

# EVALUATING THE INTONATION PERCEPTION ABILITY OF VIETNAMESE LEARNERS OF ENGLISH

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## ABSTRACT

This paper investigates the ability of Vietnamese learners of English to perceive features of English intonation, more specifically, tonicity and tone. An action research paradigm is adopted which takes into account individual language learning strategies (LLS). The performance of three groups of learners, cycle one (C1), cycle two (C2) and a control group (CG), is examined on pre-test, mid-test and post-test scores. The results show that the pre-test scores are significantly different from the post-test scores in both groups C1 and C2, that the experimental groups perform better on tonicity than tone, and that they both outperform CG. This is discussed in terms of implications for language teaching and international intelligibility in English.

**Keywords:** English intonation, perception, tonicity, tone, language learning strategies

## 1. INTRODUCTION

In Vietnam, where pronunciation has traditionally taken a secondary role to grammar, vocabulary and (more recently) receptive and productive language skills, there has been an almost total neglect of intonation teaching to students of English. If pronunciation is found at all in the curriculum, the focus is placed on teaching students to pronounce single words correctly. An examination of textbooks (e.g. [5, 11]) used with students of English in Vietnam reveals that intonation teaching focuses on a few features confined to the grammatical function, e.g., the rigid use of two intonation patterns for three specific grammatical structures, such as a rise for yes/no questions, and a fall for wh-questions and statements. A teacher of English in Vietnam, the first author observes that, while differences in tone production and identification are indeed a problem for Vietnamese learners, nucleus placement is also an issue, but is rarely addressed.

The reality is that teachers are not equipped with a good knowledge of intonation. In addition, when interviewed, some Vietnamese teachers

answered that they did not like to teach stress and intonation because they did not think they could be a good model, and others responded that the difficulty lay in the difference between the use of tone in the students' first language and English [6].

Although there have been considerable changes in English pronunciation teaching methods and materials in the 16 years since it was introduced as a subject in universities in Vietnam, intonation is still not seen as a priority. Griffiths [6] attributes this to 'the lack of clear guidelines and rules available in course books' and 'the fact that isolated exercises once a month do not seem to have much of an effect'.

But the situation is not peculiar to Vietnam; intonation teaching is generally considered to be a problematic area despite its high communicative importance [4, 12]. In a bid to explain why intonation is still neglected, Underhill [13] associates the lack of confidence amongst teachers with the perceived difficulty of the area. This seems true for Vietnamese teachers of English.

Where use of tonal features is concerned, Vietnamese learners of English come from a language background which is totally different. Vietnamese belongs to the Austro-Asiatic language family under the group of Viet-Muong on the Mon-Khmer branch, well known for its tone complexity. Lexical contrasts are marked by tonal pitch differences and laryngeal features [15]. Like Thai and Chinese, Vietnamese is a tonal language in which each monosyllabic word unit has only one lexical tone which restricts the meaning of the syllable, i.e., the same syllable from a segmental point of view conveys different meanings depending on the different tone it bears in different contexts. For example, the syllable [ta] means a variety of things, as shown in Table 1. In addition, the tones vary slightly in spontaneous speech [3]. Clearly, this is different from English, and this difference may be a potential barrier for Vietnamese learners of English intonation.

**Table 1:** The meaning of the Vietnamese syllable [ta].

word	tone	meaning
ta	level	me / us
tá	rising	twelve
ta	low broken	100kg / weightlifting
tã	high broken	napkin
tâ	curve	diarrhea
tà	falling	evil

The dissimilarities in the use of tone in the two languages and the lack of confidence amongst teachers can be counted as factors preventing English intonation from being taught in Vietnam. On top of that, Underhill [13] may be right to claim that ‘we are not in control of a practical, workable and trustworthy system through which we can make intonation comprehensible’. This indicates that with a workable system it should be possible to teach at least some aspects of intonation to learners of English.

Adopting an action research paradigm, this study and aims to find out whether focus on certain features of intonation (tonicity and tone) in combination with selected individual language learning strategies (LLS) can improve the performance of Vietnamese students in a listening test.

## 2. METHODOLOGY

### 2.1. Participants

Data were collected from 41 Vietnamese second year upper-intermediate English majors divided into two groups, C1 (14 students) and C2 (27 students). They were all students at a university in Vietnam aged between 19 and 20 with a mean age of 19;06. C1 consisted of nine male and five female students, whereas C2 consisted of six male and 21 female students.

There was also a control group (CG) of 12 students aged between 19 and 20 with a mean age also of 19;06. 10 were female and two were male. They were drawn from the same population as C1.

### 2.2. Materials

The materials used in the training were selected mainly from Wells [14] and partly from Bradford [2], and focused on the intonation of sentence types (e.g. statements, questions, exclamations and commands) and associating intonation with new and given information, i.e. the discourse function. All exercises took the form of drills which focused on tonality, tonicity and tone.

### 2.3. Procedure

The training was undertaken in the form of action research with four stages: plan, act, observe, and reflect [8, 10]. The intervention took the form of teaching English intonation and work on LLS. As is normal in action research [10], this was implemented in two three-stage cycles each consisting of four two-and-a-half hour training sessions, which totals 12 training sessions within the period of 12 weeks spread over each cycle. Students discussed their use of LLS in groups before and during the training.

**Cycle 1:** Learners were first introduced to concepts in and examples of LLS [1, 9] and required to decide what their preferred and best strategies were. They were then asked to adopt them during the training period, and reflect on their use in a learner journal (not reported on here). They were subsequently trained in intonation using drills, focusing on patterns for different sentence types.

**Cycle 2:** Teaching in the second cycle was adjusted from Cycle 1 in terms of the LLS based on the successes and failures in the first cycle. The main focus was placed on cognitive strategies, i.e., imitation / shadow talking [9]. It was also adjusted in terms of focus; training was confined to two aspects of intonation, i.e., tonicity (nucleus placement) and tone. In terms of tone, three were drilled: fall, rise and fall-rise on different sentence types and in conversation. The procedures were repeated as in Cycle 1.

### 2.4. Measurement of perception tests

The perception ability of learners in C1 and C2 was assessed by means of three identical tests administered prior to, during and after the intervention, i.e., in weeks -1, 6 and 12. The CG only did the pre- and post-tests. The tests were exacted from passages in Wells [14] in which the same sentence was spoken with eight different intonation patterns by a British native speaker. The test-takers’ task was to identify the nucleus or nuclei and tone(s) in each utterance. Each utterance scored three points for tonicity and three for tone; if the utterance contained two or three intonational phrases, the score was split accordingly. The highest perception score possible was 24 points (8x3) for tonicity and 24 points for tone.

### 3. RESULTS

Non-parametric statistical tests were carried out owing to the small group sizes; significance is set at  $p \leq 0.05$ .

Tables 2-7 show the scores from the pre-, mid- and post-tests across all three groups for tonicity and tone out of a maximum possible 24 points. Scores are rounded two decimal points.

**Table 2:** Pre-test scores: tonicity.

group	lowest	highest	average	StDev
GC	0	16.50	2.92	5.76
C1	0	12.00	1.28	3.27
C2	0	16.50	6.16	4.85

**Table 3:** Pre-test scores: tone.

group	lowest	highest	average	StDev
GC	0	6.00	1.00	1.85
C1	0	4.00	0.54	1.08
C2	0	13.50	4.50	5.13

Tables 2 and 3 show a slight starting advantage for C2, whose pre-test averages for both tonicity and tone are higher than CG or C1. The difference between C1 and C2 in both tonicity and tone identification is significant ( $p < 0.05$ ).

**Table 4:** Mid-test scores: tonicity.

group	lowest	highest	average	StDev
GC	-	-	-	-
C1	0	22.50	13.25	7.18
C2	12	22.50	19.04	3.99

**Table 5:** Mid-test scores: tone.

group	lowest	highest	average	StDev
GC	-	-	-	-
C1	0	14.00	6.36	4.29
C2	0	19.00	9.38	4.89

Tables 4 and 5 show that C2 does better than C1 in the mid-test in both tonicity and tone identification. These scores are significantly different at  $p \leq 0.05$ .

**Table 6:** Post-test scores: tonicity.

group	lowest	highest	average	StDev
GC	0	22.5	4.88	7.49
C1	6	24	16.39	6.77
C2	15.5	22.5	19.25	2.42

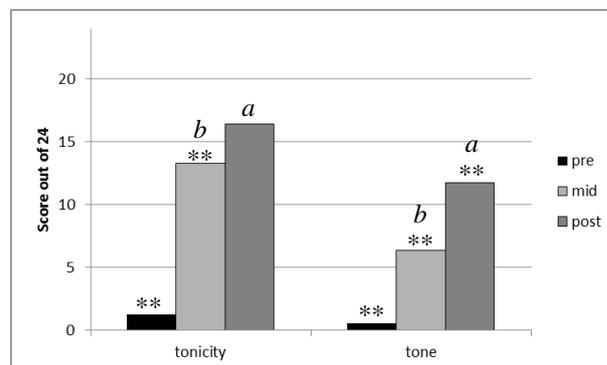
**Table 7:** Post-test scores, tone.

group	lowest	highest	average	StDev
GC	0	3	1.25	1.29
C1	6	21	11.75	5.71
C2	9	22	12.92	3.77

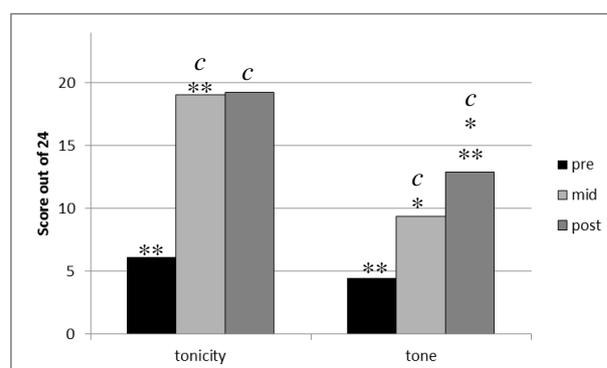
The results for the post-test show that C2 performed better on average than either C1 or CG. In terms of tonicity, there was much less variance amongst the participants in C2 as shown by the standard deviation, which indicates that more students scored nearer the average. There is not so much of a difference in variance for tone, however, except that CG shows very little (but performed very poorly). For tonicity, the difference between CG and C1 is highly significant at  $p = 0.002$ , and between CG and C2 is very highly significant at  $p < 0.001$ , with no significant difference between C1 and C2. For tone, the pattern is similar; the difference between both C1 and C2 and CG is very highly significant at  $p < 0.001$ , with no significant difference between C1 and C2.

Figures 1, 2 and 3 show a comparison of the tests scores for tonicity and tone by group. Significance at  $p < 0.05$  is indicated with \* or *a*, at  $p < 0.01$  with *b*, and at  $p < 0.001$  with \*\* or *c*. Asterisks are used for within-feature comparisons; *a*, *b* or *c* compare performance across features, but only for tests taken at the same time.

**Figure 1:** C1 scores comparison.



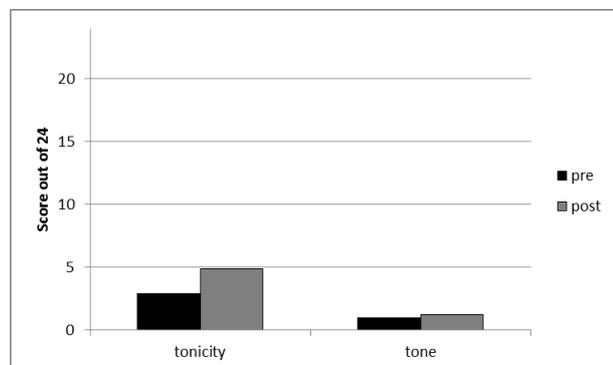
**Figure 2:** C2 scores comparison.



The Figures indicate that there is improvement in both groups in perception of tonicity and tone across the three tests, but the improvement in tonicity is not statistically significant from the mid-

to the post-test. Improvement in tone, although not as significant as in tonicity, is consistent across the tests. Improvement in CG is negligible.

**Figure 3:** CG scores comparison.



#### 4. DISCUSSION

The aim of this study was to find out whether, by using an action research paradigm, focus on certain features of English intonation (tonicity and tone) in combination with selected individual LLS could improve the performance of Vietnamese students in a listening test.

The results show that it is possible for learners to improve performance in tonicity and tone identification. However, although learners did better overall in tonicity and showed improvement across all tests in this feature, the scores were only significantly better between the pre- and post-tests, with small but negligible improvement between the mid- and post-tests. This is particularly true for C2, although the standard deviation scores show that there was less variation by the time of the post-test. For tone identification, scores were lower overall, but improvement was consistent.

It is necessary to interpret these results with caution. Firstly, C2 started with significantly better performance in the pre-test than C1, and secondly, there is a possibility that learning effect may have played a part, as the material in each of the three tests was identical on every occasion. It should also be noted that the sample size is very small and the results cannot therefore be overgeneralized.

Concerning the changes made to the focus of instruction in the action research paradigm, the results are inconclusive; C2 did better overall than C1, but the difference is not statistically significant, and it is difficult to evaluate the effects of different LLS. It may, therefore, be the case that any teaching which focuses on intonation will have a positive effect on the identification of tonicity and tone amongst learners.

The fact that identification of tonicity is improved amongst these groups of learners has positive implications for international intelligibility in English. Tonicity is one of the few suprasegmental aspects of speech to be identified as 'critical' for communication in situations where English is used as a lingua franca [7]; it is hoped that the marked improvement seen in this study will help these learners perform better from the perspective of perception of meaning. We therefore recommend that teachers of Vietnamese or, indeed, other learners spend time on tonicity, as it does indeed seem to be learnable.

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