

How Learners' Affective Variables Impact Their Perception Of Recasts In The Acquisition Of Grammatical Gender In L2 French

Virginie Dasse-Askildson

The goal of this study is to investigate whether motivation as an affective variable plays a role in how beginning language learners may perceive recasts (i.e., implicit negative feedback) when learning grammatical gender in French. In so doing, this study addresses two research questions: 1) Does implicit negative feedback (i.e. recasts) have an effect on the language learning of French beginning students? 2) Does motivation play a role in how recasts are perceived by beginning language learners? In other words, how does the degree of motivation of language learners impact their language learning? The participants were students enrolled in elementary French at a major North American University. Before testing began, students' motivation to learn French was evaluated using a well-known motivational instrument, the Gardner's socio-educational model (Gardner, 1982; 2001). They were then randomly assigned to one of two conditions: the experimental group (i.e. the written recast group) and the control group. Grammatical gender assignment to nouns (masculine or feminine) and noun/adjective agreement in French were selected for this study because previous research shows how difficult they are to acquire for language learners both in immersion and in instructed settings (Vuchic, 1993; Holmes & Dejean de la Bâtie, 1999; Guillelmon & Grosjean, 2001; Ayoun, 2007). The present study proposes to investigate the role of motivation because previous studies (Ayoun, 2007) suggested that more motivated learners may overcome the inherent difficulties in acquiring grammatical gender and improve their performance.

Accuracy in production of the target form was measured over the short-term by three elicitation tasks: a composition, a cloze test, and a grammaticality judgment correction task. Based on previous research, the following predictions were tested: 1) the recast group will outperform the control group which did not receive any feedback, suggesting that the use of recasts has a facilitative effect on language learning even at the beginning level; 2) There will be a positive correlation between learners' motivation and their intake of recasts (i.e. the greater their motivation, the greater their likelihood to benefit from recasts). The implications of the results for future empirical research and pedagogical applications are discussed.

INTRODUCTION

Negative feedback has attracted much attention in second language acquisition (SLA) since researchers (e.g., Long, 1991; Swain, 1991) showed that exposure to the correct forms of language is not enough for second language (L2) development to occur. Corrective feedback can be broadly defined as the information following a non-target like form produced by the learners, designed to help them move toward a more target like form.

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Feedback is said to facilitate learning because it “promotes the selective noticing and storage of new input strings” (Ortega & Long, 1997) and helps learners to notice the gaps between output and input. According to Schmidt’s (1998, 2001) Noticing Hypothesis, awareness of specific linguistic items in the input is necessary for language learning to occur. The bulk of the research since the mid-nineties has stressed the importance of integrating attention to instruction focusing on form and meaning, and has, therefore, centralized its efforts on finding various methods to integrate formal instruction within a communicative framework. Numerous issues regarding feedback have been raised and researched over the last several decades (Lyster & Ranta, 1997): (1) Should learners’ errors be corrected? To answer this question, researchers started to investigate the role of negative feedback versus positive evidence; (2) When should learners’ errors be corrected? Interaction experts examined at what point of time should learners be corrected during interaction with two or more participants in and out of the classroom; (3) Under which conditions is corrective feedback most likely to be beneficial to L2 acquisition? To address this question, experts have investigated the relative existence and utility of negative feedback according to the age of the learners. Finally, although the necessity of negative feedback is generally well accepted among SLA researchers, the form it needs to take is still controversial. The last question will thus be: (4) Which type of corrective feedback is most effective? Numerous studies have compared implicit negative feedback (i.e., recasts) with several other forms of implicit interactional feedback (e.g., negotiation strategies), and explicit negative feedback.

In a communicative language teaching context where the teacher does not want to interrupt the flow of the students’ oral performance but instead maintain their oral accuracy, there has been a growing interest in one specific type of corrective feedback called ‘recast’. According to Saville-Troike (2006), a recast is “an indirect correction that might appear to paraphrase what a learner says, but actually corrects an element of language use” (p. 193). It has been suggested that learners do not perceive the corrective element in a recast for various reasons: (1) in content-based lessons, the corrections included in the recasts are restrained by their functional properties (Lyster, 1998); (2) recasts seem to be less recognizable at the morphosyntactic level than at the phonological (Lyster 2001) and lexical levels (Carpenter, Jeon, MacGregor & Mackey, 2006); (3) recasts may prove beneficial only for the learners who are cognitively ready to process the information (i.e. advanced learners) (Nicholas, Lightbown & Spada, 2001).

The present study differs from previous research on implicit negative feedback by focusing on written recasts instead of oral recasts (Lyster & Mori, 2006; Ellis, Loewen, & Erlam, 2006; Iwashita, 2003; Mackey, & Philip, 1998). The present research project, which took place in a laboratory setting, allowed for the selection and manipulation of a limited number of independent variables. In this study, we controlled the length of the recast (e.g., number of words) and the time (e.g. how long the feedback appeared on the screen) to examine the effect on the dependent variable (i.e., students’ gain) from pre- to

post-test on several predetermined tasks. Additionally, the computerized treatment sessions of the present study removed any researcher's bias. Finally, in an experimental setting, we have the ability to replicate results.

On the other hand, in a classroom setting, it is usually difficult to select and control for all the independent variables. Written recasts do not only bring validity to the present study, but they also reflect the large amount of feedback that L2 learners receive in instructional settings.

In a study on the effect of different types of corrective feedback (oral and written) on ESL student writing, Bitchener, Young and Cameron (2005) found a significant effect for the combination of written and conference feedback on accuracy levels in the use of the past simple tense and the definite article in new pieces of writing. This study showed that not only does oral feedback promote L2 acquisition, but that written feedback also is a valid tool for language teachers to improve their students' language performance. Finally, for optimal language acquisition to occur, it seems that both forms of feedback, which are very present in classroom language learning environments, need to be given equal importance.

Weaver (2006) carried out both a quantitative and qualitative study with 44 students of the faculties of Business and Art & Design from a major North American university. Her research project focused on student attitudes, their beliefs and perceptions in relation to the written feedback they received from their tutors. The surveyed participants expressed a strong interest in written corrections to which they paid attention more easily than the large quantity of oral feedback they usually received. Students valued written corrections as a form of feedback to promote their L2 development. So, while verbal responses constitute an important part of the L2 acquisition process, written feedback deserve a much greater place in the current wealth of studies on negative feedback.

Another well researched area in SLA that may shed a new light on the conditions under which corrective feedback is likely to promote L2 acquisition is motivation. Indeed, motivation (or lack of it) is often mentioned to suggest why some L2 learners are more successful than others. But what constitutes motivation and to what extent does it influence the many components of formal language learning including learners' perception of corrective feedback? In other words, is there a correlation between beginning L2 learners' motivation and their intake of recasts? The focus of the present study — grammatical gender and its corresponding noun-adjective agreement — is particularly well suited for investigating the existence of a potential correlation between L2 learners' motivation and their intake of recasts because we chose a target form which has been evaluated by SLA researchers as difficult to learn compared to other grammatical features.

While some SLA experts (Lyster, 1998; Nicholas et al., 2001) attribute the possible inefficiency of recasts to their ambiguous corrective aspect, others (Andersen, 1991; Hudson, 1993; Ellis, 1996) had suggested well-before the blooming interest in negative feedback that certain L2 grammatical features might just be more difficult to acquire than others. In L2

French acquisition, numerous studies both in immersion (Dewaele & Véronique, 2001, Granfeldt, 2000) and instructed settings (Guillelmon & Grosjean, 2001; Prodeau, 2005) have shown how grammatical gender assignment to nouns and noun/adjective agreement are difficult to acquire for L2 learners. Grammatical gender is considered very difficult to acquire because it is of low communicative value while being overly present in the language.

Dewaele & Véronique's (2001) study suggests that gender assignment and/or noun/adjective agreement in French is problematic for learners at all levels. The authors analyzed 519 gender errors of 27 Dutch students (advanced university learners of L2 French) and found a great amount of inter-individual and intra-individual variation. The participants mainly differed in the strategies they used (e.g., avoidance and generalization strategies). Linguistic and psycholinguistic variables also had an effect on the gender accuracy rate of the Dutch students.

According to Comrie (1999), gender assignment in languages includes two major principles: semantic principles (for inherent lexical gender) and formal principles (for abstract grammatical gender). For instance, English is a language that assigns gender according to meaning, thus following the semantic principle¹. While some languages can involve semantic principles for the most part, rare are those that only include formal principles. French and other Romance languages, such as Spanish, include inherent lexical gender and abstract grammatical gender, thus making the learning of the gender assignment system more complicated and opaque. According to Ayoun (2007), L2 French learners have to figure out the correct grammatical gender of almost 90% of all French nouns because only about 10% of the nouns offer semantic clues (Séguin, 1969 in Ayoun, 2007: 159). Grammatical gender, also called arbitrary gender, applies to all French nouns, animate or inanimate, concrete or abstract. Thus, any noun will be either masculine (e.g. le vélo - *the bike*) or feminine (e.g. une douzaine - *a dozen*). Final phones in words give the L2 learner a phonological clue as to whether the noun is masculine or feminine. Very few determiners indicate the gender of nouns (e.g. 'de' as in 'beaucoup de' does not bear any gender marking as well as none of the plural determiners such as 'des' or 'les'). Another possibility of figuring out grammatical gender in French is the adjectives since they agree in gender (and number) with the nouns they modify. However, in spoken French grammatical gender opposition cannot be recognized in two thirds of adjectives (Dewaele & Véronique, 2001). According to Riegel, Pellat & Rioul (1994), this proportion lowers to one half in the written language.

The debate over the systematic/unsystematic nature of grammatical gender in French started over thirty years ago. On one side of the equation we have Tucker, Lambert, Rigault & Segalowitz (1968) who declared that "French grammarians [had] been hasty in their conclusion that there [were] no regularities or only minimal ones to gender determination" (p.316) and also other current researchers such as Lyster (2006) who concluded from his corpus analysis of 9,961 nouns in *Le Robert Junior Illustré* that 81% of all feminine

nouns and 80% of all masculine nouns are rule-governed, having endings that systematically predict their gender. On the other side of the equation, we have French grammarians, who claim the unsystematic nature of gender attribution, and numerous researchers such as Jacob and Laurin (1994) who report that “the gender of a noun referring to an inanimate object follows no strict rule” (p. 145). Furthermore, even when students are in the presence of clear positive evidence, they might not pay any attention to the grammatical gender feature because of its low communicative value. Therefore, despite the amount of input students receive, they still have great difficulty in mastering gender assignment, which once again suggests that positive evidence is not enough for acquisition to occur; hence, the importance of corrective feedback. Consequently, the present study offers to investigate a grammatical feature that requires a great deal of motivation from the students to learn. Additionally, the study will examine whether recasts can help learners in the process of reaching their ultimate goal. Finally, the present experiment will allow us to determine whether motivation has an effect on the students’ intake of recasts. To address these research questions, we will first review the existing corrective feedback and motivational literature. Then, following the results of the study, suggestions for pedagogical implications and directions for further research will be offered.

REVIEW OF THE LITERATURE

Corrective feedback

One of the first areas of research in the negative feedback literature investigated the necessity of corrective feedback to promote L2 acquisition and raised the question of whether L2 learners’ errors should be corrected.

Iwashita (2003) compared negative feedback and positive evidence in a task-based interaction setting in which English learners of L2 Japanese at an Australian university participated in three communication tasks with a native-speaker conversation partner. Comparison of the pretest and immediate posttest scores on the Japanese locative-initial construction and verb morpheme structures revealed interesting results. Although the participants were ten times more frequently exposed to positive evidence during task-based interaction than to implicit negative feedback, only the students who scored high on the pretest benefited from the positive evidence. In comparison, implicit negative feedback in the form of recasts had beneficial effects on the short-term development of L2 features for all learners irrespective of their previous knowledge of the targeted grammatical items. Beyond the negative feedback/positive evidence dichotomy, Iwashita attributed the advantage of the former type of feedback to saliency as a main indicator of language learning (see Schmidt’s Noticing Hypothesis, 1990).

The second area of research in the negative feedback literature assumes that second language learners’ errors need to be corrected to promote acquisition and raises the question of when students’ errors should be corrected.

Bell (1992) presented a review of the research on negative feedback and proposed various theories of communicative teaching that integrate a focus on form. She attempted to bridge the gap between SLA researchers and teachers by providing instructors with methods for the correction of L2 errors (e.g. clarification requests, negotiation strategies). Similar to the present study, Bell established a connection between corrective feedback and learners' integrative and instrumental motivation. However, unlike the present researcher, she was not interested in finding whether motivation would lead students to repair their errors and ultimately learn, but in when the learners should be corrected and how much corrective information the feedback should include to promote their interest in learning and avoid their demotivation. Bell concluded that the amount of error corrections depends on the learners' expectations of language learning. For an individual whose main goal is to be able to communicate in the L2, only the errors which impede understanding should be corrected. Other learners who plan to work or study in the target language country will need to be more accurate in the L2 given that in this case error correction may be of "vital importance" (p.26) to them. Furthermore, Bell concluded from her analysis of the research that L2 teachers should set aside a time for negative feedback and focus on the target language form. In doing so, learners do not always feel pressured to produce grammatically correct L2 forms.

The bulk of the research since the mid-nineties has focused on finding differences in the uptake of corrective feedback between age groups.

Oliver (1998) examined L2 conversational interactions between children. Her research focused on whether children can negotiate for meaning and also what strategies they use. This project involved ninety-six age- and gender-matched dyads (from eight to thirteen years old). The results of the transcriptions showed that children, like adults, use a variety of negotiation strategies to work toward mutual understanding. Thus, the difference between adults and children does not lie in children's awareness of using such strategies but rather in the proportion of strategies they use. It seems that due to their limited level of social, psychological and cognitive development, and their alleged self-absorbed nature, children tend to focus more on their own message than on facilitating the construction of meaning of their partner in conversation. Hence, a greater use of clarification requests and repetitions were observed in lieu of comprehension checks. While negotiating strategies seemed to equally benefit adults and children, their divergent pattern and proportion of use indicate that the results found in SLA research on negative feedback with children cannot be generalized to adults.

The most recently researched question of the implicit negative feedback field concerns the type of corrective feedback that has the greatest benefit to L2 development. The numerous experiments over the last decade have produced rather mixed results. Lyster and Mori (2006) compared implicit and explicit feedback for two different L2s (French and Japanese) and found that the efficacy of each type of feedback depends largely on the communicative orientation of the class. In other words, students repaired their

errors mostly following promptsⁱⁱ in French immersion but primarily after recasts in Japanese immersion. The implications of the results for language teachers lead Lyster and Mori to propose the Counterbalance hypothesis: classroom activities and feedback that act as a counterbalance to a classroom's major communicative orientation will be more effective than feedback activities that coincide with its main communicative orientation.

Several interaction researchers (Lyster, 1998, 2001; Mackey & Philip, 1998; Nicholas *et al.*, 2001; Carpenter *et al.*, 2006) stated that recasts might not be perceived by learners as corrective feedback but simply as a reformulation or a confirmation of what they said in the L2. These experts have identified a certain number of reasons for this phenomenon which we will summarize hereunder.

Lyster (1998) investigated student-teacher interactions in four immersion classrooms at the primary level in Canada. The researcher compared the use of recasts by the four teachers to their concomitant use of noncorrective repetition in the classroom. Lyster found that recasts and noncorrective repetition had the same effect on the students' French L2 development: no learning improvement was observed in either instances. Moreover, the researcher noticed that on numerous occasions, the teachers even accompanied the recasts by positive feedback to express their approval of the content of the learner's utterance. Overall, it seems that, in content-based lessons, the corrections included in the recasts were restrained by their functional properties.

Carpenter *et al.* (2006) examined how English L2 students interpreted recasts in interaction. All participants were asked to watch video clips of other L2 students who received recasts and repetitions by their classroom teacher. However, the first group saw the original video that contained errors followed by feedback, but the second group watched a modified video where all mistakes were removed leaving only the corrective feedback. In both groups, participants had to indicate if they heard a recast, a repetition or any other type of interactional feedback. Results indicated that the second group, which did not hear the errors, did not distinguish as well as the first group all recasts from repetitions. The post hoc analysis showed that it was easier for students to recognize phonological and lexical recasts than morphosyntactic recasts.

Nicholas *et al.* (2001), who also focused on recasts, claimed that researchers should be more cautious in interpreting the results as they may deviate depending on the context in which they have been observed — whether it is a laboratory project or a classroom study. The authors concluded from their analysis of the SLA research that recasts may prove beneficial only for the learners who are cognitively ready to process the information (i.e. advanced learners) and are able to recognize that the recast is a reaction to the accuracy of the form, and not the content, of the original utterance.

This selective review of the corrective feedback literature shows that numerous questions remain concerning the type of implicit negative feedback which is likely to be effective in L2 acquisition. Motivation is another well

researched area in SLA that may contribute to our understanding of the conditions under which recasts are likely to promote L2 learning. Motivation is often considered a necessary element for success in educational achievement situations. But what is motivation and to what extent does it influence the many components of formal language learning?

Motivation literature

A seminal study in the field of motivation was published in 1959 by Gardner and Lambert, two social psychologists, who proposed that the effect of attitude to a language be presented as a motivational construct. This construct includes integrative and instrumental motivation. The former manifests itself by a desire to learn the L2 in order to “come closer to the other language community” (Gardner, 2001, p.5), and by positive attitudes toward learning another language. The latter concerns motivation arising from external goals such as passing examinations, or furthering a career. While both may seem antithetical, Gardner recognized that they may be complimentary in several cases. However, in the context of the SLA socio-educational model (Gardner, 1982; 2001), Gardner has been mostly interested in the integrative aspect of motivation. The former definition of integrative motivation can be understood along three dimensions:

(1) integrativeness, (2) attitudes toward the learning situation, and (3) motivation.

The first variable refers to the emotional identification of the language learners with the target cultural group and also their openness toward other language communities in general.

The second variable concerns the individuals' attitudes towards the situation in which the L2 is learned. For instance, Gardner *et al.* (2004) found in their year long project with intermediate L2 French learners that the classroom environment, and in particular the teacher, can influence students' attitudes greatly. They also discovered that the students' attitudes towards the learning situation can change over time depending on achievement in the course and other environmental events. The learners' attitudes have in turn an effect on the third variable: motivation.

Motivation refers to the effort that the learners will make to study the language, their desire to learn it, and the positive affect that the learning process will have on them. The truly motivated learners will display these three components.

The socio-educational model of SLA is used in the present study following extensive previous research (Gardner, Tremblay, & Masgoret, 1997; Wu, 2003). It is important to note that similarly to Dörnyei (2004), we modified the concept of integrative motivation to adapt it to the language learning situation of the elementary students at the northern American university where we conducted the present research project. In other words, the idea of wanting to integrate in the other language community (i.e. first variable of the 'integrativeness' concept) can be applied in Canada, where two

languages coexist, but in the context of formal foreign language learning in the United-States, it may be irrelevant since some students have never been to the target country and might never go. In this sense Dörnyei (2004) considers 'integrativeness' not as wanting to physically integrate the other cultural group but as involving an identification process of the learner with the L2 community, including the attributes of the group that the learner would like to have. Of the three variables, Gardner sees motivation as a direct link to success in the development of a second language while 'integrativeness' and 'attitudes toward the learning situation' constitute only a support to the acquisition process.

Since the present study aims at investigating the effect of motivation on learners' intake of recasts, i.e. on their L2 performance, it may prove relevant to explore the concept of self-determination theory. According to numerous researchers (Brown, 2000, Dörnyei, 2004), self-determination theory constitutes the most powerful dimension of the whole motivation construct, being one of the most influential approaches in psychology. Self-determination theory (Ryan & Deci, 2000) distinguishes two notions which can have an effect on L2 learning: intrinsic and extrinsic motivation. The former applies to 'self-determined' individuals who engage in an activity not because there is a recompense associated with that particular task but mainly for the pleasure of learning. Extrinsic motivation refers to people who perform a task to receive an external reward. Individuals who engage in an activity to avoid some kind of punishment are also considered to be extrinsically motivated.

In order to fully explore the relationship between students' motivation and their language learning through their intake of recasts, the present study uses a well-established survey of attitudes (Gardner, 1982; 2001) to determine participants' integrative and instrumental motivation as well as their intrinsic and extrinsic motivation to learn L2 French at a northern American university.

THE STUDY

Research questions

The present study addresses two research questions:

- 1) Does implicit negative feedback (i.e. recasts) have an effect on the language learning of beginning French students, as operationalized in the present study by written production (composition task), grammatical ability (fill in the blanks task), and comprehension (grammaticality judgment task) in the short-term?
 - We predict that the recast group will outperform the control group which did not receive any feedback, suggesting that the use of recasts has a facilitative effect on language learning even at the beginning level
- 2) Does motivation play a role in how recasts are perceived by beginning language learners? In other words, how does the degree of motivation of language learners impact their language learning?

- We predict that there will be a positive correlation between learners' motivation and their intake of recasts (i.e. the greater their motivation, the greater their likelihood to benefit from recasts).

Participants and Methodology

Participants were initially eighty English speaking students in their first semester of French at a major northern American university. The eighty students were enrolled in four sections taught by two different instructors. In order to be included in the final participant pool, the students from the four sections had to have been present for all five phases of the experiment. They also had to have fully completed each of the three tasks on the pre- and post-test to be included in the final participant pool. A total of thirty-eight students did not complete all phases and/or all tasks of the experiment and were thus removed from the study.

Before the pre-test was administered, all participants were randomly assigned to one of two experimental conditions: the R- (Recast) group and the C- (Control) group. They were then asked to fill out a survey (see Appendix A) including basic demographics, as well as previous experience in French or other languages, and travel in any French-speaking country.

TABLE 1: Study Design

Initially ...	Pre-test (Day one)	Treatment 1 (Day two)	Treatment 2 (Day three)	Treatment 3 (Day four)	Post-test (Day five)	Final y...
R-group (n = 40)	- Language Background survey - Motivation questionnaire - 3 tasks	Macromedia Director lesson 1 with recasts	Macromedia Director lesson 2 with recasts	Macromedia Director lesson 3 with recasts	3 tasks	n = 25
C-group (n = 40)	- Language Background survey - Motivation questionnaire - 3 tasks	Macromedia Director lesson 1 without recasts	Macromedia Director lesson 2 without recasts	Macromedia Director lesson 3 without recasts	3 tasks	n = 17

TABLE 2: Summary of the participants' demographics

Experimental Groups	Gender	Mean age	L1	Speaks more than 2 languages
R-group (<i>n</i> = 25)	Female = 13 Male = 12	20.25 (range = 18 to 47)	English = 21 Spanish = 3 Hindi = 1	10 (i.e., 40%)
C-group (<i>n</i> = 17)	Female = 11 Male = 6	21.77 (range = 18 to 29)	English = 14 Spanish = 2 Korean = 1	7 (i.e., 41.18%)

Instruments and Stimuli

The participants went every day for a week to a computer language laboratory, where the researcher was present to assist them. On the first day, after filling out the language background survey (see Appendix A and table 2), the students also spent approximately twenty minutes responding to a written motivation questionnaire (see Appendix B). This questionnaire included sixteen negatively and sixteen positively keyed items (i.e. as a consequence a high score can reflect either a positive or a negative student attitude depending on the item) as well as three neutral items. These thirty-five variables were assessed using a seven-point Likert scale ranging from strong agreement (1) to strong disagreement (7). Following the well-established survey of attitudes, i.e. Gardner's socio-educational model (1982, 2001), we adapted and grouped the thirty-five items of our questionnaire into five major categoriesⁱⁱⁱ. The thirty-five items specifically targeted eleven sub-categories^{iv}. As previously mentioned, we altered several items from Gardner's socio-educational model to adapt them to a college-level learning situation for an American monolingual context.

On the same day (day one) that the participants filled out the language background survey and the motivation questionnaire, the R-group and the C-group were administered a pre-test. The written pre-test utilized multiple outcome measures, some focusing on communicative ability, some focusing on grammatical accuracy, and others focusing on comprehension, all targeting grammatical gender assignment to nouns and noun/adjective agreement. The pretest 'package' distributed to each participant in the two experimental groups consisted of a composition task (CP task), a cloze task (fill in the blanks; FB), and a grammaticality judgment task (GJ task). See Appendix C.

The day following the pretest (day two), the participants of the R-group and the C-group came at their leisure between nine o'clock in the morning and four o'clock in the afternoon to the computer language laboratory to receive their first computerized instructional treatment addressing the targeted structures of the study. The researcher who was present throughout the day in the laboratory did not provide the participants with feedback on the pre-test. On day three, the participants received their second computerized instructional treatment and on day four, they received their third and last

computerized instructional treatment. All treatments were designed on Macromedia Director for Personal Computers to ensure that all participants would be exposed to the stimuli in the same way within each group. The stimuli were presented in written form on the computer screen. A total of six projectors (i.e., instructional treatments) were created by the researcher of the present study (see Table 1 for a summary of the study design). The first computerized treatment for the R-group consisted of a set of images under which sentences with blanks appeared. The R-group was asked to fill in the blanks of the sentence with given elements (in French only) based on the illustration. The participants of the R-group filled in the two blanks, then clicked on the checkmark and below the sentence appeared the correct answer (i.e., Dans beaucoup de maisons, il y a une petite télévision dans la cuisine → *In many houses, there is FEM-SING a FEM-SING small television in the kitchen*) for 4 seconds. The completed sentence appeared only if the participants' answer was wrong^v. If it was correct, clicking on the checkmark just led them to the next screen with another stimulus from the instructional treatment. Each time that the participants saw the correct answer appearing on the screen, they received implicit negative feedback in the form of written recasts.

The participants of the C-group received the same initial computerized treatment as the R-group on day two but did not receive any feedback (i.e., no answer key was provided at any time). Once they clicked on the checkmark, it just led them to the next illustration with accompanying stimulus on another screen.

The second and third computerized instructional treatments (on day three and day four) were similar to the first treatment but not identical. On both days, the R-group also received recasts when necessary, while the C-group again never received any corrective feedback. The data (i.e., all the blanks that the participants filled in) for the three treatments were saved directly in individual folders on the local server to be accessed for later analysis.

On the last day (day five), the R-group and the C-group were administered a post-test. The post-test was similar to the pretest, i.e., it also contained a CP task, an FB task, and a GJ task. The participants had the same amount of time as in the pre-test to complete each task. The topics of the CP task varied from the topics on the pre-test. The FB and GJ tasks were identical. The researcher decided to re-use the same FB and GJ tasks from the pre-test, first because of the relatively important length of time in between the pre- and post-test (almost a week) and, also because of the large quantity of item-blanks (twenty-six) in the FB task and the complexity and number of sentences (twelve) for elementary learners in the GJ task^{vi}.

Scoring

A motivation index was created for each participant in the R-group and the C-group. The questionnaire included sixteen negatively and sixteen positively keyed items, rated on a seven-point scale from strong agreement (1)

to strong disagreement (7), with 4 being neutral. The researcher of the present study decided to equate a high score with a high degree of motivation. As a consequence, all the positively keyed items were reversed on the 1-7 point scale so that their score could be equally compared with the negatively keyed items^{vii}. The three neutral items were not calculated in the motivation index and kept for later analysis.

The same scoring measures were used in the pre-, and post-test. In the CP task, only the target items (grammatical gender assignment to nouns and noun/adjective agreement) were scored. Each target item was scored on a 0 to 1 point scale. Any wrong choice of article category (e.g. definite instead of indefinite or vice-versa) was not scored, since we were interested only in gender^{viii}. In the FB task, the maximum score was twenty. Similarly to the CP task, each target item was scored on a 0 to 1 point scale. In the GJ task, the maximum score was twelve. Similarly to the CP and the FB tasks, each sentence was scored on a 0 to 1 point scale. For grammatical sentences, one point was awarded if a participant appropriately judged the grammaticality of a sentence. For ungrammatical sentences, one point was awarded only when the participants corrected the incorrect sentence appropriately (i.e., when they corrected the grammatical gender).

RESULTS AND DISCUSSION

Analysis

In order to determine whether the computerized instructional treatments significantly affected the participants (i.e., whether implicit negative feedback in the form of recasts had an effect on the language learning of French beginning students), the data were submitted to a series of analyses of variance (ANOVA) including a one-way ANOVA with repeated measures. The between participants factor was the experimental condition (R-group and C-group). The within participants factors were time (pretest versus post-test), and type (CP, FB, and GJ tasks). All inferential statistics were performed using the Statistical Package for the Social Sciences (SPSS) 14.0, employing a probability level for rejection of $p < .05$. To determine whether condition, time, or type had an effect, the researcher used a General Linear Model (GLM) with repeated measures. To determine whether there was an interaction between learners' motivation and their gain from pre-to post-test on the three tasks within each condition (i.e., R- and C-groups), the researcher used Regression tests.

Results

The results of the statistical analysis revealed a complex picture depending on the condition and type of task under study. Hypothesis 1, in response to the first research question, predicted that the recast group would outperform the control group which did not receive any feedback, suggesting that the use of recasts has a facilitative effect on language learning even at the beginning level. When performing repeated-measure analyses of variance of accuracy of the gains between pre- and post-test, the researcher did not find

any significant results (for the R-group on the FB task gains, we found $F(1, 40) = 2.285, p = .13$ and for the GJ task gains, we found $F(1, 42) = 8.356, p = .60$). However, the descriptive statistics still indicate that the mean scores from the instructed group (R-group) increased from pre- to post-test and made more improvement than the control group, with pretest to post-test gains ranging from .45 to 5.49 points higher than those of the C-group over this period. Only the mean score of the R-group on the CP task (similarly to the C-group) did not increase from pre- to post-test. The means for acquisition in each group (R- and C-groups) at time one (pretest) and time two (post-test) are displayed in Table 3.

TABLE 3: Group Means for task at Time one and Time two

		CP task		FB task		GJ task	
		Mean	Std. Dv	Mean	Std. Dv	Mean	Std. Dv
C-group	Pre-test	12.76	2.278	62.64	14.26	30.88	14.05
	Post-test	13.64	4.16	67.35	12.38	36.76	15.60
R-group	Pre-test	14.32	3.66	57.60	13.70	28.33	15.40
	Post-test	14.00	4.967	67.80	12.16	34.66	16.66

In order to test Hypothesis 2, which stated that there would be a positive correlation between learners' motivation and their intake of recasts, we conducted a thorough item-analysis of all participants' motivation questionnaires. Based on the Gardner's socio-educational model (1982, 2001), we adapted and grouped the thirty-five items of our questionnaire into five major categories. Table 4 shows the motivation means per category for each experimental group. Common to both groups is the high degree of language anxiety, which seems normal at a beginning level of L2 learning. They also seem to have both minimal self-confidence compared to the other categories within each condition. The instructed group (R-group), however, appears more motivated than the C- group and this is exhibited in all categories (see Table 4).

TABLE 4: Means for motivation for each of the five major categories

	Integrativeness	Attitudes toward the learning situation	Motivation	Language anxiety	Other attributes*	Total (Max = 7 pts)
C-group	3.91	3.89	3.76	4.88	3.11	3.91
R-group	4.41	4.58	4.08	5.92	4.26	4.65

*Self-confidence (new situations, ability controlled, and given ability).

Once we obtained a motivation index for each group, we calculated the overall treatment gain from pre- to post-test for the C-group and the R-group (see Table 5).

TABLE 5: Motivation means and overall treatment gains (CP + FB + GJ tasks)

	Motivation index (/7)	Treatment gain (from pre- to post-test)	Std. error
C-group	3.91	11.47	3.95
R-group	4.65	16.21	4.05
Both groups	4.28	13.84	

Hypothesis 2 was not supported: the series of analyses of variance including a regression test with repeated measures showed no interaction between learners' motivation and their overall treatment gains (for the C-group, we found $F(1, 40) = 2.809, p = .102$ and for the R-group, we found $F(2, 39) = 1.451, p = .247$).

Discussion and implications

From the above findings it may be concluded that:

- 1) Recasts do not have a significant effect on the language learning of French beginning students in the short-term.

Recasts may prove beneficial only for the learners who are cognitively ready to process the information (i.e., advanced learners) (Nicholas, Lightbown & Spada, 2001). In the present study, data was collected with elementary students early in the semester (after only six weeks of instruction in French).

- 2) Motivation does not play a role in how recasts are perceived by beginning language learners.

Even though we found no significant interaction between learners' motivation and their overall treatment gains, it is interesting to note that it was the more motivated group (R-group) that performed better on most of the tasks (see descriptive statistics in Table 3), leaving us to wonder whether this resulted from the recasts the instructed group received, its high motivation or a combination of both (i.e. the elementary learners perceived the corrective element in the recasts because they were motivated students).

The finding that recasts do not have a facilitative effect on language learning at the beginning level confirms previous results from earlier studies (Lyster, 1998, 2001; Mackey, & Philip, 1998; Nicholas *et al.* 2001; Carpenter *et al.*, 2006). However, the study was limited by its small number of participants per group ($n = 17$ and $n = 25$). This small sample of learners might not be representative of other French L2 learners, as they may, for instance, differ in their cognitive abilities. It would thus be fruitful to replicate this research project with a wider sample of beginning learners.

Additionally, the variety of colorful pictures used in the three computerized lessons may have distracted the learners from the input and hence the corrective feedback. In fact, we inserted sixty images ranging from celebrities (i.e., singers, and actors) to random people traveling across the world, to the fictive characters originating from the elementary textbook used by the participants in their respective classes. As a consequence, the students may have paid more attention to the pictures than the sentences and their subsequent corrections (i.e., recasts).

Furthermore, three days of treatment may not be sufficient for elementary students to learn grammatical gender in L2 French.

Finally, the recasts may have appeared for too short of a time on the screen. The corrections became visible for a total of four seconds before the student would be able to move onto the next stimulus. Even though all sentences and their recasts were rather short in length and thus appropriate for an elementary level, several participants indicated that they did not have time to read the corrections. While four seconds was initially set by the present researcher as sufficient for any elementary learner's uptake, it seems that the format of the Macromedia Director lessons with their pictures and colorful backgrounds may have slowed the participants' reading process.

Replications of this laboratory experiment should therefore include not only more participants (and more advanced learners) but also incorporate simple drawings instead of pictures and recasts that appear on each screen for a longer period of time, at least one-and-a half to twice the initial amount; six to eight seconds.

A strength of this research project is that it is one of the few studies (Carroll & Swain, 1993; Mackey & Philip, 1998; Ayoun, 2001, 2004) that investigated the use of implicit negative feedback in a laboratory, allowing for a highly controlled environment. Indeed, the experimental setting of the present study permitted the selection and manipulation of a number of independent variables. In this research project, we could control the quantity of sentences, the length of the stimuli (e.g., number of words) and the amount of time the feedback appeared on the screen, so that all participants would be exposed to the exact same input and receive identical instructional treatments. Also, the computerized treatment sessions of the present study removed any researcher's bias. Lastly, in an experimental setting, because of the controlled environment we create, we have the ability to replicate results.

Another strength of the present study is that it examines an under-researched area of the implicit negative feedback field, i.e., written recasts (Ayoun, 2001, 2004). Written recasts reflect the large amount of feedback that L2 learners receive in instructional settings and, as such they deserve a much greater place in the current wealth of studies on negative feedback.

Finally, this research project is quite unique in the sense that it investigates the relationship between learners' perception of recasts and their motivation, which had not been previously researched by any corrective feedback expert. The lack of findings on this research question however, should not imply that the degree of motivation of language learners does not

impact their L2 learning; it only suggests that motivation may not play a role in how recasts are perceived by beginning language learners. Nonetheless, more research on implicit negative feedback's intake related to students' motivation is needed in order to further our understanding of how motivation influences SLA in the classroom and whether recasts promote beginning L2 learners' acquisition.

CONCLUSIONS

This study has investigated the effectiveness of implicit negative feedback in an experimental setting and its relationship with motivation. It extended our knowledge of written recasts, perception, and L2 development, linked to students' affective variables.

Given the variation found in this study, it is important for researchers to further investigate and replicate other corrective feedback studies in order to identify how recasts can be best incorporated into the L2 classroom to promote L2 learning for all language learners.

Appendix A

Pseudonym (first, middle and last name initials+ birth date, e.g. *BAT80*):

LANGUAGE BACKGROUND SURVEY

Age: _____ Female: ___ Male: ___

What is your college status? Freshman Sophomore Junior
 Senior Graduate

What is your major?

What is your minor?

What language class(es) are you taking this semester?

What is your native language?

What is your Second language? / What is your Third language?

How proficient are you in French?

How old were you when you started to learn/study it?

Where did you start learning it?

Do your parents speak French too?

How long have you studied it?

Do you feel you are still learning it?

Have you ever been in a French-speaking country? Yes _____ No _____

If yes, where, for what purpose and for how long?

_____ If you speak a third language, how proficient are you in it?

Appendix B
QUESTIONNAIRE

Pseudonym: _____

For each of the statements below, please indicate to what extent you agree with the statement, using the 1-7 scale below. If you agree strongly with the statement, circle 1; if you disagree strongly with the statement, circle 7. Of course, you may neither strongly agree nor strongly disagree with the statement; if so, please circle the number between 1 and 7 that represents the best fit.

1	2	3	4	5	6	7
Strongly agree	agree	slightly agree	neutral	slightly disagree	disagree	strongly disagree

*Circle the **number** that corresponds to your response for each question:*

1. French is really great	1 2 3 4 5 6 7
2. I love learning French	1 2 3 4 5 6 7
3. I hate French	1 2 3 4 5 6 7
4. Learning French is a waste of time	1 2 3 4 5 6 7
5. I would like to learn as much French as possible	1 2 3 4 5 6 7
6. I wish I were fluent in French	1 2 3 4 5 6 7
7. Knowing French isn't really an important goal in my life	1 2 3 4 5 6 7
8. I haven't any great wish to learn more than the basics of French	1 2 3 4 5 6 7
9. It worries me that other students in my class seem to speak French better than I do	1 2 3 4 5 6 7
10. I get nervous and confused when I am speaking in my French class	1 2 3 4 5 6 7
11. I don't usually get anxious when I have to respond to a	1 2 3 4 5 6 7

question in my French class	
12. Students who claim they get nervous in French class are just making excuses	1 2 3 4 5 6 7
13. It would bother me if I had to speak French on the telephone	1 2 3 4 5 6 7
14. I feel anxious if someone asks me something in French.	1 2 3 4 5 6 7
15. When called upon to use my French, I feel very much at ease	1 2 3 4 5 6 7
16. I would feel comfortable speaking French in an informal gathering where both English and French speaking persons were present	1 2 3 4 5 6 7
17. I wish I could speak another language perfectly	1 2 3 4 5 6 7
18. If I planned to stay in another country, I would make a great effort to learn the language even though I could get along in English.	1 2 3 4 5 6 7
19. Studying a foreign language is not a pleasant experience	1 2 3 4 5 6 7

For each of the statements below, please indicate to what extent you agree with the statement, using the 1-7 scale below.

1	2	3	4	5	6	7
Strongly agree	agree	slightly agree	neutral	slightly disagree	disagree	strongly disagree

20. Seeing that the United-States is relatively far from countries speaking other languages, it is not important for Americans to learn foreign languages	1 2 3 4 5 6 7
21. Studying French is important because it will make me appear more cultured	1 2 3 4 5 6 7
22. Studying French is important because it will give me an edge in competing with others	1 2 3 4 5 6 7
23. Studying French can be important for me because it will allow me to meet and converse with more and varied people	1 2 3 4 5 6 7
24. Studying French is important because it will allow me to gain good friends more easily among people from French-speaking countries	1 2 3 4 5 6 7
25. I make a point of trying to understand all the French I see and hear	1 2 3 4 5 6 7
26. When I have a problem understanding something we are learning in my French class, I always ask the instructor for help	1 2 3 4 5 6 7
27. I don't pay too much attention to the feedback I receive in my French class	1 2 3 4 5 6 7
28. I don't bother checking my corrected assignments in my French courses	1 2 3 4 5 6 7
29. I'm sure I could speak French well in almost any circumstances	1 2 3 4 5 6 7
30. I feel comfortable conducting myself in French almost any time and any place.	1 2 3 4 5 6 7
31. I feel confident using French regardless of my ability	1 2 3 4 5 6 7
32. I am as confident using French as other people who know as much French as I do	1 2 3 4 5 6 7
33. I have less confidence in my French skills than others who know as much French as I do	1 2 3 4 5 6 7
34. I work on my French assignments just to the extent that I will not fail the class	1 2 3 4 5 6 7

35. I am studying French merely because it is a required subject	1	2	3	4	5	6	7
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Thank you for your time and insight!

Appendix C

Pseudonym: _____

TASK 1 (Composition):

Instructions: Who is your favorite actor? Tell me about him: why do you like him? Where does he come from? How old is he? Does he have any other family members who are actors?

1. First, please describe his physical appearance. **Please use all the adjectives listed below**, feel free to also use other adjectives to **write a minimum of 8 sentences**.

jeune / vieux	petit / grand/ moyen	joli / beau	souriant	sportif
élégant	mince / gros / musclé	frisé / long/ court /raide	élégant	

2. Second, describe his personality. **Please use at least 8 of the adjectives listed below**, feel free to use other adjectives in addition if you like.

gentil	ennuyeux	énervé	travailleur	compétent
distrain	ambitieux	généreux	sportif	organisé
passionnant	intelligent	patient	amusant	vieux jeu / moderne

TASK 2 (Cloze t.):

Instructions: Fill in the blanks below by using either articles (le, la, un, une) or the verb 'avoir' conjugated in the present tense according to what fits best in the text.

La famille Bouhazid.

_____ famille de Rachid est à Marseille. Sonia est _____ femme de Rachid. Ils ont _____ enfant qui s'appelle Yasmine. Elle _____ 6 ans. Les parents de Yasmine ont _____ trentaine d'années (ils sont nés dans les années 70). Sonia n'aime pas _____ ville de Paris parce qu'elle _____ froid, elle préfère _____ village de cent habitants près de Marseille où elle est née. Bruno pense que Sonia est _____ drôle* (**strange*) de personnage. Elle dit qu'elle _____ besoin de voir _____ soleil tous les jours mais elle reste tout le temps enfermée dans _____ maison à regarder _____ télévision ! Elle est vraiment très bizarre. Yasmine et Rachid _____ peur que Sonia décide de rester à Marseille. Pour Yasmine, Sonia est _____ personne formidable même si elle n'est pas _____ grande voyageuse ! Rachid va acheter _____ joli bijou à Sonia pour la Saint-Valentin, il espère convaincre Sonia de venir à Paris. Bruno pense qu'il a _____ optimisme fantastique. Rachid _____ aussi envie de montrer à Sonia _____ monument de Notre-Dame puis d'aller au célèbre restaurant _____ Tour d'argent. De toute façon, c'est _____ tour de Rachid d'emmener Sonia au restaurant parce que l'année dernière, elle a invité Rachid dans un bon restaurant de Marseille. Comme Yasmine est triste de ne pas voir sa maman, Rachid va aussi acheter _____ animal pour reconforter sa fille : _____ chien peut-être parce qu'ils _____ déjà _____ tortue.

TASK 3 (Grammaticality Judgment):

Instructions: You will read isolated sentences. Some are grammatically incorrect while others are grammatically correct. Please judge the sentences based on how grammatical or ungrammatical you feel they are, using the following category:

Ungrammatical: it is grammatically incorrect; I would not say it or write it.
I don't know: sorry, I really can't tell whether it is grammatically correct or incorrect.
Grammatical: It is grammatically correct; I would say it exactly like that.

Write **(G)** in front of the sentence if it is grammatically correct, **(U)** if it is ungrammatical, or **(I)** for **I don't know**. If the sentence is ungrammatical **(U)**, correct it in the space provided below it.

1. ___ Mes cousines sont d'excellents amis.

Correct here if necessary:

2. ___ C'est une bonne idée de faire du sport.

Correct here if necessary:

3. ___ Bruno va vendre son vieille vélo à Camille.

Correct here if necessary:

4. ___ La plante vert est jolie.

Correct here if necessary:

5. ___ Elle pense que son professeur est intelligente.

Correct here if necessary:

6. ___ C'est une école grande.

Correct here if necessary:

7. ___ Ma soeur passe son vacance ici.

Correct here if necessary:

8. ___ Cet homme a l'air d'être une personne sympathique

Correct here if necessary:

9. ___ Il est chouette mon copain, hein?

Correct here if necessary:

10. ___ Votre enfant est belle comme un ange.

Correct here if necessary:

11. ___ Mado habite au première étage de l'immeuble.

Correct here if necessary:

12. ___ L'homme n'est-il pas une créature bizarre?

Correct here if necessary:

Appendix D

Pseudonym: _____

TASK 1 (Composition):

Instructions: Who is your best girlfriend (or topic 2: who is your mother?)
Tell me about her: who is she? Where does she come from? How old is she?
What does she do?

1. First, please describe her physical appearance. **Please use the adjectives listed below**, feel free to also use other adjectives to **write a minimum of 8 sentences**.

jeune / âgé	américain/mexicain/français	passif/agressif	actif/paresseux	court/long
imposant	maigre/ mince / fort/gros	brun/blond/noir	doux/ délicat	élégant

2. Second, describe her personality. **Please use at least 8 of the adjectives listed below**, feel free to use other adjectives in addition if you like.

affectueux	courageux	fier	chaleureux	réservé
compréhensif	extraverti	exigeant	indépendant	sérieux
charmant	introverti	froid	joyeux	séducteur

TASK 2 (Cloze t.):

Instructions: Fill in the blanks below by using either articles (le, la, un, une) or the verb 'avoir' conjugated in the present tense according to what fits best in the text.

La famille Bouhazid.

_____ famille de Rachid est à Marseille. Sonia est _____ femme de Rachid. Ils ont _____ enfant qui s'appelle Yasmine. Elle _____ 6 ans. Les parents de Yasmine ont _____ trentaine d'années (ils sont nés dans les années 70). Sonia n'aime pas _____ ville de Paris parce qu'elle _____ froid, elle préfère _____ village de cent habitants près de Marseille où elle est née. Bruno pense que Sonia est _____ drôle* (*strange*) de personnage. Elle dit qu'elle _____ besoin de voir _____ soleil tous les jours mais elle reste tout le temps enfermée dans _____ maison à regarder _____ télévision ! Elle est vraiment très bizarre. Yasmine et Rachid _____ peur que Sonia décide de rester à Marseille. Pour Yasmine, Sonia est _____ personne formidable même si elle n'est pas _____ grande voyageuse ! Rachid va acheter _____ joli bijou à Sonia pour la Saint-Valentin, il espère convaincre Sonia de venir à Paris. Bruno pense qu'il a _____ optimisme fantastique. Rachid _____ aussi envie de montrer à Sonia _____ monument de Notre-Dame puis d'aller au célèbre restaurant _____ Tour d'argent. De toute façon, c'est _____ tour de Rachid d'emmener Sonia au restaurant parce que l'année dernière, elle a invité Rachid dans un bon restaurant de Marseille. Comme Yasmine est triste de ne pas voir sa maman, Rachid va aussi acheter _____ animal pour reconforter sa fille : _____ chien peut-être parce qu'ils _____ déjà _____ tortue.

TASK 3 (Grammaticality Judgment):

Instructions: You will read isolated sentences. Some are grammatically incorrect while others are grammatically correct. Please judge the sentences based on how grammatical or ungrammatical you feel they are, using the following category:

Ungrammatical: it is grammatically incorrect; I would not say it or write it.

I don't know: sorry, I really can't tell whether it is grammatically correct or incorrect.

Grammatical: It is grammatically correct; I would say it exactly like that.

Write (G) in front of the sentence if it is grammatically correct, (U) if it is ungrammatical, or (I) for I don't know. If the sentence is ungrammatical (U), correct it in the space provided below it.

13. ___ Mes cousines sont d'excellents amis.

Correct here if necessary:

14. ___ C'est une bonne idée de faire du sport.

Correct here if necessary:

15. ___ Bruno va vendre son vieille vélo à Camille.

Correct here if necessary:

16. ___ La plante vert est jolie.

Correct here if necessary:

17. ___ Elle pense que son professeur est intelligente.

Correct here if necessary:

18. ___ C'est une école grande.

Correct here if necessary:

19. ___ Ma soeur passe son vacance ici.

Correct here if necessary:

20. ___ Cet homme a l'air d'être une personne sympathique

Correct here if necessary:

21. ___ Il est chouette mon copain, hein?

Correct here if necessary:

22. ___ Votre enfant est belle comme un ange.

Correct here if necessary:

23. ___ Mado habite au première étage de l'immeuble.

Correct here if necessary:

24. ___ L'homme n'est-il pas une créature bizarre?

Correct here if necessary:

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ⁱ e.g. “mother” is ‘inherently’ feminine because of its meaning while “cousin” can be either masculine or feminine.

ⁱⁱ A prompt include “a variety of signals – other than alternative reformulation – that push learners to self-repair” (Lyster & Mori, 2006: 271)

ⁱⁱⁱ 1) Integrativeness, 2) Attitudes toward the learning situation, 3) Motivation, 4) Language anxiety, and 5) Other attributes.

^{iv} 1) Attitudes toward learning French, 2) Desire to learn French, 3) French class anxiety, 4) French use anxiety, 5) Interest in foreign languages, 6) Instrumental orientation, 7) Integrative orientation, 8) Motivational intensity, 9) Self-confidence (new situations), 10) Self-confidence (ability controlled), and 11) Self-confidence (given ability).

^v i.e., if one of the two blanks (article or adjective) was incorrect or if both (article and adjective) were incorrect.

^{vi} Also, it is interesting to note that on the day of the post-test, not a single participant from the R-group and C-group asked why they were taking the same FB and GJ tasks as in the pre-test.

^{vii} So a score of 7 was changed into 1, a score of 6 into 2, a score of 5 into 3, a score of 4 remained 4, a score of 3 into 5, a score of 2 into 5 and a score of 1 into 7.

^{viii} E.g., if a student wrote “ma mère est la jolie femme” (*my mother is the pretty woman*) instead of “ma mère est une jolie femme” (*my mother is a pretty woman*), he would still be awarded 1 point since he showed that he knew the inherent lexical gender of “femme”.