and preferences in relation to the qualities of each error correction type.

Prototype pronunciation software may be developed taking into consideration the learners’ preferences for error correction types in the present study. A synergy of expertise from the pedagogical point of view, IT representation in terms of layout and the technical expertise in the signal reading for ASR technology should be fostered to study the feasibility and appropriateness of developing pronunciation software. Such prototype pronunciation software can be provided to learners to practice their pronunciation and to gather feedback from them with regard to the relevant aspects which require further improvement of the software.

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