

## **Introduction**

Textual enhancement (TE) of input has been considered one of the Focus on Form (FonF) procedures in instructed second language acquisition (SLA) (Doughty & Williams, 1998). TE is carried out to enhance the saliency of input in written or oral texts with a view to facilitating learner's noticing of targeted forms and thereby enhancing their acquisition (Sharwood Smith, 1991, 1993; Schmidt, 1995, 2001; Nassaji & Fotos, 2011). Since TE's emergence in the 1990s, distinctive research designs and varied data elicitation techniques that aimed to examine the effectiveness of TE have resulted in a range of dissimilar and contradictory findings (see e.g., Leow, 2008; Lee & Huang, 2008; Han, Park & Combs, 2008). One of the reasons for the differences in the outcomes of studies in this area is that the targeted forms varied with regard to their semantic value and communicative function. For example, in Alanen's (1995) study more moderate gains in accuracy were observed for the locative suffix which has a 'more or less clearly definable semantic content', as opposed to the other targeted form, consonant alternation, which is 'semantically empty' (p. 269). Additionally, though multiple exposure to enhanced input can increase the chances of noticing targeted forms (Sharwood Smith, 1993), most of the researchers provided only single exposure to enhanced input and did not conduct any delayed post-tests to measure longer term effects of TE (see Lee & Huang's (2008) meta-analysis). A further shortcoming of studies in this field has been that many of them treated the group that received textually non-enhanced input as the control group, which can help us establish the role TE can play in fostering acquisition in comparison with input flood (see Lee & Huang, 2008 for a similar argument), but not the single effect of textual enhancement. Finally, very few previous research projects measured gains in students' performance combined with the extent TE could trigger noticing of the targeted grammatical construction. As a result, it is difficult to discern from previous

studies how successfully learners' attention was drawn to the grammatical constructions in question, how useful TE is in helping students to establish form to function mappings and to what extent students' grammatical awareness and knowledge develops in the short term and in the long run if they are provided with multiple exposure to the enhanced input.

This study has been designed while taking these issues into account. Two modal auxiliaries, 'be going to' and 'will', and their use for expressing future plans and intentions were targeted in this project. Bangladeshi tertiary level EFL learners were included as participants. The targeted forms were chosen based on important differences between the participant's first language (L1), Bangla, in which the future tense is grammatically marked in the form of verbal morphology with a single future morpheme and English, where futurity is lexically expressed. An additional feature of Bangla that there is no use of modal auxiliaries for expressing volitional aspects of meaning in Bangla, also made us suppose that the participants may find it difficult to make form-meaning mappings of modals in English (DeKeyser, 2005).

## **Background**

Input enhancement, previously known as consciousness-raising, is a type of FonF technique (Doughty & Williams, 1998). It refers to the use of different devices through which "the perceptual salience of the target items could be increased" in the input (Long & Robinson, 1998, p. 24). As mere exposure to comprehensible input is not enough for language learning to take place, planned interventions by teachers are needed to direct learners' attention to the formal properties of L2, which may help learners increase their awareness of target structures and to process input so that it can become intake (Sharwood Smith, 1991). Sharwood Smith (1993) proposed that input salience can be increased externally by explicit discussion of target

forms, metalinguistic descriptions, negative evidence via overt error correction, input flood, processing instructions, garden-path techniques and textual enhancement (Gascoigne, 2006). In contrast, learners' internal mechanisms can make some features of the input seem salient to them.

Textual enhancement, which is a non-explicit and external input enhancement technique, was defined by Nassaji and Fotos (2011) as an external attention drawing device whereby any particular feature of the oral or written input (e.g. grammatical items or structures, lexical or phonological items) can be made perceptually salient to L2 learners in a planned way so that they can notice the targeted forms without any explicit metalinguistic explanation. This input enhancement technique can be applied by teachers, researchers or material developers intentionally, in written or visual input, through typographical alterations such as bold facing, underlining, enlarging, capitalizing, italicizing or colour coding (Gascoigne, 2006).

TE is considered an “implicit and unobtrusive way” of directing learners’ attention to targeted forms (Nassaji & Fotos, 2011, p. 41), because it tends to focus learners’ attention primarily on the meaning of the text, and incidentally on mapping form-meaning relationships (R. Ellis, 2008). Therefore, textually enhanced forms may not always be noticed by learners because salience created externally by teachers may not correspond with learners' internally generated salience (Sharwood Smith, 1991, 1993). Another potential constraint on the effect of TE on the acquisition of targeted constructions might be that as learners’ attention is focussed on the meaning of the text, they might not have attentional resources available for processing linguistic forms (VanPatten, 1996). Conversely, it might be possible that textually enhanced forms draw away students’ attention from meaning, and thus TE might have a detrimental effect on comprehension (see e.g. Lee, 2007). Recent discussions in the field of educational psychology show that minimally guided instruction, including discovery-based,

experiential learning, of which input enhancement can also be an example of, does not result in substantial development in performance (see e.g. Kirschner, Sweller & Clark, 2006). The reason for the apparent lack of long-term learning cited in this field of inquiry is similar to the constraints on TE, namely that there are limitations on working memory and attentional resources when acquiring new information (Sweller, 1988), and without sufficient guidance inductive learning might not take place.

Previous empirical studies which treated TE alone as an independent variable differ greatly in the number (one or two) and choice of target forms. White (1998), Leow (2001), Izumi (2002), Wong (2003) and Simard (2009) targeted one form, whereas Alanen (1995), Jourdenais, Ota, Stauffer, Boyson, and Doughty (1995), Overstreet (1998) and Leow, Egi, Nuevo and Tsai (2003) targeted two forms. These targeted forms were selected based on their “difficulty, learnability, semantic content, communicative value, perceptual salience and natural occurrence, and frequency” (Han et al., 2008. p. 599). According to Park (2004), the mixed choice of target forms with different learning difficulties might have resulted in the diverse outcomes of these studies.

With regard to the findings of previous studies, only three of them Shook (1994), Jourdenais et al. (1995), and Alanen (1995) found TE to have positive impact on L2 learners’ grammatical development. Shook’s study targeted preterit forms and relative pronouns in Spanish in two relatively short one hour sessions. Jourdenais et al.’s single treatment also involved the Spanish preterit form as well as the imperfect. Alanen (1995) also found a significant effect of textual enhancement on one of the targeted forms, the locative suffix, which has high semantic value in Finnish. This might indicate that textual enhancement is more effective for semantically meaningful constructions than for those features of grammar that carry less communicative meaning. Another common feature of two of the studies that found a positive effect of textual enhancement, namely those of Shook (1994) and Jourdenais

et al (1995), was that their participants had prior knowledge of the constructions. From this we might conclude that prior-knowledge can facilitate students' noticing in the textually enhanced conditions. Shook (1994) and Alanen (1995) measured grammatical development by means of controlled production tasks (sentence completion and fill-in the blank tasks) and recognition tasks (grammaticality judgements, multiple choice test), which required students to employ their explicit knowledge. In contrast Jourdenais et al. (1995) found an effect of textual enhancement in a picture-based writing task, which might have called on students' procedural and to some extent automatic knowledge. Overall, Lee and Huang's (2008) meta-analysis indicated very small-sized effects ( $d=.22$ ) of textual enhancement on the acquisition of grammatical constructions in L2 learning. Interestingly, this small effect size is similar to findings in the field of educational psychology research that have investigated learning outcomes from minimally guided learning (see Kirschner et al., 2006).

Previous studies also employed varying treatment lengths and exposure to the input. Most of the researchers utilised short-term treatment with somewhat limited exposure (in terms of time and quality) to input (Alanen, 1995; Jourdenais et al., 1995; Overstreet, 1998; Leow et al., 2003; Wong, 2003). For example, Alanen provided only 15 minutes exposure, whereas White (1998) provided exposure over a two-week period involving greater treatment length with a greater amount of exposure to the input. Besides, only Shook (1994) (2 sessions), Alanen (1995) (2 sessions), White (1998) (10 sessions), Izumi (2002) (6 sessions) and Wong (2003) (3 sessions) provided multiple exposure to enhanced input. The findings with regard to the length and intensity of exposure seem to be contradictory, as Jourdenais et al.'s (1995) participants benefitted just from one exposure session with 28 exemplars in the input; whereas both Alanen's (1995) and Shook's (1994) study consisted of two sessions with between 10-15 exemplars presented in each.

Considering previous research from a methodological perspective, we can point out a number of shortcomings. Firstly, very few previous research studies, other than White (1998) and Leow (2001), administered a delayed post-test to examine TE's further effects on participants' intake. According to White (1998), conducting delayed post-tests is important because only through these tests one can make inferences about the longer lasting effects of instruction. Second, only Izumi (2002) and Simard (2009) included both experimental and control groups in their studies, while other researchers focused only on experimental groups. Jourdenais et al. (1995), Alanen (1995), Leow (2001) and Leow et al. (2003) considered their non-enhanced groups as control groups and these groups were also exposed to input flood. Thus these researchers mainly compared TE's effects with that of input flood, which is another type of input enhancement technique. For this reason it is difficult to ascertain whether any development between pre- and post-tests might have been caused by practice effects or learning taking place in performing the test tasks.

### *The present study*

To address the research gaps in the previous studies and to gain further insights into the effects of TE on grammar learning, the participants in our study were provided with two exposures to written texts in different orders to control for the task order effect. Our study also included a pre-test, immediate post-test and delayed post-test, and had both experimental groups and a control group to examine participants' prior knowledge of the targeted forms as well as to explore how durable the effects of TE are on the development of L2 learners' grammatical knowledge regarding the expression of future plans and intentions.

The targeted forms of this study were the modal auxiliaries 'will' and 'be going to'. These forms were chosen because the participants do not use modals in their L1 to express the volitional aspect of meaning. As mentioned earlier, Bangla expresses future tense with the

help of verbal morphology and has a one to one form-function mapping of between future form and future meaning. In contrast, in English future tense is expressed by lexical means in five different ways: (1) will + simple infinitive (2) going to + simple infinitive (3) present progressive tense (4) simple present tense and (5) will + progressive infinitive. Furthermore, in English there are a number of semantic distinctions made in descriptions of future states and events. For example, Radden and Dirven (2007, p. 227) list seven different future meanings ordered according a scale of certainty. The fact that in the students' L1 there is one-to-one correspondence between meaning and form, whereas in the target language (TL) multiple shades of meaning are distinguished which are denoted by different lexical forms can cause particular difficulties for acquisition (DeKeyser, 2005). The target forms were also chosen based on the consideration that learners receive minimal exposure to them during their previous English studies.

In our study we chose to focus on two different ways of expressing future intentions: predicted future intentions, which express decisions made at the time of speaking and the future of present intentions, which describe future plans that were formulated before the act of speaking (Leech, 2004). The first meaning is expressed by 'will', which is considered a primary modal auxiliary in that its meaning has both a logical (semantic) and a practical (pragmatic) element. The second meaning is expressed by 'be going to', which is considered a semi-modal because of its having primary modal-like qualities in terms of meaning and behaviour (Leech, 2004) and sharing varying extents of the characteristics of the main verb 'go' (Palmer, 1974). These two meanings are often presented in contrast in EFL textbooks and even though the form 'going to' seems to be more frequent in input, students tend to underuse it and mainly apply 'will' uniformly across situations (see e.g Bardovi-Harlig, 2002).

Based on the considerations outlined in the review of literature and with regard to the linguistic and semantic characteristics of target forms above, the study addressed the following three research questions:

1. To what extent does multiple exposure to enhanced texts affect the participants' noticing of and metalinguistic awareness about the expression of future plans and intentions by means of the modal auxiliaries 'be going to' and 'will'?
2. To what extent does multiple exposure to enhanced texts affect the participants' grammatical development in expressing future plans and intentions by means of the modal auxiliaries 'be going to' and 'will' immediately after the treatment and in the delayed post-test?

It needs to be noted that in our study grammatical development was operationalized as gain scores in written controlled tasks of recognition and production. These tasks mainly tap students' explicit knowledge and their ability to apply this explicit knowledge in tasks in which they need to decide which future tense modal expresses the intended communicative meaning more accurately. Therefore these tasks can give insights into early stages of proceduralisation of explicit knowledge (DeKeyser, 2007), but do not yield information on the level of automaticity gained or that of the implicit knowledge acquired.

## **Research method**

### ***Participants***

Altogether 97 students participated in our research. They were selected from an entire cohort of first year, first semester science faculty students at a mid-level private university in Bangladesh based on their pre-test results. Only students who scored less than 40% on the pre-test were invited to participate. The final study participants were randomly assigned into

the experimental and control groups. Among the study participants there were fifty-three males and forty-four females who were first year, first semester science faculty students at a mid-level private university in Bangladesh. They were in five groups taking English 1, a Basic English skills credit course, which was approximately at A2-B1 level on the Common European Framework of Reference. Their average age was 18.18 years (standard deviation = .457, range 18–20) and they had no experience of staying in any native English-speaking country. All of them had prior exposure to EFL in primary and secondary school and came from a Bangla (L1) medium background. The target forms were not taught to the students as part of the English language curriculum at the university.

### **Research procedures**

This study has an experimental design with a pre-test, immediate post-test and delayed post-test. The study included two experimental groups – enhanced (N=40) and non-enhanced (N=40), and a control group (N=20). The experimental groups were exposed to different versions of the input: textual enhancement and input flood without textual enhancement, but the control group was not provided with any input. The participants were allocated to the control and experimental groups randomly. To provide multiple exposure to the input, two reading texts were used in different orders – text A first and text B first into two more groups, respectively, as text A first and text B first, each having equal numbers of participants (N=20).

The study consisted of four sessions, which were distributed over five weeks. In the first session in week 1 (day 2), a pre-test was taken. After two weeks (week 3, day 2), in the second session, the first exposure was provided to the experimental groups, and they only did a reading based multiple choice (MC) comprehension task. No tests were administered in this

session in order to avoid a practice effect of the test. In the same week (week 3, day 4), the experimental groups' participants attended the third session where they were given exposure to the second set of texts. Then, an immediate post-test was conducted. Finally, a delayed post-test was taken in the fourth session of week 5 (day 2). The control group only completed the test without getting any exposure to the input and only had three sessions of meetings.

The pre-test and the immediate and delayed post-test were taken in the same format with exactly the same tasks. However, the reading based MC comprehension task, the noticing question, and the metalinguistic task were only included in the immediate post-test in order to examine the immediate post exposure effect.

### ***Materials***

The materials used in the study included an information sheet about the study, a consent form, a personal information sheet for the participants, and two reading texts with enhanced and unenhanced versions. The first three materials were given to the participants prior to the pre-test. A reading based MC comprehension task, a noticing question, a controlled production grammar task (fill-in-the-blanks with clues), a form recognition task (choosing the correct form) and a metalinguistic awareness task were also used in this study to elicit data. The instruments and materials used in the study were piloted on a similar group of students (N=20) prior to the study to check the difficulty level and clarity of instruction. The tasks were also administered to a group of 20 native speaker undergraduate students in the United Kingdom to ascertain that only items on which there is considerable agreement (over 80%) among native speakers are included.

### **Experimental tasks**

For the study, two reading texts, text A ('Planning a Party' with 157 words) and text B ('We are going to Use it Today' with 220 words), were used. Text A was taken from a website (Beare, n.d) and text B was taken from Puchta, Stranks, Gerngross, Holzmann and Lewis-Jones's (2008) coursebook. Both of the texts were modified in order to adjust the difficulty level of the texts to that of the participants. The targeted forms were printed in bold and equal numbers of tokens of exposure to the targeted forms (will = 5, be going to = 5; altogether 10 target forms that occurred in each turn of the dialogue) were included in each of the texts so that input flood could be controlled (Han et al., 2008). Though the targeted auxiliary forms are contracted in spoken English, their full forms were included in these texts to maintain the perceptual saliency of the input (Long & Robinson, 1998). Since both of the targeted forms included volitional aspect of meaning, two different communicative situations in a dialogue format were included in both texts. The texts were originally designed by the material developers to teach the contrastive meanings of 'will' and 'be going to'.

### **Reading comprehension task**

Five multiple-choice items were designed based on each of the reading texts (total 10 items). The experimental groups were allowed 15 minutes to read the text and 5 minutes to respond to the questions. No explicit instruction was given to the participants to notice the emboldened forms. This task was used to check the participants' comprehension of the meaning of the texts.

### **Pre- and post-test grammar tasks**

In the first test task, the participants were asked to fill in the blanks with the correct form of the verb given in brackets using ‘will’ or ‘be going to’. There were 10 items (5 items for ‘will’ and 5 for ‘be going to’) and the students were given 10 minutes to do the task. This task was focused on the production of the correct target form, and was referred to as Grammar Task 1 in the tests.

In the second grammar task, which consisted of 10 items (5 items for ‘will’ and 5 for ‘be going to’), the participants were asked to put a circle around the correct answer with both ‘will’ and ‘be going to’ being given as options. Fifteen minutes were allotted for this whole task, which was designed to examine whether or not the participants were able to recognise the correct target form according to the context. This task was referred to as Grammar Task 2 in the tests.

#### Noticing and metalinguistic awareness questions

A question was designed to determine whether the participants in the experimental groups who were exposed to the texts noticed the targeted forms. The question simply enquired into whether the participants had noticed “anything specifically while reading the text”. An additional metalinguistic task was also administered. This post-exposure task had only one question where the participants were asked to explain their understanding of the functions of ‘be going to’ and ‘will’. The participants of the experimental groups were asked to answer the question based on their exposure to the text, whereas the control group who were not exposed to the input, had to answer it based on their current level of knowledge of the target forms. The participants were allowed to use L1 to answer it since some of them might not have the required proficiency level in English to express their thoughts accurately.

### *Data analysis*

The following steps were taken to score and analyse the data. The correct and incorrect answers among the quantitative data gathered from the MC comprehension, fill-in-the-blanks and choosing the correct form tasks were scored as '1' and '0' points, respectively. The total test scores were counted based on the fill-in-the-blanks task and choosing the correct form task so that the participants' overall development across the pre-test, immediate post-test and delayed post-test could be compared with regard to the tests, the tasks and the target forms separately.

For scoring the responses of the noticing question, the following criteria were used. Responses which expressed that the participants had noticed the target forms and expressions of future tense were considered as instances of noticing. Any answers which did not make a mention of future tense or the target verb forms were considered as 'not noticed'.

The qualitative data for the metalinguistic awareness task were scored according to the participants' understanding of the targeted forms, 'will' and 'be going to', separately. Responses which expressed that 'will' could be used for referring to future plans or intentions made instantly during the conversation were considered as showing detailed understanding of the targeted form 'will'. Responses which stated that 'will' could be used for expressing more certain future plans or intentions but made no reference to when the decision about the future action was made were considered as showing partial understanding of the targeted form 'will'. Responses which expressed that 'be going to' could be used for referring to future plans made prior to the conversation were considered as showing detailed understanding of the targeted form 'be going to'. Responses which stated that 'be going to' could be used for referring to less certain future plans or intentions but did not mention the time when the decision was made were scored as partial understanding of the targeted form 'be going to'. Any responses other than those stated above were considered as showing no understanding of

the targeted form. All the qualitative data was double-coded by the two authors of the article. In case of disagreement (which happened in 5% of the cases) a joint decision was made.

The raw scores obtained from the pre-test, immediate post-test and delayed post-test were analyzed with SPSS version 19 with the level of significance set at .05. Before conducting any statistical tests or analyses, the pre-test scores were deducted from the immediate and delayed post-test scores to calculate how much the three treatment groups (enhanced, non-enhanced, control) had gained in terms of overall test-scores, and for tasks and target forms separately. After that, a repeated measure analysis of variance (ANOVA) was conducted with the three tests' total gain scores considered as within subject factors, and treatment (enhanced, non-enhanced and control) and text order (A and B) considered as between subject factors. This analysis was performed to examine whether different text orders had any effect on the treatment groups' gain scores. It was revealed that text order had no statistically significant effect on test scores ( $F(2,94) = .747, p = .48$ ). Therefore, it was concluded that any measurable changes in the immediate and delayed post-tests were unlikely to be induced by the exposure to different text orders during the treatment.

The descriptive statistics for all the gain scores revealed that the distribution of the total gain scores of both the immediate and delayed post-tests was normal.

## **Results**

In this section the results for all the gain scores of the three tests for each of the grammar tasks and the total scores gathered from the MC comprehension task, noticing question and metalinguistic awareness task will be presented. These data were analysed by applying various statistical tools with a view to examining how far the participants were able to notice and gain metalinguistic awareness of the targeted forms (Research Question 1), and whether

they had developed in their expression of future plans and intentions using the targeted forms ‘will’ and ‘be going to’ in controlled grammar tasks (Research Question 2). The descriptive statistics for all three groups’ total scores in the pre-test show that they all had similar levels of prior knowledge about the targeted forms (see Table 1). One-way ANOVA results for these scores also reveal that these groups did not vary from each other in a statistically significant manner in terms of prior knowledge of will ( $F(2, 94) = .79, p = .45$ ) and be going to ( $F(2, 94) = .01, p = .999$ ). The results, however, indicate that the participants had considerably higher prior knowledge of the construction ‘will’ than of ‘be going to’ ( $t(96) = 21.59, p < .001$ ).

*Insert Table 1 around here*

Independent sample t-tests were conducted on the comprehension scores for texts A and B to examine whether the enhanced and non-enhanced groups varied in their mean scores. Table 2 presents the descriptive statistics for these scores according to the treatment groups.

*Insert Table 2 around here*

These treatment groups’ high M and low SD scores as well as the t-test results indicate that the experimental groups did not vary in a statistically significant way in their comprehension scores for the texts (text A comprehension  $t(75) = .41, p = .68$ ; text B comprehension  $t(75) = .27, p = .78$ ). Therefore, these results show that both of the groups manifested high levels of comprehension of the texts and TE did not have a detrimental effect on the processing of the meaning of the texts.

A Pearson’s chi-square test was used in order to examine the effect of TE on noticing. The results indicate that the enhanced and non-enhanced groups differed in a statistically significant manner in their noticing of the targeted forms ( $\chi^2(2, N= 97) = 9.01, p < .001$ ). A

cross-tabulation of these scores according to treatment further revealed that 78.4% of the participants of the enhanced group and 45% participants of the non-enhanced group noticed the targeted forms during the exposure. These results indicate that the majority of the participants of the enhanced group noticed the targeted forms in the enhanced texts, whereas almost half of the non-enhanced group also noticed the targeted forms without having any exposure to the enhanced input. Although the latter finding shows that input flood without TE can also induce noticing, the significant difference in noticing between the TE and non-TE groups suggests that visual enhancement can call learners' attention to the targeted construction more successfully than input flood.

We also examined how far the treatment groups varied in their understanding of the targeted form-function mappings of 'will' and 'be going to' in the metalinguistic awareness task by means of Pearson's Chi-square test. None of the students in the control group showed either partial or detailed understanding of the targeted constructions, and therefore they were not included in these analyses. The results show that the treatment groups differed in a statistically significant way in their understanding of 'be going to' but did not differ in the case of 'will' ('be going to'  $\chi^2 (4, N= 97) = 15.54, p = .004$ ; 'will'  $\chi^2 (4, N=97) = 8.22, p = .12$ ). The cross-tabulations of the metalinguistic awareness task scores according to the target forms and treatment groups show that 13.5% of the participants of the enhanced group and 7.5% participants of the non-enhanced group gained 'detailed understanding' of 'will' and 'be going to' respectively. In contrast, only 37.8% of the participants of the enhanced group, and 25% participants of the non-enhanced group gained 'partial understanding' of the targeted function of 'be going to'. 32.4% participants of the enhanced group and 22.5% participants of the non-enhanced group gained 'partial understanding' of the targeted function of 'will'. Nevertheless, 48.6% and 54.1% of the participants of the enhanced group achieved 'no understanding' of the targeted form-function mapping of 'be going to' and 'will' respectively;

and 67.5% and 70% of the participants of the non-enhanced group gained ‘no understanding’ of the targeted form-function mapping of ‘be going to’ and ‘will’ respectively.

Hence it can be concluded that in spite of providing multiple exposures to the enhanced texts, a large number of participants did not gain any understanding of the form-function mappings of either ‘will’ or ‘be going to’. Although the non-enhanced group was exposed to the unenhanced version of the texts, the students in this group did gain some understanding of the targeted form-function mappings, while the control group who were not provided with any input did not achieve any understanding at all. Overall, the experimental groups gained more ‘detailed’ and ‘partial’ understanding of ‘be going to’ than of ‘will’.

The participants’ average gain scores in Grammar Task 1, which was a production task in immediate and delayed post-tests were  $.32$  ( $SD= 1.09$ ) and  $.19$  ( $SD= 1.36$ ), respectively. One-way ANOVA and partial eta squared results for these scores reveal that the effects of the treatment on the different groups’ achievement in both immediate and delayed post-tests were medium and large, respectively (immediate post-test  $F(2, 94) = 5.20, p = .007, \eta^2 = .100$ ); delayed post-test  $F(2, 94) = 9.11, p < .001, \eta^2 = .162$ ). However, Table 3 also demonstrates that when we look at the gain scores separately for the two constructions in the production task, they show no significant difference across groups in the immediate post-test, but there is a significant treatment effect for both constructions in the delayed post-test (will:  $F(2, 94) = 4.91, p = .009$ ; be going to:  $F(2, 94) = 3.58, p = .03$ ).

*Insert Table 3 around here*

A post hoc Scheffe test revealed that the effect of treatment in the overall scores of the immediate post-test was due to the statistically significant difference between the mean gain scores of the enhanced and control groups. In contrast, the enhanced group differed in a

statistically significant way in its overall gain scores from both the non-enhanced and control groups in the delayed post-test. The post-hoc analyses of the delayed post-test gain scores of the constructions of 'will' and 'be going to' show that in the case of 'will' the enhanced group differed significantly from the control and the non-enhanced group, whereas in the case 'be going to' the difference was found between the enhanced and non-enhanced group only.

The participants' average gain scores in the receptive grammar task (Grammar Task 2), which required students to choose the correct form, in the immediate and delayed post-tests were 1.49 ( $SD= 1.29$ ) and 1.62 ( $SD= 1.35$ ), respectively. These figures show that the participants increased their scores in this form recognition task than in the previous form production task ( $t(96) = 6.11, p < .001$ ). The results of the one-way ANOVA and partial eta squared values reveal that there were large effects of the treatment on the overall gain scores of different groups in both the immediate and delayed post-tests (immediate post-test  $F(2, 94) = 11.99, p < .001, \eta^2 = .203$ ; delayed post-test  $F(2, 94) = 7.01, p < .001, \eta^2 = .130$ ). As can be seen in Table 4, however, there was only a significant effect of treatment on the structure 'will' (immediate post-test  $F(2, 94) = 8.38, p < .001$ ;  $F(2, 94) = 5.10, p = .008$ ) but not on 'be going to'.

*Insert Table 4 around here*

The post hoc Scheffe test revealed that the treatment effect in the overall scores of the immediate post-test was due to the statistically significant contrast between all three groups, whereas the treatment effect in the delayed post-test was caused by the difference between the mean scores of the non-enhanced and control group. The post-hoc analysis for the immediate gain in the scores of the construction 'will' indicated that the enhanced group differed significantly from both the control and the non-enhanced group. In the delayed post-test,

however, both the enhanced and the non-enhanced group outperformed the control group with regard to the construction ‘will’.

The total gain scores for ‘will’ and ‘be going to’ for each test were calculated by adding the gain scores on the two tasks for each form separately. The one-way ANOVA and partial eta squared results for the total gain scores of the immediate and delayed post-tests show that the treatment had large effects on all the group’s total gain scores across the tests (immediate post-test  $F(2,94) = 31.85, p < .001, \eta p^2 = .404$ ; delayed post-test  $F(2, 94) = 13.50, p < .001, \eta p^2 = .223$ ). As can be seen in Table 5, the treatment had both a significant immediate and delayed effect on students’ performance in using the construction ‘will’ (immediate post-test  $F(2,94) = 9.97, p < .001, \eta p^2 = .17$ ; delayed post-test  $F(2, 94) = 9.66, p < .001, \eta p^2 = .17$ ), but not on their performance using ‘be going to’ (immediate post-test  $F(2,94) = 2.64, p = .07$ ; delayed post-test  $F(2, 94) = 2.95, p = .06$ ).

*Insert Table 5 around here*

Additionally, the post-hoc Scheffe test revealed that although the treatment groups differed from each other in a statistically significant way in their overall gain scores in the immediate post-test, the enhanced and non-enhanced groups did not have any statistically significant variation in their overall gain scores in the delayed post-test. Similarly, in the immediate post-test gains of the construction ‘will’ the control group performed significantly worse than the enhanced group, and there was a significant difference between the two experimental groups as well. In the delayed post-test, however, the difference between the textual enhancement and non-enhancement group disappeared and both of these groups showed higher gains than the control group.

## **Discussion**

In our study we sought to answer the question to what extent multiple exposures to enhanced texts affect the participants' noticing of and metalinguistic awareness about the expression of future plans and intentions by means of the modal auxiliaries 'be going to' and 'will'. Based on the review of literature it could be assumed that multiple exposure to enhanced input would increase the participants' chances of noticing the targeted forms 'be going to' and 'will'. This might result in further processing and gains in declarative knowledge with regard to the expression of future plans and intentions via the use of those auxiliaries. It was evident from the results of the noticing question that the enhanced and non-enhanced groups differed in a statistically significant manner in terms of noticing the targeted form. This finding is similar to those of Jourdenais et al. (1995), Leow (2001) and Izumi (2002) which showed that TE was effective in terms of drawing learners' attention to target forms. Nevertheless, it is interesting to observe in our research that although the groups differed in their reported noticing significantly, even in the visual enhancement group 21.6% of the participants did not notice the targeted form. Although our findings are limited to two linguistic constructions and a particular group of learners, they seem to underscore the claims of Kirschner et al. (2006) that if new information is presented in a context where learners need to pay attention to a number of parallel processes and a variety of sources of information, in our case the comprehension of the reading text, they might not have sufficient working memory resources left for attending to the information to be acquired.

In our study we also examined whether input enhancement can lead to increased metalinguistic awareness of the two targeted constructions. With regard to 'be going to', we could observe a significant impact of the treatment conditions on metalinguistic awareness, but concerning 'will', students' ability to verbalize the targeted use of the construction did not

seem to change substantially. This discrepancy needs to be considered in the light of the pre-test results. The pre-test results indicate that the participants had higher prior knowledge of 'will' than of 'be going to'. In line with Bardovi-Harlig's (2002) findings that the use of 'will' emerges earlier than that of 'going to', the qualitative analysis of the students answers on the metalinguistic awareness task also suggests that students often identified 'will' as a tense auxiliary only, thus missing its volitional aspect of meaning. Therefore, these results might suggest that textual enhancement without explicit information on the complexities of form-function mapping might not be effective in helping learners to expand their existing conceptualisations of this grammatical construction. With regard to the 'be going to' construction, students could make some development in metalinguistic awareness from minimal to partial understanding. The findings also show that only a few of the participants in both the enhanced and non-enhanced groups were able to gain a 'detailed understanding' of the targeted form-function mappings of 'be going to' and 'will', whereas more than half of the participants of both groups did not achieve any understanding of the targeted form-function mappings of these forms. Therefore neither input flood nor textual enhancement alone was found to be sufficient for helping students to understand all the details of the usage of the targeted constructions.

Our study also aimed to answer the question whether the participants had developed in their use of the targeted forms 'will' and 'be going to' in controlled recognition and production tasks. In contrast with the findings showing increased metalinguistic awareness about the use of 'be going to', the overall results of the grammar tasks indicate that students did not gain higher scores for the construction 'be going to' as a result of the treatment. There might be several reasons for this somewhat contradictory result. One of the possible explanations might be that the lack of prior knowledge of this construction might have prevented the participants to benefit from the implicit FonF techniques of input flood and

textual enhancement. This finding is similar to the majority of studies where textual enhancement was found to have negligible effects on improvement in grammatical knowledge of constructions of which students had low levels of pre-existing knowledge (for a review see Lee & Huang, 2008). Therefore it might be possible that although the students gained some partial metalinguistic awareness of the form-function mapping of ‘be going to’, this was not sufficient for them to apply it in the grammar tasks.

As opposed to the construction ‘be going to’, there seems to be a large effect of treatment on the students’ ability to use ‘will’ in both of the grammar tasks, which might be due to the fact that the participants had higher pre-existing knowledge of this structure as demonstrated by the pre-test scores. This finding, albeit limited in generalizability, seems to be in accord with the claims made by Kirschner et al. (2006) that minimally guided instruction might be more useful for students who have pre-existing knowledge in the field constituting the focus of study.

The results further reveal that the treatment had an overall large effect on students’ ability to use ‘will’ in the controlled grammar production and comprehension tasks ( $\eta\rho^2 = .17$ ). It was also found that the enhancement group differed significantly in the immediate post-test gains of the construction ‘will’ both from the control group and the non-enhanced group, but in the delayed post-test both of the experimental groups showed higher gains than the control group. The same pattern of results was reported by White (1998). This variation might have occurred due to the input given to the non-enhanced group. The unenhanced versions of the texts were also seeded with the targeted forms, which were semantically meaningful. Therefore, these enriched texts might have been able to draw the participants’ attention to the targeted forms without any enhancement, and thus served as a means of input flood (Reinders & Ellis, 2009). This finding regarding the enriched texts may also be supported by the results gained from the analysis of the noticing question which show that

almost half of the participants of the non-enhanced group had also noticed the targeted forms. As a result, it could be argued that TE might only serve to speed up the chances of noticing, otherwise there might be no need to enhance semantically meaningful targeted forms which could be noticed without enhancement (Leow et al., 2003).

### **Conclusions and implications**

This experimental study brought three main findings. First of all, the study showed that multiple exposure to textually enhanced input had a positive impact on Bangladeshi tertiary level EFL learners' ability to use the construction 'will' for expressing future plans and intentions in controlled grammar tasks, and was successful in helping the participants to gain some understanding of the form-function mapping of the construction 'be going to'. Second, even though multiple exposure to enhanced input was provided, it was not effective in inducing the experimental groups' detailed comprehension of form-function mappings. Therefore, taking these EFL learners' L1 and TL contrast regarding the use of modal auxiliaries and limited access to the TL into account, it can be recommended that TE and input flood should be employed along with explicit instruction to foster learners' explicit knowledge of targeted form-function mappings (Fotos, 1998; DeKeyser, 2003, 2009). A similar recommendation emerged from White's (1998) study which also involved L1-L2 contrast. Thirdly, the results suggest that TE and input flood could have the same effect in the long run in the case of enhancing semantically meaningful target forms.

Although this study has provided some valuable insights into the impact of TE of input on EFL learners' grammatical development, it also has certain limitations. Firstly, no online data were collected in this study to investigate the experimental group's underlying cognitive processes, which might have been involved with noticing the targeted forms and

processing the input further. Secondly, the participants' individual differences regarding language learning aptitude were not examined in this study, though these could be an influential factor in determining the effectiveness of TE. The short length of treatment in our study might also have contributed to the fact that very few participants were able to gain a detailed understanding of the targeted constructions, and research using an extended longitudinal design would be necessary to draw more ecologically valid conclusions. Therefore, future studies could address all these limitations via a wider span, and choose new forms to gain more insights into the effectiveness of TE of input in different EFL contexts.

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