Learner Uptake and Perception of Recasts

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Learner immediate response (i.e., uptake) to recasts has been discussed in a considerable amount of research in the field of second language acquisition (SLA). Many different interpretations of learner uptake have been proposed. One of them defines uptake as an indication of learner noticing of recasts. However, only a limited amount of research has actually examined how learner uptake is associated with learner perception of recasts. The current study examined how learners actually respond to recasts provided in the classroom. In addition, it investigated whether or not learner uptake was related to learner perception of recasts and how the quality of learner uptake was associated with the depth of learner awareness. Nine intact English classrooms were observed and video-taped. Eighty-eight students participated in either oral or written stimulated recall sessions. They viewed the video clips of their own classes and recalled the moments when they received recasts. The analyses of classroom interaction and students’ comments indicated that they responded to recasts to a considerable extent when they had an opportunity for uptake. Learner uptake of recasts was found to be related to learner perception of recasts. It was also revealed that the students much more frequently perceived the gap when they showed successful uptake compared to the cases where they did not.

I. INTRODUCTION

Recasts, a type of corrective feedback, have received considerable attention from second language acquisition (SLA) researchers and have been investigated in a number of descriptive and experimental studies in both laboratory and classroom contexts (Long, Inagaki, & Ortega, 1998; Mackey, 2006; Nicholas, Lightbown, & Spada, 2001). Recasts can be generally defined as a teacher’s isolated or expanded rephrasing of a student’s erroneous utterances into a target form, while retaining its original meaning (Sheen, 2006). Recasts are provided immediately after the learner’s erroneous utterances. Hence, the
juxtaposition of the incorrect form and the correct form of the learner’s utterance in recasts may trigger him/her to compare the difference (i.e., noticing the gap), and this has been considered a catalyst of second language (L2) learning (Long, 2007). In addition, recasts retain the learner’s initial meaning; therefore, the learner already has prior understanding of at least, if not all, of the message. This may enable the learner to have “additional freed-up attentional resources which can be allocated to the form of the response” (Long, 2007, p. 78).

Research into recasts has mainly focused on examining (a) their effectiveness in L2 learning (Han, 2002; Long et al., 1998) and (b) immediate learner responses to recasts (Ellis, Basturkmen, & Loewen, 2001; Lyster & Mori, 2006). Thus far, recasts have been found to be facilitative in L2 learning although their effectiveness is constrained by both learner internal factors (i.e., proficiency levels, readiness, and working memory) and external factors (i.e., target linguistic features) (Mackey, Philp, Egi, Fujii, & Tatsumi, 2002; Philp, 2003). With regard to learner immediate responses to recasts, researchers have found that recasts elicit the least frequent responses compared to other types of feedback (i.e., clarification requests) (Lyster & Ranta, 1997; Panova & Lyster, 2002). However, it is also claimed that the frequency of learner uptake is largely affected by contextual factors (i.e., ESL settings vs. EFL settings; adults vs. children) (Ellis et al., 2001; Sheen, 2004). In addition, more recently, researchers have investigated the relationship between learner uptake and characteristics of recasts (i.e., intonation of recasts, length of recasts, target linguistic features, etc.) (Kim, 2009; Sheen, 2006).

As a matter of fact, learner responses to recasts have attracted the attention of not only L2 researchers but also L2 practitioners. One of the many reasons for this interest is that recasts are widely known as a type of corrective feedback teachers provide most often in L2 communicative classrooms. Recasts, by their implicit nature, are non-threatening and unobtrusive, which is well suited for meaning-oriented classrooms. This might be the reason teachers favor recasts over other types of recasts. However, due to their implicit nature, it is not feasible for teachers to observe whether or not learners actually perceive the correction in the form of recasts. The only kind of learner behavior that might be feasible and observable is their immediate responses to recasts: learner responses could be readily available signals that indicate whether learners actually perceive recasts (Lichtbown, 1998).

Unfortunately, despite the growing attention to learner responses and perception, little empirical research has been conducted to determine any real relationship between the two. For this reason, the current study aims to examine whether learner responses to recasts are related to learner perception of recasts. Furthermore, the study will explore how different types of learner responses are related to different levels of learner awareness of recasts. To this end, this paper will first review previous studies on learner responses to recasts to
II. LITERATURE REVIEW

1. Learner Responses to Recasts

As has been widely recognized, Lyster and Ranta’s (1997) research into corrective feedback in French immersion classrooms has spawned many studies into learner responses to corrective feedback (McDonough & Mackey, 2006; Panova & Lyster, 2002). In their study, Lyster and Ranta coined the term ‘uptake’ to refer specifically to learner immediate response to feedback. Since then, L2 researchers have used ‘uptake’ to refer to learners’ responses to corrective feedback. Lyster and Ranta defined two types of uptake depending upon its quality: (a) uptake that results in the repair of the error which the feedback targeted, and (b) uptake that results in an utterance that still needs repair (i.e., needs-repair). The fine-grained analysis of 18.3 hours of classroom interaction revealed that although recasts were the most frequently used type of corrective feedback, they elicited the lowest rate of learner uptake. When the quality of uptake was examined, recasts resulted in the lowest rate of repairs, and all of these repairs involved repetition of the teacher’s recasts. This finding led the researchers to deduce that recasts may not be perceptible and that the repetitions that follow recasts do not necessarily indicate that learners actually notice the corrections made in recasts.

Many researchers have investigated the same question that Lyster and Ranta (1997) explored in their study (Lyster & Mori, 2006; Panova & Lyster, 2002). Some of these studies have reported more evidence that supports such skepticism of recasts. For instance, Panova and Lyster (2002), following Lyster and Ranta’s taxonomy of corrective feedback and learner uptake, examined how adult learners in ESL classrooms in Canada responded to different types of feedback. The finding parallels Lyster and Ranta’s: although recasts were the most frequently provided form of correction, they elicited the lowest rate of uptake and repairs.

As opposed to the studies that revealed the dearth of learner uptake of recasts, other research found that a high rate of uptake and repairs followed recasts. As an example, Ellis et al. (2001) analyzed the data of 12 hours of communicative ESL teaching in New Zealand. Concurring with the aforementioned studies, recasts were the most frequently used type of corrective feedback. However, they also found a fairly high rate of uptake (71.6%) and repairs (76.3%, successful uptake in Ellis et al.’s term). A similar result was reported in Sheen’s (2004) research in EFL classrooms in Korea. Ellis et al. (2001)
attributed the different rate of learner uptake to contextual differences – in the classrooms that are more meaning-oriented, less learner uptake occurs; in more form-oriented classrooms, more learner uptake takes place. Likewise, Nicholas et al. (2001) consider contextual variables as a factor that can determine the effectiveness of recasts.

Besides contextual variables, more recently, researchers have scrutinized the relationship between learner uptake and the different characteristics of recasts. More precisely, instead of looking at recasts as an entity, researchers have started classifying recasts depending on the manner in which they are provided (e.g., declarative form vs. interrogative form) and on the linguistic features recasts target (e.g., morphosyntax, lexicon, and phonology) (Kim, 2009; Loewen & Philp, 2006; Sheen, 2006). These attempts reveal that learner uptake of recasts is largely related to the characteristics of recasts, which actually implies that the salience of recasts can be manipulated by recast providers.

2. Interpretation of Learner Uptake

The dearth of learner uptake of recasts fuels the skepticism that some researchers have about the effectiveness of recasts in L2 learning (Lyster & Ranta, 1997; Panova & Lyster, 2002). However, the validity of this skepticism has been argued (Long, 2007). One assertion that has been used to counter arguments against the effectiveness of recasts due to the lack of uptake is that recasts do not require learners to respond. In other words, responding to recasts is an optional discourse move. By contrast, other types of feedback which are compared with recasts – clarification requests and elicitations – require learners to respond to the feedback. Moreover, learners do not always have the opportunities to respond to recasts. Teachers, oftentimes, continue talking after providing recasts (Kim, 2009; Nabeie & Swain, 2002; Oliver, 1995). In this regard, it is not logical to evaluate the effectiveness of recasts in L2 learning according to the frequency of learner uptake that follows recasts.

It is also incongruent to equate learner uptake with L2 learning because immediate responses do not always mean long-term acquisition. Long (2007) notes that a learner’s ability to repeat a teacher’s model utterance is “notoriously unreliable as an indication that the structure involved has really been learned” and “it is all too often no more than ‘language-like’ behavior” (p. 99). Similarly, Ellis et al. (2001) mention that learners’ successful uptake does not indicate acquisition of a feature. Rather, learners’ ability to autonomously use the feature in their own later utterances without prompting (i.e., feedback) seems a more reliable indication of learning.

Since research has argued for the association between the learner uptake and L2 learning, Loewen (2005) empirically investigated whether learner uptake could be a
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reliable signal of L2 learning. He analyzed 32 hours of meaning-based lessons in 12 ESL classes. He found that what was related to L2 learning was not the presence of uptake but the quality of uptake. More precisely, only successful uptake (i.e., learners’ successful incorporation of the linguistic information into their responses) was reliably related to L2 development, while general uptake (i.e., any responses) was not. In a similar vein, Shekary and Tahirian (2006) found that successful uptake was a strong predictor of L2 development. What these studies show is that not all uptake moves are equal in their contribution to L2 learning.

These studies raise the question of what makes learners respond to feedback in a different way. One possible answer to this question is related to how learners perceive feedback. A number of researchers take learner uptake as a sign of learner perception of feedback (Lyster & Ranta, 1997; Mackey, Gass, & McDonough, 2000; Sheen, 2004). Consistent with this claim, Mackey et al. (2000) found a relationship between learner uptake and perception in their research into learner perception of feedback in dyadic interaction. Learners who received the feedback during a dyadic task activity correctly recalled and identified the linguistic focus of the feedback when they modified their erroneous utterances 66% of the time. In contrast, when they did not modify their problematic utterances (89%), they failed to identify the target of the feedback in their recall. Although the relationship between learner uptake and perception has been discussed in many studies, unfortunately little empirical research has been conducted to prove their association.

Indeed, according to Schmidt (2001), perception of recasts is a vehicle for internalizing the linguistic information in recasts (i.e., reformulation embedded in recasts). Likewise, Carroll (2000), in her detectable hypothesis, claims that for implicit feedback to be effective, it is necessary for learners to recognize the linguistic problems targeted by the feedback. Mackey (2006) empirically proved a positive relationship between learner perception of feedback and subsequent L2 learning.

Learners do not always perceive recasts as correction to language; moreover, they do not always correctly perceive the linguistic information in the recasts even though they perceive the feedback in the classroom (Kim & Han, 2007; Roberts, 1995). Learners will require a different level of awareness of recasts when they merely perceive the corrective function of recasts from when they perceive the difference between their initial utterances and the reformulated forms in recasts (i.e., noticing the difference). They will need cognitive comparison for the latter process (Schmidt, 1990). This different level of perception is attributed to the contribution of recasts to L2 acquisition differently (Schmidt, 2001). Consequently, previous research would arguably support the hypothesis that learner uptake may be a manifestation of a different level of cognitive process. The current study aims to examine this hypothesis, raising three research questions:
1) To what extent do learners respond to recasts? 
2) Is learner uptake related to learner perception of recasts? 
3) Is the quality of learner uptake related to the depth of learner awareness of recasts?

III. METHODS

1. Context and Participants

Nine intact high-beginning/low-intermediate EFL adult classes\(^1\) (9 teachers and 88 students) in Korea participated in the study. The classes were designed to help learners improve their communicative skills through oral/listening practice in English guided by a theme-based textbook. There was very limited explicit grammar instruction. However, when explicit grammar instruction was necessary (e.g., a student asked for the explanation), the instruction was given. The classes met four times a week for 90 minutes per session. On the days the study was conducted, the class size ranged from 8-13.

The students, aged between 20 and 45, had studied English for more than 10 years in Korea. None of them had studied in an English-speaking country. The teachers (2 males; 7 females) were native speaker of English and had taught EFL classes for more than two years. Since the study aimed to examine learners’ responses to recasts and their perception of recasts naturally occurring in the classroom, teachers and students were not informed of the specific purpose of the study. Instead, they were informed that the focus of the study was on general teacher-student interaction.

2. Procedure

1) Class Observation

Each class was observed and video-taped on a different day. In addition to video-taping, clip-on microphone was attached to the teachers for audio-recording.

2) Clipping the Class Tapes

After the class, the students had a 95-minute break. During the break, the tapes were

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\(^1\) The students were placed into high-beginning/low-intermediate levels according to their scores on the school’s placement test (i.e., an oral test).
reviewed by the researcher and a research assistant (RA). Instances of recasts were clipped. Instances of other types of feedback and of the teacher’s responses to content were also clipped as distractor items.

3) Stimulated Recalls

Learner perception of recasts was measured using two different types of stimulated recalls – oral and written stimulated recall. Oral stimulated recall is widely used in L2 research (Egi, 2007; Mackey et al., 2000; Kim & Han, 2007). It is usually conducted in the form of an individual interview, hence provides researchers with a means to gather in-depth data. However, it does not allow the researcher to collect data from a large number of participants in a short time. By contrast, written stimulated recall enables researchers to gather a slew of data in a limited time. Written reports are considered to be comparable to oral reports in their ability to document participants’ thoughts (Carpenter, Jeon, MacGregor, & Mackey, 2006; Mackey & Gass, 2005; Roberts, 1995). A detailed discussion of each protocol is presented below.

(1) Oral Stimulated Recall (OSR)

Five volunteers from each class (total 45 students) participated in the oral stimulated recall (OSR hereafter) session. After the researcher finished clipping the tapes, she interviewed each student. In the recall session, the students watched the clips of their class. After each clip, the researcher prompted the student to recall what he/she was thinking at the moment when the recast was provided (e.g., “What were you thinking at the time?” and “Can you tell me what you were thinking when the teacher said that?”). The same questions were also asked after clips of other types of feedback and of teachers’ responses to content. The interview was conducted in Korean and audio-taped. Then it was transcribed and translated into English.

(2) Written Stimulated Recall (WSR)

The written stimulated recall (WSR hereafter) employed in this study was adapted from Carpenter et al. (2006). It determined the focus of students’ reports through the use of multiple choice questions (see Appendix). The RA administered the recall session. After the break, the rest of the students who did not participate in the oral stimulated recall session took part in the written stimulated recall session. They gathered in a classroom and watched the same clips of the class that the oral stimulated recall group would watch. A sheet was provided in advance so that the students could answer questions after watching

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2 She was a doctoral student majoring English Education in a university in Korea.
the clips. They were asked to indicate whether they thought the teacher was: (a) trying to correct (and if so to write down the error(s) corrected), (b) confirming to understand what the student said, or (c) asking a question and/or asking for information. If they did not remember what they were thinking, they were instructed to check (d) I don’t know. They were also allowed to write their own thoughts on a blank line under (e) other. In addition, as a means of indentifying whether recasts were directed to themselves or others, they were asked to put a check mark in front of the number on the given sheet if the interaction s/he watched occurred between her/himself and the teacher.

3. Coding

1) Recasts Episodes

A recast episode was operationalized as a sequence of one or more feedback turns, involving at least one recast. It started with a student’s erroneous utterance which then received a recast from a teacher, and ended with a student’s utterance indicating either a response to the recast or topic continuation.

2) Learner Uptake

Building on Lyster and Ranta (1997) and Ellis et al. (2001), uptake was classified into three types: (a) uptake, (b) no uptake, and (c) no opportunity. Uptake included such cases as (a) repetition (i.e., the student simply repeated the recast), (b) incorporation (i.e., the student repeated the recast and incorporated the correct form into a longer utterance, (c) acknowledgement (i.e., the student respond to the teacher by simply saying ‘yes’ or ‘nodding’), and (d) same error (i.e., the student repeated the initial error in his/her response to the recast) – (a) and (b) were defined as successful uptake and (c) and (d) as unsuccessful uptake. Below are examples of successful uptake, unsuccessful uptake, and no uptake.

Example [1] Successful uptake/repetition
S: Usually I get up at 6 am and go to this class.
T: Come to this class.
S: Come to this class. Finish about at 8:30. I go to… go to my class.

Example [2] Unsuccessful uptake, acknowledgment
S: I don’t go department store. When I want to book, I go to Kyo-bo. It is only big store I use.
T: Kyo-bo is the only big store you use?
S: Yes.

Example [3] No uptake
S: I think… she… she is sitting in the chair
T: Okay, sitting on the chair.
S: She hold… she is holding… ball.

3) Students’ Perception of Recasts

Perception was considered isomorphic with noticing, and following Schmidt (1990, 2001), it was operationalized as interpretative comments on the intent of the teacher’s response to a student’s utterance.

(1) Oral Stimulated Recall
① No Perception of Recasts as Correction
The category of no perception of recasts as correction contained instances in which the students failed to perceive a recast as a correction to an erroneous utterance.

② Perception of Recasts as Correction
The category of perception of recasts as correction included cases where students perceived a recast as a correction to an erroneous utterance. This category was further categorized into two types: (a) no perception of gap consisted of those cases where the student knew that a recast was given as correction to an error, but failed to identify the real linguistic problem that elicited the recast; (b) perception of gap consisted of those cases where the student not only knew that the teacher made a correction but also perceived the difference between the trigger utterances and the linguistic information contained in the recast.

③ No Comment
This category included the comments that expressed inability to recall anything related to a particular recast episode (e.g., I don’t know).

(2) Written Stimulated Recall
The students’ answers to the multiple choice questions were coded in the following way: cases where a student checked ‘(a) trying to correct’ were coded as perception of recasts as correction. Within this category, cases were the student was able to identify the error that was corrected were coded as perception of gap. On the other hand, cases where the student
failed to identify the error that was corrected were coded as no perception of gap. No perception of recasts as correction entailed cases where the student checked ‘(b) confirming to understand what the student said’ or (c) asking a question and/or seeking more information’. Cases where the student checked ‘(d) I don’t know’ were coded as no comment. Other comments written in ‘(e) other’ were reviewed to examine if the comment could be coded as one of the previous four categories.

VI. RESULTS AND DISCUSSION

Through the stimulated recall (oral or written recall), the students commented on not only the recasts directed at themselves but also those directed to others. Since the purpose of the current study is to examine the relationship between learner uptake and perception, the students’ comments on the recasts that were directed at them were the object of the analysis.

1. Chances of Learner Uptake

A total of 183 recasts were observed. Table 1 shows raw frequencies and percentages of uptake, viz., the students’ immediate responses to the teachers’ recasts. Out of 183 recasts, the students were given an opportunity to respond to the teachers’ recasts 60% (111 tokens) of the time. By contrast, 40% of recasts were followed by the teachers’ topic continuation, thereby not giving the students the opportunity for uptake. While several studies reported that a majority of recasts were provided without an opportunity for learners to respond (Lyster & Ranta, 1997; Oliver, 1995, 2000), more than half of the recasts in this study gave students an opportunity to respond.

<table>
<thead>
<tr>
<th>Uptake</th>
<th>No uptake</th>
<th>No opportunity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful</td>
<td>68 (37%)</td>
<td>28 (15%)</td>
<td>96 (71% + 15%)</td>
</tr>
<tr>
<td>Unsuccessful</td>
<td>28 (15%)</td>
<td>15 (8%)</td>
<td>43 (28% + 15%)</td>
</tr>
<tr>
<td>Uptake</td>
<td>68 (37%)</td>
<td>28 (15%)</td>
<td>96 (71% + 15%)</td>
</tr>
<tr>
<td>No opportunity</td>
<td>15 (8%)</td>
<td>72 (40%)</td>
<td>87 (28% + 40%)</td>
</tr>
</tbody>
</table>

When the students had a chance for uptake, they responded to the teachers’ recasts 86% (96 out of 111) of the time, and of the 96 uptake instances, they generated 71% (68 instances) successful uptake. These rates were far higher than what Lyster and Ranta

\[3 \text{ The total number of the cases where the students had a chance for uptake was computed by combining the instances of uptake and no uptake.} \]
(1997) reported on their data from French immersion classes: recasts elicited uptake only 31% of time. Similarly, Mackey and Philp (1998) found that only 33% of recasts were repeated or modified in native and non-native speaker interaction. The higher frequency of opportunities for student uptake presented in the current study compared to previous studies may be attributed to the different focus across classes. In classes where the emphasis is on content rather than on language, teachers usually do not permit students to uptake their recasts, preferring to continue topic development. On the other hand, like the classes which participated in the current study, when the primary focus of the class is on language, even when they are meaning-based, teachers are less likely to choose topic continuation over allowing students to respond. Consequently, learners tend to respond to recasts more actively. Whether such active responses are related to their awareness of the corrective function of recasts and/or the gap between their initial erroneous utterances and recasts will be discussed in light of the second and the third research questions.

2. Learner Uptake and Perception of Recasts

As concerns the students’ perception of gaps, illustrated in Table 2, the OSR group demonstrated 82% (53 out of 65) perception of gaps for the recasts which resulted in uptake. They showed 25% (2 out of 8) perception of gaps in the case of recasts they did not respond to despite the given opportunities. On the other hand, they demonstrated 34% (15 out of 44) perception of gaps in the case of recasts provided without opportunities for uptake. Learner uptake is largely related to how learners perceived recasts as shown by the frequency of perception of gaps, no perception of gaps, and no perception of recasts as correction corresponding to the existence and absence of learner uptake. The output of chi-square analyses also suggested a significant relationship between learner uptake and learner perception of recasts ($\chi^2=30.902; df=4; p=.000; Cramer’s V=.365$).

| Learner Perception of Recasts and Uptake in OSR Group |
|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | Uptake          | No uptake       | No opportunity  | Total           |
| PG              | 53 (82%)        | 2 (25%)         | 15 (34%)        | 70 (60%)        |
| NPG             | 2 (3%)          | 1 (13%)         | 1 (2%)          | 4 (3%)          |
| NRC             | 10 (15%)        | 5 (62%)         | 27 (62%)        | 42 (36%)        |
| NC              | 0               | 0               | 1 (2%)          | 1 (1%)          |
| Total           | 65              | 8               | 44              | 117             |

(Note: PG=Perception of gaps; NPG=No perception of gaps; NRC=No perception of recasts as correction; NC=No comment)

As illustrated in Table 3, the WSR group showed 65% (20 out of 31) of perception of gaps for the recasts which resulted in uptake. When they did not show any uptake despite
the given opportunity, they demonstrated 29% (2 out 7) perception of gaps. The recasts provided without opportunities for uptake resulted in 14% (4 out of 28) perception of gaps. A chi-square analysis yielded that learner perception of recasts and uptake were significantly associated ($\chi^2=16.808; df=4; p=.002; \text{Cramer's } V=.360$).

<table>
<thead>
<tr>
<th></th>
<th>Uptake</th>
<th>No uptake</th>
<th>No opportunity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG</td>
<td>20 (65%)</td>
<td>2 (29%)</td>
<td>4 (14%)</td>
<td>26 (39%)</td>
</tr>
<tr>
<td>NPG</td>
<td>0</td>
<td>0</td>
<td>2 (7%)</td>
<td>2 (3%)</td>
</tr>
<tr>
<td>NRC</td>
<td>11 (35%)</td>
<td>5 (17%)</td>
<td>21 (75%)</td>
<td>37 (56%)</td>
</tr>
<tr>
<td>NC</td>
<td>0</td>
<td>0</td>
<td>19 (4%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>31</td>
<td>7</td>
<td>28</td>
<td>66</td>
</tr>
</tbody>
</table>

(Note: PG=Perception of gaps; NPG=No perception of gaps; NRC=No perception of recasts as correction; NC=No comment)

The results described above suggest that for recasts to which the students responded, their recall reports indicated that they perceived the corrective function of recasts and the gap far more frequently, particularly if compared to the cases where they did not respond to recasts. This result provides empirical evidence to suggest that learner uptake can be indicative of learner perception of didactic function of recasts and/or corrected form (Lightbown, 1998; Mackey et al., 2000). However, the study cannot ignore the cases in which the students did not perceive the gap or did not even perceive the corrective function of recasts even when they responded to the recasts. This suggests that the interpretation of learner uptake must be conducted with caution and, in turn, questions the relationship between the quality of uptake and learner perception.

3. The Quality of Learner Uptake and the Depth of Learner Awareness

In order to investigate the relationship between the quality of learner uptake and the depth of learner perception, learner uptake was further looked into depending on whether uptake was successful or not. As Figure 1 shows, in the case of successful uptake, the students in the OSR group perceived the gap 98% of the time. On the contrary, in the case where the students showed unsuccessful uptake, they showed only 27% of perception of gaps. This pattern was very similar to the students’ perception when they showed no response to the recast despite having the opportunity for uptake.
FIGURE 1
Learner Perception of Recasts by Uptake Types in OSR Group
(Note: SU=Successful Uptake; USU=Unsuccessful uptake; NU=No Uptake; NPC=No Perception of Recasts as Correction; NPG=No Perception of Gaps; PG=Perception of Gaps)

FIGURE 2
Learner Perception of Recasts by Uptake Types in WSR Group

As indicated in Figure 2, the students in the WSR group showed 100% of perception of gaps for the cases where they performed successful uptake. In contrast, when they did not successfully respond to the recasts, they only perceived the gaps 15% of the time. Interestingly, this rate was even lower than the rate of learner perception of gaps when the students did not respond to the recasts.

As an attempt to examine the association between successful uptake and perception of gaps, a correlation analysis was performed. As shown in Table 4, for the OSR group, the obtained $r$ value is .824, and for the WSR group, .822 was obtained. The magnitude of $r$ indicates how well learner perception and successful uptake correlate. The closer the value is to 1, the stronger the relationship between the two variables (Hatch & Lazaraton, 1991). By squaring the value of $r$, the extent to which perception of gaps and successful uptake were overlapped was calculated. 68% overlap between learner perception of gaps and successful uptake observed in both OSR and WSR groups as indicated in Table 4. This can be interpreted as a fairly strong association (Hatch & Lazaraton, 1991).
The findings suggest that learner uptake should not be treated as a unitary entity. More specifically, learners’ responses to recasts represent a different level of learner awareness. For learners, noticing the difference between their problematic forms and the reformulated form embedded in recasts requires a deeper level of awareness than noticing the corrective function of recasts since the former requires a cognitive comparison between the two forms (Saxton, 1997; Schmidt, 2001). This is a similar process what Schmidt defines as ‘understanding’ (Schmidt, 1990). As illustrated in Table 4, successful uptake is a fairly reliable indication of learner noticing the gap. Such result accounts for Loewen’s (2005) finding that only successful uptake brought about L2 development. Learner noticing of gaps is supposedly beneficial for learning process (Long, 1996; Mackey, 2006; Schmidt, 2001). Noticing the gaps is particularly effective in rejecting the non-targetlike form in favor of the correct form, thereby accelerating interlanguage destabilization (Long, 2007). Mackey’s (2006) research examined this claim and found the beneficial role of noticing the gap triggered by corrective feedback in L2 development.

As opposed to successful uptake, unsuccessful uptake does not necessarily involve cognitive comparison. In the current study, most cases of unsuccessful uptake (25 out of 28) belonged to the cases where the students showed a simple acknowledgement (e.g., nodding or saying ‘yes’). Logically, we can suppose that cognitive comparison of two forms would not be a necessary process for a simple acknowledgement. As a matter of fact, only three comments (12%) on the acknowledgement indicated perception of gaps. In contrast, for all the cases where the students attempted to use the reformulated form in the following utterance but failed to use it correctly (3 out of 28) (identified as ‘same error’ in the classification of the quality of uptake), they reported perception of gaps. It seems difficult to make any generalization based on this finding due to the small number of instances of ‘same error.’ However, as Swain (2005) argues great cognitive efforts are involved in the process where learners modify their output in response to feedback (i.e., pushed output), it can be assumed that learners’ endeavor to use the reformulated form demands a high level of awareness although their attempts are not successful (Mackey, 2007).

<table>
<thead>
<tr>
<th>Perception of gaps &amp; Successful uptake</th>
<th>OSR Group</th>
<th>WSR Group</th>
</tr>
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<tbody>
<tr>
<td>Perception of gaps</td>
<td>$r = .824$</td>
<td>$r = .822$</td>
</tr>
<tr>
<td>Successful uptake</td>
<td>$r^2 = .68$</td>
<td>$r^2 = .68$</td>
</tr>
</tbody>
</table>

(Note: The overlap rate is computed by squaring the value of $r$.)
V. CONCLUSION

The present study examined the extent to which learners actually received the opportunity for uptake and their responses to recasts. In addition, by means of stimulated recall, the study investigated whether or not learner uptake was related to learner perception of gaps and whether or not the quality of uptake was related to the depth of learner awareness. The results showed that 60% of recasts were provided with an opportunity for learner uptake. When the uptake chances were provided, the students responded to the recasts 71% of the time and 86% of uptake turned out to be successful uptake. When it comes to learner perception, a strong relationship was observed between learner uptake and perception of gaps. However, when uptake was further analyzed according to the quality of uptake, it was found that the absence of uptake was not a crucial indication of perception of gaps. Instead, what was important was how they responded to recasts (Loewen, 2005). Only 27% of unsuccessful uptake in the OSR group and 15% in the WSR group were found to be the cases of learner perception of gaps. In contrast, in the case of successful uptake, the learners reported perception of gaps when they demonstrated successful uptake 98% of the time in the OSR group and 100% in the WSR group. This finding suggests a strong relationship between the quality of learner uptake and the depth of learner cognitive process.

The finding of the current study provides empirical evidence for the theoretical claim that successful uptake may be a critical indication of noticing (Lightbown, 1998; Loewen, 2004): “a reformulated utterance from the learner gives us some reason to believe that the mismatch between learner utterance and target utterance has been noticed, a step at least toward acquisition” (Lightbown, 1998, p. 193). The study also suggests that neither the presence nor the absence of uptake can serve as a reliable token of learner noticing of gaps, as Mackey and Philp (1998) suggests. In the language classroom, learner uptake is a readily available indication of learners’ immediate recognition of feedback. As found in this study, learner uptake seems to represent a different level of cognitive process. This suggests a need for teachers to be attentive to how students respond to recasts.

Learner uptake of feedback has been hotly debated. However, only a limited amount of research has examined what uptake actually means. In this regard, the current study contributed to find a link between the quality of learner uptake of recasts and learner awareness of the recasts. Research into uptake and the level of awareness deserves more research considering the pedagogical value that uptake has. In addition, it would be interesting to examine the relationship among uptake, noticing, and L2 development.
REFERENCES


**APPENDIX**

Written Stimulate Recall

Name: ______________________________

You are going to watch a video tape of your class with me. I will pause the video a few times while you are watching it. Each section involves an interaction occurring between a student (maybe you, maybe another classmate) and your teacher. When I pause the video, answer what you were thinking when the teacher was speaking. Check the answer that is closer to what you were thinking, or write another answer (you may use your native language, if you like).

If the interaction is one occurring between yourself and your teacher, please put a √ in front of the number.

Do you have any questions? Now I will begin to play the tape.

1. I thought the teacher was
   ____ (a) trying to correct.
     if so, write down the error(s) corrected: ____________________________
   ____ (b) confirming to understand what the student said.
1. I thought the teacher was
   (a) trying to correct.
   if so, write down the error(s) corrected: ___________________________
   (b) confirming to understand what the student said.
   (c) asking a question and/or asking for more information.
   (d) I don’t know what I thought at that time.
   (e) other(s): ___________________________________________________

2. I thought the teacher was
   (a) trying to correct.
   ___________________________
   (b) confirming to understand what the student said.
   (c) asking a question and/or asking for more information.
   (d) I don’t know what I thought at that time.
   (e) other(s): ___________________________________________________

Applicable levels: Adult education and college level
Key words: Perception of recasts, recasts, learner uptake, meaning-based EFL classrooms

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