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# Comparing the impacts of various inputs(I + 1 & I-1) on pre-intermediate EFL learners' Reading comprehension and Reading motivation: the case of Ahvazi learners

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## Abstract

Considering the vital role of comprehensible input, this study attempted to compare the effects of input with various difficulty levels on Iranian EFL learners' reading comprehension and reading motivation. To fulfil this objective, 54 Iranian pre-intermediate EFL learners were selected from two intact classes ( $n = 27$  each). The selected participants were randomly assigned to two equal groups, namely "i + 1" ( $n = 27$ ) and "i-1" group ( $n = 27$ ). Then, the groups were pretested by a researcher-made reading comprehension test. After carrying out the pre-test, the treatment (i.e., extensive reading at different levels of difficulty) was practiced on the both groups. The participants in "i + 1" group received reading passages beyond the current level, on the other hand, the "i-1" group received those reading passages which were below their current level. After the instruction ended, a modified version of pre-test was conducted as posttest to determine the impacts of the treatment on the students' reading comprehension. The obtained results indicated that there was a significant difference between the post-tests of "i + 1" and "i-1" groups. The findings showed that the "i + 1" group significantly outperformed the "i-1" group ( $p < .05$ ) on the post-test. Moreover, the findings indicated that "i + 1" group's motivation increased after the treatment. The implications of the study suggest that interactive type of input is beneficial to develop students' language skills.

**Keywords:** Comprehensible input, Extensive reading, Foreign language reading anxiety, Input, Reading comprehension, Text difficulty level

## Introduction

There is a consensus of agreement among the researchers that input is vital for language learning to come about but they may not have analogous opinions about the way it is utilized by learners (Gass and Selinker 2008). Input may be operationally described as "oral and/or written corpus of target language to which second language (L2) learners are subjected via different sources, and is perceived by them as language input" (Kumaravadivelu 2006, p. 26). According to Ellis (2012), input-

based instruction “includes the utilization of the input that learners are presented to or are needed to process” (p. 285). In this procedure, through presentation to language input, if students discover the way language works or the way language is rehearsed in workplace, or handicraft target condition, learning will be occurred (Basturkmen 2006; Tahmasbi et al. 2019). Thus, it can be deduced that input is of fundamental significance for language learning abilities particularly reading.

Reading is seen as “an essential expertise for EFL learners to enhance their language ability” (Chiang 2015, p. 11). Reading is characterized as “a fluent process of readers joining information from a text and their own background knowledge to fabricate meaning” (Nunan 2003, p. 68). It gives chances to foreign language learners to be presented to English in circumstances that language input is entirely restricted (Lao and Krashen 2000; Namaziandost et al. 2019c; Wu 2012).

In recent years, extensive reading (ER) has gained particular consideration as an impressive and undertaking way of expanding foreign language skills (Yamashita 2013). ER aims “to progress good reading habits to form knowledge of vocabulary and grammar and to encourage a liking for reading” (Richards and Schmidt 2010, p. 194). The major purpose in ER is to reach at a general understanding of what is read (Richards and Schmidt 2010). ER is for general comprehending in which “the minimum 95% comprehension figure” (Meng 2009, p. 134) is admissible and the reading velocity is below 100 to 150 words per minute (Mikeladze 2014; Shakibaei et al. 2019). Truly, some studies (e.g., Bell 2001; Chiang 2015; Hitosugi and Day 2004; Iwahori 2008; Leung 2002; Tanaka 2007) have presented that ER significantly enhanced foreign language reading comprehension and general proficiency.

One of the best bountiful sources for providing language input for EFL learners is through extensive reading (ER) (Day and Bamford 1998; Krashen 1982). As indicated by Krashen (1982), the input to which learners are presented ought to be a little above their current level of competence, ‘i + 1,’ in which ‘i’ alludes to the present language capacity of learner, though ‘1’ alludes to the input that is somewhat above the learners’ present language ability. On the other hand, Day and Bamford (1998) suggested a diverse model on the hardness level of the input. Based on this hypothesis, “ER is efficacious if it furnishes students with input which is marginally beneath their current level of competence (i.e., ‘i-1’)” (Day and Bamford 1998, p. 36). This way language learners can swiftly develop their reading certainty, reading fluency and construct sight words and high-frequency words.

However, a glance to the prior literature divulges that there are rare studies on the impacts of these two viewpoints (i.e., ‘i + 1’ and ‘i - 1’) on EFL learners’ reading comprehension and reading motivation. To cover the extant gap, the current study tried to focus on this theme by inspecting how Krashen’s input hypothesis through ‘i + 1’ and ‘i - 1’ materials may impress EFL students’ reading comprehension and reading motivation.

### Literature review

Second language (L2) reading is a multifaceted, complex process in that it involves the interplay of a wide range of components. As a result, although most of the reviews on L2 reading research start with an attempt to answer the question ‘What is reading?’, nearly all of them go on to state that it is such a complex concept that no definition of

reading, which is clearly stated, empirically supported, and theoretically unassailable, has been offered to date (e.g., Aebersold and Field 1997; Grabe and Stoller 2002; Namaziandost and Shafiee 2018; Urquhart and Weir 1998).

Grabe (2009) notes that a proper definition of reading will need to account for what fluent readers do when they read, what processes are used by them, and how these processes work together to build a general notion of reading. Granting that no single statement can capture the complexity of reading, Grabe (2009) states that reading can be conjured as a complex combination of processes – processes that are rapid, efficient, interactive, strategic, flexible, evaluative, purposeful, comprehending, learning, and linguistic (p. 14). In the most general terms, it can be stated that reading is a process that involves the reader, the text, and the interaction between the reader and the text (Grabe 2009; Grabe and Stoller 2002; Koda 2005; Mirshekaran et al. 2018). Reading researchers' continuous attempts to explain how the reader and the text components interact, and how this interaction results in reading comprehension have paved the way to the conceptualization of a number of reading models, each focusing on different aspects of reading.

Generally, reading comprehension has been defined by researchers as “a critical part of the multifarious interplay of mechanisms involved in L2 reading” (Brantmeier 2005, p. 52). For many students, reading is presumed as the beneficial dexterity that they can utilize inside and outside the classroom. It is additionally the skill that can preserve the lengthy time. According to Allen and Valette (1999), “reading is not only allotting foreign language sounds to the written words, but also the comprehension of what is written” (p. 249). Miller (2008) characterized “Reading comprehension as the ability to comprehend or to get meaning from any kind of written materials” (p. 8).

In Reading comprehension, readers get information from written texts and need to decode these data into meaningful messages so that they can understand the reading materials and achieve the purposes of reading. According to Wade and Trathen (1990) reading comprehension contains four key concepts: transmission translation, interaction, and transaction. It is a psycholinguistic process which starts with a linguistic surface representation encoded by a writer and ends with meaning which the reader constructs. There is thus an essential interaction between language and thought in reading. The writer encodes thought as language and the reader decodes language to thought (Carrell 2000; Ziafar and Namaziandost 2019). Existing research has shown that professional readers make choices as to what to read. When readers encounter comprehension problems, they use strategies to overcome their difficulties. Different learners seem to approach reading tasks in different ways and some of these ways appear to lead to better comprehension. It has been noted that the paths to success are numerous and that some routes seldom lead to success.

Regarding the mentioned points, reading widely is an individual movement which depends on the students' fondness (Nation 1997). Extensive reading (ER) boosts reader's reading aptitudes and it is shortsighted to urge EFL students to peruse better through ER which is enchanting to them (Nuttal 2000). The principle objective of an Extensive reading plan is to give a circumstance to students to appreciate reading a foreign language and new real messages quietly at their own velocity and with satisfactory comprehension (Day and Bamford 1998; Nasri and Biria 2017). “ER is bolstered by

Krashen's (1982, 1994) input hypothesis, affective filter hypothesis, and delight hypothesis" (Bahmani and Farvardin 2017, p. 6).

Reading extensively is an individual activity which is based on the learners' interest (Nation 1997). ER enhances reader's reading skills and it is easy to teach EFL learners to read better through ER which is enjoyable to them (Namaziandost et al. 2019a; Nuttal 2000). The fundamental objective of an ER program is to provide a situation for learners to enjoy reading a foreign language and unfamiliar authentic texts silently at their own pace and with sufficient understanding (Day and Bamford 1998). ER is supported by Krashen's (1982, 1994) input hypothesis, affective filter hypothesis, and pleasure hypothesis.

According to Krashen's (1982) input hypothesis, adequate exposure to comprehensible input is essential for language learners to learn the language. According to this hypothesis, the input to which learners are exposed should be a little beyond their current level of language competence, i.e., 'i + 1.' Based on this hypothesis, when learners frequently and repeatedly meet and concentrate on a large number of messages (input) which is a little beyond their level of competence, they gradually acquire the forms. Furthermore, based on Krashen's affective filter hypothesis (1982), language acquisition occurs in low-anxiety situations. Foreign language learners with a low affective filter (e.g., anxiety) will attain the language acquisition or comprehension more easily (Hashemifardnia et al. 2018; Huang 2001). In the same vein, Krashen (1994) proposed the pleasure hypothesis, arguing that the pleasurable activities are effective and facilitating for language and literacy development. Based on this hypothesis, ER provides a low-anxiety situation for learners to learn a foreign language. Krashen's hypotheses have encouraged different universities and institutions to do research in ER and utilize ER programs in foreign language teaching (Chiang 2015).

The Input Hypothesis directs the question of how we get language. This speculation expresses that we obtain (not learn) language by comprehending input that is a little past our current level of procured capability (Krashen and Terrell 1983; Nasri et al. 2019). This has been lately declared perspicuously by Krashen (2003): "we procure language in just one way: when we comprehend messages; that is, when we acquire "comprehensible input"" (p. 4). This potent allegation is rehashed in different spots where Krashen expresses that 'comprehending inputs is the main way language is obtained' and that 'there is no individual variety in the key procedure of language procurement' (Krashen 2003, p. 4). Consequently, Krashen frequently utilizes the term 'comprehension hypothesis' (2003) to allude to the Input Hypothesis, contending that 'perception' is a superior depiction as only input is not sufficient; it must be comprehended.

Thus, based on Krashen's (1982) input hypothesis, adequate presentation to understandable input is essential for language students to learn language. In light of this speculation, the input to which students are uncovered ought to be a little past their current level of language ability, i.e., 'i + 1'. Considering Krashen's perspective, when learners constantly and repeatedly confront and concentrate on an expansive quantity of input which is a little higher than their level of capability, they inchmeal obtain the structures. Krashen's input hypotheses have motivated different universities and institutions to accomplish researches and studies in ER and utilize ER programs in teaching TEFL (Bahmani and Farvardin 2017; Chiang 2015).

Day and Bamford (1998), in particular, suggested a modern scheme which is diverse from Krashen's (1982) input hypothesis. Based on this scheme, "ER is advantageous if it furnishes the students with input which is somewhat beneath their current level of competence (i.e., 'i-1')" (Bahmani and Farvardin 2017, p. 4). Moreover, "'i-1' creates a condition for automaticity educating and extending a huge sight vocabulary rather than learning new target structures" (Mikeladze 2014, p. 5). Truth to be told, 'i-1' is considered as the learners' tranquility zone where they can rapidly construct their reading certainty and reading fluency (Abedi et al. 2019a; Chiang 2015).

All of researchers and teachers accepted that motivation is a basic factor to enhance reading comprehension. As indicated by Dornyei (2001), the meaning of motivation is very intricate and obscurant because it is made out of various models and hypotheses. As discussed by Protacio (2012), "reading problems occur partly due to the fact that people are not motivated to read in the first place" (p. 11). Moley Bandré, and George (2011) explain that, motivation happens when "students develop an interest in and form a bond with a topic that lasts beyond the short term" (p. 251). Furthermore, Guthrie and Wigfield (2000, p. 405) propound that "reading motivation is the individual's personal objectives, values, and beliefs regarding the topics, processes, and outcomes of reading". Considering this delineation, one would come to two principle consequences: The first is that reading motivation refers to putting together of various dimensions of motivation in an intricate route. The second is the type of agency people have over it since they can manipulate, unify and divert their motivation to read in terms of their credence, worthiness and objectives (Namaziandost et al. 2018b; Wigfield and Tonks 2004). "Not only does reading motivation relate to reading comprehension, but it also relates to both the amount of reading and students' reading achievement" (Guthrie and Wigfield 2005, p. 76). Guthrie et al. (2006, p. 232) elucidate that "reading motivation correlates with students' amount of reading". For this purpose, Guthrie and Wigfield (2005) emphasize the perspective that "reading motivation is domain-specific as it belongs to a status that necessitates an emotional reaction particular to a reading material, and that would metamorphose based on the diversity of activities inaugurating it" (p. 89).

Pachtman and Wilson (2006) expressed that it is crucial to propel students to read by giving them chances to choose their interest materials. In other words, readers need to read more when they are allowed to choose their reading materials since they should find out that reading is a pleasurable action. As indicated by Hairul, Ahmadi, and Pourhosein (2012), reading motivation is the substantial measure of motivation that learners need to focus their positive or negative feelings about reading. For example, students who read for joy and utilizing ways to help their understanding are amazingly roused readers. Students of this sort regularly view reading as a vital factor in their daily exercises, acknowledge difficulties in the reading procedure and are probably going to be effective readers.

Hairul, Ahmadi, and Pourhosein (2012) believed that reading motivation greatly affects reading appreciation. The researchers proceeded with that reading motivation impacts all parts of motivation and reading appreciation procedures in various conditions. They additionally accentuated that learners' inspiration totally influences their understanding; it implies that learners with more stronger reading inspiration can be relied

upon to read more in more extensive territory. As indicated by Hairul, Ahmadi, and Pourhosein (2012), a standout amongst the most essential components which help students read more is reading inspiration and it importantly affects reading perception. In this manner, numerous researchers have been very much aware of the noteworthiness of inspiration in the objective language learning and how inspiration expands appreciation among language students.

Prior researches have checked the impacts of ER on EFL reading comprehension and vocabulary learning. Bell (2001) carried out a two-semester study on young adult students at the elementary level in Yemen to compare the impacts of ER and intensive reading on reading speed and reading comprehension. This study was run over two semesters. The researcher divided students into two groups: an experimental group ( $n = 14$ ) and a control group ( $n = 12$ ). The experimental group received an ER program and read graded readers; these students had access to 2000 graded readers in the British Council library. On the other hand, the control group received the intensive reading program, read short passages and filled the tasks. The researcher measured students' reading speed by utilizing two reading tests, and for measuring their reading comprehension he utilized three various texts with three types of questions (cloze, multiple-choice, and true-false). The two groups enhanced both in speed and reading comprehension, but the ER program based on graded readers was much more effective to the enhancement of reading speed than the intensive reading program. The outcomes of the reading comprehension test also indicated that the learners in the extensive group got higher scores than students in the intensive group.

Chiang (2015) researched the impacts of different text difficulty on L2 reading perceptions and reading comprehension. To give the ideal test to L2 reading, comprehensible input hypothesis hypothesizes that selecting text somewhat more difficult than the student's present level will improve reading perception. Fifty-four freshman from one college in central Taiwan were arbitrarily separated into two groups. Level 3 and level 4 Oxford Graded Readers were given to the learners in the 'i - 1' group while students in the 'i + 1' group were equipped with level 5 and level 6. Quantitative data were collected through the English Placement Test and the Reading Attitudes Survey. Findings from the pretest and posttest of the Reading Attitudes Survey propose that the i-1 group has achieved significantly in reading attitudes, while no difference in reading attitude was recognized with the i + 1 group. The outcomes additionally indicated that diverse hardness levels of reading text did not significantly influence participants' reading comprehension.

Bayat and Pomplun (2016) aimed to indicate how several eye-tracking features within reading are influenced by different primary agents, as individual discrepancies, the hardness level of the text, and the topic of the text. To this end, they directed an eye-following experiment with 21 participants who read six sections with various points. For each topic, metamorphosis in three factors were assessed: the mediocre obsession term, the student estimate, and the normal rapidity of reading. The Flesch reading ease score was utilized as a measurement for the hardness level of the content. Examination of difference is utilized as a part of request to break down determinant factors related with content attributes, containing the difficulty level and the point of the content. The findings showed that during the reading of entries with comparable difficulty levels, the point of the content has no noteworthy impact on mediocre obsession span and

mediocre understudy estimate, though a critical effect overall speed of reading is watched. Additionally, individual properties have a primary effect on eye-movement demeanor.

Ahmadi (2017) attempted to consider the effect of reading motivation on reading comprehension. In his paper, he explained the terms reading motivation, different types of motivation, reading comprehension, and different models of reading comprehension. The review of this study showed that reading motivation had a considerably positive effect on reading comprehension activities.

Recently, Bahmani and Farvardin (2017) examined the impacts of various text difficulty levels on foreign language reading anxiety (FLRA) and reading comprehension of English as a Foreign Language (EFL) learners. To fulfil this objective, 50 elementary EFL learners were chosen from two intact classes ( $n = 25$  each). One class was considered as ' $i + 1$ ' and another as ' $i - 1$ '. The participants in each class practiced extensive reading at diverse levels of difficulty for two semesters. A reading comprehension test and the FLRA Scale were administered before and after the treatment. The outcomes indicated that both text difficulty levels significantly enhanced the participants' reading comprehension. Moreover, the results revealed that, the ' $i + 1$ ' group's FLRA augmented, while that of the ' $i - 1$ ' group diminished.

However, to the best of the researchers' knowledge, rare studies, if any, have been carried out on the impacts of Krashen's Input Hypothesis (i.e., ' $i + 1$ ' and ' $i - 1$ ') on EFL learners' reading comprehension and reading motivation. To reach the purposes of the study, this study attempted to response the following research questions:

**RQ1:** Are there any significant differences between and within the ' $i + 1$ ' and the ' $i - 1$ ' groups' reading comprehension after implementing the treatment? If so, which group has higher reading comprehension in English?

**RQ2:** Are there any significant differences between and within the ' $i + 1$ ' and the ' $i - 1$ ' groups' reading motivation after implementing the treatment? If so, which group has higher motivation towards reading in English?

## Methodology

### Design

A quasi-experimental approach was utilized in this study gather data from 54 EFL learners to check the potentially various impacts of using ' $i + 1$ ' versus ' $i - 1$ ' readers on reading motivation and reading comprehension. To this end, the reading motivation and reading comprehension of the participants were quantitatively measured prior to and after the intervention of ER through the Foreign Language Reading Motivation and the FCE (First Certificate in English).

### Participants

Fifty-four EFL learners (25 males and 29 females) were selected from two intact classes in a private language institute in Iran. The participants' ages ranged from 16 to 21. American Headway 1 (Soars and Soars 2010) was the textbook taught to the participants. According to the Common European Framework of Reference (CEFR) classification, American Headway 2 is appropriate for the B1 level. To ensure the participants'

proficiency level, CEFR Headway placement test (2012) was performed to all participants, and their score ranged between 66 and 74, which is equal to B1 level. The participants were chosen from two intact classes. Each class was assigned to a group (i.e., ‘i + 1’ or ‘i - 1’). The ‘i + 1’ group (n = 27) read graded readers stories which were beyond their level of proficiency, whereas the ‘i - 1’ group (n = 27) read graded readers stories which were below their level of proficiency. The participants read graded readers along with their classroom materials. Per week, 35 min of class time was devoted to the participants’ narration of the novels they had already read.

**Instruments**

***CEFR headway placement test***

CEFR Headway placement test is designed to provide a useful tool to estimate the participants’ level at which they should begin or continue their English language studies (Bahmani and Farvardin 2017). This test was selected because the participants were studying American Headway. Moreover, the American Headway book, CEFR Headway placement test (2012) and Oxford Bookworm Series (the graded readers in this study) were classified based on CEFR. It could be a big help to determine the probable ‘i’ of participants (Bahmani and Farvardin 2017). CEFR Headway placement test (2012) comprised of 100 multiple-choice items with three sections, including 50 vocabulary, 25 grammar and 25 reading comprehension items. The findings were compared with the band score of CEFR Headway placement test (see Table 1).

**Graded readers**

The reading materials in this study were the Oxford Bookworms Series published by Oxford University Press. The Oxford Bookworms Series classifies books into seven levels. Table 2 indicates the word counts and CEFR levels in the Oxford Bookworms series.

To make sure what level is appropriate, nine EFL learners at the pre-intermediate level and four EFL teachers were asked to read the Oxford Bookworms Series at various levels. After studying the books, all teachers agreed that for the pre-intermediate level learners, Starter, Level, and Level 2 were really easy, and Levels 4, 5 and 6 were both grammatically and lexically difficult. According to the teachers, Level 3 was considered suitable for the pre-intermediate level. The learners also reported that Level 3 was

**Table 1** Band score of CEFR Headway placement test

Test result	CEFR level
0–40	A1- low
41–48	A1- high
49–56	A2- low
57–65	A2- high
66–74	B1- low
75–83	B1-low-medium
84–92	B1- medium-high
93–100	B1- high



**Table 2** Word counts and CEFR levels in the Oxford Bookworms Series

Book levels	Word counts	CEFR levels
Starter	250	A1
Level 1	400	A1/A2
Level 2	700	A2/B1
Level 3	1000	B1
Level 4	1400	B1/B2
Level 5	1800	B2
Level 6	2500	B2/C1

comprehensible for them. Level 3 equals to levels B1 in CEFR. Therefore, Level 3 was determined as the appropriate level for the participants. Accordingly, the 'i - 1' group was proposed to read Levels 1 and 2 and the 'i + 1' group was suggested to read Levels 4 and 5. The participants were required to read two books at each level throughout the study.

### Reading comprehension test

The reading comprehension part of the Cambridge First Certificate in English (FCE 2008) was used to measure the participants' reading comprehension ability. It included four parts: Part one was actually included 8 items. Part One consisted of a modified cloze test containing eight gaps. There were 4-option multiple-choice items for each gap. The main focus in this part one was on vocabulary, e.g. idioms, collocations, fixed phrases, complementation, phrasal verbs, and semantic precision.

Part Two comprised of 7 questions. It consisted of one text from which seven sentences have been removed and placed in jumbled order after the text, together with a seventh sentence which does not fit in any of the gaps. Candidates must decide from which part of the text the sentences have been removed. In part two, the main focus was on cohesion, coherence, and text structure.

The Third Part included 8 questions and consisted of a text containing eight gaps (plus one gap as an example). Each gap corresponded to a word. The stem of the missing word was given beside the text and must be changed to form the missing word. Candidates needed to form an appropriate word from given stem words to fill each gap. This part concentrated on vocabulary, in particular the use of affixation, internal changes, and compounding in word formation.

In the last part, i.e., Part Four, which included 7 items, one long text preceded by seven multiple-matching questions. Candidates were required to locate the specific information which matches the questions. Some of the options might be correct for more than one question. The primary focus in this part was one detail, opinion, specific information, and implication.

In general, the reading section of the FCE used in this study included 30 items which should be answered in 30 min. Two forms of this test were available, as equivalent forms. Hence, one form was used as the pretest, the other as posttest. It should be mentioned that the test was a mixture of both about and beneath the students' current level. A Pearson correlation coefficient between the two equivalent forms of the FCE was calculated as 0.899 which indicated a high reliability between the two versions of the test.

### **The motivation for reading questionnaire (MRQ)**

Another instrument utilized in the present study was a modified sample of *Motivation for Reading Questionnaire (MRQ)*. MRQ was expanded by Dr. Allan Wigfield and Dr. John Guthrie from University of Maryland in 1997 (Wigfield and Guthrie 1997). Wigfield and Guthrie utilized the MRQ on a group of students at one mid-Atlantic state school during implementation of Concept-Oriented Reading teaching. Factor analyses carried out by Wigfield and Guthrie affirmed the essence of construct validity which backups eleven factors for the total 53 -item in this MRQ. There was an affirmative relevance of maximum segments of reading motivation with low - to high levels. They additionally asserted that their questionnaire has a reliability range from .43 to .81. In this research, the researchers had selected 30 items of the entire 53 items in the questionnaire because solely eight aspects of total eleven aspects of reading motivation were identified to measure. They are: reading efficacy, reading challenge, reading curiosity, reading involvement, importance of reading, reading word avoidance, social reasons for reading, and reading for grades. MRQ was a five-point Likert scale questionnaire made up of five options: 1 for 'I strongly agree', 2 for 'I agree', 3 for 'I don't know', 4 for 'I disagree', and 5 for 'I strongly disagree'. The MRQ was given to participants twice, one before the treatment and once after the treatment.

### **Data collection procedure**

Fifty-four pre-intermediate EFL learners were participated in this study. In the first week, the CEFR Headway placement test was performed to specify the participants' proficiency levels. This test additionally helped the researchers determine the probable participants' 'i.' In the second week, the MRQ and the reading comprehension test were carried out in 80 min. Based on the outcomes of the CEFR Headway placement test (2012), the 'i + 1' group were assigned to read graded readers at Levels 4 and 5, and the 'i - 1' group were assigned to read Level 1 and Level 2 graded stories. There was a small library and bookstore in the language institute to provide the participants with the graded readers. It was also proposed that if they would not find the book of their interest, they could find them from other libraries and bookstores outside.

The number of pages the participants required to read was specified at the outset of each week. At the end of each week, 20 min of the class was allocated for their reports. The participants were given time to talk about various parts and the characters of the novels, their ideas about the end of the novels, and even provided some comments regarding the novels. In the first semester, the 'i + 1' group read two graded readers at Level 4 which were one level beyond their 'i', and in the second semester, they read two graded readers at Level 5. On the other hand, in the first semester, the 'i - 1' group read two graded readers at the Level 1 which was two levels below their 'i' and in the second semester, they read two graded readers at Level 2 which was one level below their 'i.' Finally, after a three-month involvement in this study, the findings of these two various ways were compared with each other. In the last week of, the participants received an immediate posttest. They responded the MRQ and an equivalent version of the reading comprehension test in one session. The procedure was like the pretest.

**Data analysis**

Collected data through the aforesaid procedures were analyzed by using Statistical Package for Social Science (SPSS) software version 25. Firstly, Kolmogorov-Smirnov (K-S) test was run to check the normality of the data. Then, two independent samples t-tests were done to figure out if there was any significant difference between the ‘i + 1’ and the ‘i - 1’ groups in terms of reading comprehension and MRQ. At the end, two 2 × 2 mixed analysis of variance (ANOVAs) were run to discover significant interaction impacts between time and group from the reading comprehension test and the MRQ. Furthermore, independent samples t-tests were run to test the simple main impacts of group on the pretests and the posttests. Paired samples t-tests were also done to further follow up on the simple main impacts of time on MRQ and reading comprehension for both groups. To indicate the practical significance, for all of the t-tests, effect sizes (Cohen’s ds) were computed.

**Results and discussion**

The previous section included a delineation of the methodology which was utilized to respond the research questions of this study, which are rewritten here for reasons of convenience: (a) Are there any significant differences between and within the ‘i + 1’ and the ‘i - 1’ groups’ reading comprehension after implementing the treatment? If so, which group has higher reading comprehension in English? and (b) Are there any significant differences between and within the ‘i + 1’ and the ‘i - 1’ groups’ reading motivation after implementing the treatment? If so, which group has higher motivation towards reading in English?

**Results of normality tests**

Before conducting any analyses on the pretest and posttest, it was indispensable to peruse the normality of the distributions. Thus, Kolmogorov-Smirnov test of normality was run on the data acquired from the above-mentioned tests. The consequences are presented in Table 1:

The *p* values under the *Sig.* column in Table 3 determine whether the distributions were normal or not. A *p* value greater than .05 shows a normal distribution, while a *p* value lower than .05 demonstrates that the distribution has not been normal. Since all

**Table 3** One-Sample Kolmogorov-Smirnov Test (Groups’ Pretests, Post-tests, and MRQ)

	Kolmogorov-Smirnov <sup>a</sup>		
	Statistic	df	Sig.
i + 1 pretest	.165	27	.058
i + 1 posttest	.192	27	.298
i-1 pretest	.215	27	.098
i-1 posttest	.223	27	.092
i + 1 MRQ (Before Treatment)	.186	27	.187
i + 1 MRQ (After Treatment)	.220	27	.086
i-1 MRQ (Before Treatment)	.218	27	.772
i-1 MRQ (After Treatment)	.173	27	.183

<sup>a</sup>Lilliefors Significance Correction

the *p* values in Table 1 were larger than .05, it could be concluded that the distributions of scores for the pretest, posttest, and MRQ obtained from both groups had been normal. It is thus safe to proceed with parametric test (i.e. Independent and Paired samples *t*-tests and mixed-ANOVA in this case) and make further comparisons between the participating groups. Table 4 displays the means and standard deviations of the participants' scores on the reading comprehension tests and the MR questionnaire before and after the study.

To answer the first research question, one mixed 2 × 2 ANOVA with two main factors, time (i.e., reading comprehension pretest and posttest) and group (i.e., 'i + 1' and 'i - 1') was run to examine whether there were significant interaction effects between difficulty levels. Furthermore, independent samples *t*-tests were run to check the simple main impact of group on the reading comprehension pretest and the posttest, respectively. Finally, paired samples *t*-tests were done to investigate the simple main impact of time for each group. Tables 5 and 6 shows the results of the mixed ANOVA on the reading comprehension tests.

The results indicated that the main impact of the text difficulty level was not significant [F (1, 52) = 8.945, *p* = .004, partial eta squared = .147], proposing a significant difference in the reading comprehension scores of the 'i + 1' and the 'i - 1' groups. Moreover, there was a significant interaction between difficulty level and time [F (1, 52) = 6.305, *p* = .015, partial eta squared = .108], suggesting that over the course of two semesters, the changes in scores from the reading comprehension differed significantly between the 'i + 1' and the 'i - 1' groups. There was also significant main impact of time [F (1, 52) = 6.305, *p* = .000, partial eta squared = .674], suggesting a substantial difference in the reading comprehension scores across two periods. Next to a mixed ANOVA, two independent samples *t*-tests were run as follow-up tests to check the simple major impact of group on the pretest and the posttest, respectively (Table 6).

As Table 6 illustrates, the findings indicated that there was no significant difference between the two groups on the pretest (*t* = .391, *p* = .698, *d* = 0.106358), showing that both the 'i + 1' and the 'i - 1' groups were at a similar baseline prior to the experiment. Moreover, the outcomes show a significant difference between the two groups in their posttests (*t* = 3.644, *p* = .001, *d* = 0.991757) after the intervention. Furthermore, paired-samples *t*-tests were run as follow-up tests to check the simple main impact of time for each group (Table 7).

As illustrated in Table 7, the findings propose that both groups' reading comprehension was significantly progressed at the end of this study (*t* = 7.281, *p* = .000, *d* = 1.978905 for the 'i + 1' group's reading comprehension; *t* = 8.408, *p* = .000, *d* = 2.239838 for the 'i - 1' group's reading comprehension). That is, the reading comprehension of the 'i - 1' and the 'i + 1' groups significantly enhanced after the intervention of ER.

**Table 4** Descriptive statistics of the 'i - 1' and 'i + 1' groups' responses to reading comprehension test and MRQ

Groups	N	Pretest				Posttest			
		Reading Comprehension		MRQ		Reading Comprehension		MRQ	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
i + 1	27	9.37	1.66	52.96	4.72	13.07	2.05	58.11	5.83
i-1	27	9.22	1.05	51.07	6.89	11.48	.096	50.37	3.66

**Table 5** Results of mixed-ANOVA on reading comprehension pretest and posttest with time and group factors

Tests of Within-Subjects Contrasts						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
time	240.009	1	240.009	107.445	.000	.674
time * Groups	14.083	1	14.083	6.305	.015	.108
Error (time)	116.157	52	2.234			
Tests of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	12,566.898	1	12,566.898	5496.122	.000	.991
Groups	20.454	1	20.454	8.945	.004	.147
Error	118.898	52	2.287			

Cohen (1988) expressed that the impact size (Cohen’s *d*) of 0.2 is small; 0.5 is moderate; and 0.8 is high. Cohen’s effect size values of the ‘i + 1’ and the ‘i - 1’ groups’ paired samples *t*-tests are  $d = 1.978905$  and  $d = 2.239838$  for reading comprehension, respectively, proposing high practical significance. To response the second research question, first, a mixed ANOVA was run to assess the impact of two discriminatory text difficulty levels (‘i + 1’ vs. ‘i - 1’) on participants’ scores from the MRQ before and after the treatment (Table 8).

As Table 8 indicated, there was significant interaction between difficulty level and time [ $F(1, 52) = 5.816, p = .019$ , partial eta squared = .101], suggesting that over the course of the treatment period, the changes in scores from the MRQ differed significantly between the ‘i + 1’ and the ‘i - 1’ groups. There was no significant main effect of time [ $F(1, 52) = 3.355, p = .073$ , partial eta squared = .061], proposing no substantial difference in the MRQ scores across the two periods. Moreover, the major impact of the text difficulty level was significant [ $F(1, 52) = 33.035, p = .000$ , partial eta squared = .388], suggesting a difference in the MRQ scores of the two text difficulty levels. After the mixed ANOVA, two independent samples *t*-tests were run to check the simple main impact of group on the pretest and the posttest, respectively (Table 9).

As Table 9 shows, the findings indicated that there was no significant difference between the two groups before the treatment ( $t = 1.173, p = .246, d = 0.319386$ ), suggesting that both the ‘i + 1’ and the ‘i - 1’ groups were at a similar baseline of MR prior to the experiment. The outcomes also show a significant difference between the two groups in their posttests ( $t = 5.841, p = .000, d = 1.589669$ ) after the treatment. In other words, the ‘i + 1’ group was found to have greater increases in their MRQ scores. Furthermore, Cohen’s effect size value of the groups’ independent *t*-tests on the posttest is  $d = 1.589669$  showing high practical significance. Paired-samples *t*-tests were also conducted as follow-up tests to check the simple main impact of time for each group (Table 10).

**Table 6** Independent samples *t*-tests on reading comprehension pretest and posttest scores

	Meandifference	Std. errordifference	T	Df	P	Cohen’s <i>d</i>
Pretest	.14815	.37924	.391	52	.698	0.106358
posttest	1.59259	.43705	3.644	52	.001	0.991757

**Table 7** Paired samples t-tests of both groups (reading comprehension pretest and posttest)

	Mean differences	SD	SEM	t	df	p	Cohen's <i>d</i>
i + 1	3.70370	2.64306	.50866	7.281	26	.000	1.978905
i-1	2.25926	1.39622	.26870	8.408	26	.000	2.239838

As illustrated in Table 10, the findings propose that the 'i + 1' groups' reading motivation was significantly progressed at the end of this study ( $t = -3.017, p = .006, d = 0.969698$ ), whereas the 'i - 1' groups' FLRA was significantly decreased after the intervention ( $t = .408, p = .687, d = 0.127414$ ). Cohen's effect size values of the 'i + 1' and the 'i - 1' groups' paired samples t-tests are  $d = 0.969698$  and  $d = 0.127414$  for reading motivation, respectively) proposing high practical significance for the 'i + 1' group and moderate practical significance for the 'i - 1' group. In summary, the text difficulty significantly affected the 'i + 1' and the 'i - 1' participants' FLRA. The findings imply that the 'i + 1' group had greater increases in their MRQ scores.

In brief, the present study aimed to see whether using the *i + 1* and *i-1* could improve the reading comprehension of EFL learners, and whether there was a difference between the learners' motivation in this regard or not. The outcomes of the study indicated that this *i + 1* significantly improved reading comprehension of the learners in the experimental group; moreover, the motivation of the experimental group (*i + 1*) was increased after the treatment. Consistent exposure to the input (i.e., graded readers) over the treatment period seemed to have had an important effect on improving participants' reading comprehension. It could be possible that consistent exposure to written input facilitated the participants' incidental vocabulary learning (Mikeladze 2014; Namaziandost and Nasri 2019; Nasri et al. 2018; Waring and Takaki 2003).

The obtained results may be due the significant role of inputs which the students had received before they produced the language. The comprehensible inputs which the students were subjected to before producing the language greatly helped the students to be able to read English more efficiently. It can be deduced that comprehension proceeds the production.

Students of the experimental group had improvement on the post-test thanks to the treatment they had received. The researcher found that the classes were more challenging and the students were more involved in learning to understand the reading texts. The improvement of the students can be attributed to the 'i + 1' reading texts as Krashen (1982) states input which is somewhat above the present level of competence of

**Table 8** Results of mixed-ANOVA on MRQ before and after treatment with time and group factors

Tests of Within-Subjects Contrasts						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
time	133.333	1	133.333	3.355	.073	.061
time * Groups	231.148	1	231.148	5.816	.019	.101
Error (time)	2066.519	52	39.741			
Tests of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	304,857.815	1	304,857.815	16,089.782	.000	.997
Groups	625.926	1	625.926	33.035	.000	.388
Error	985.259	52	18.947			

**Table 9** Independent samples t-tests on MRQ before and after treatment

	Mean difference	Std. error difference	T	Df	P	Cohen's <i>d</i>
Pretest	1.88889	1.60963	1.173	52	.246	0.319386
posttest	7.74074	1.32528	5.841	52	.000	1.589669

the language learner can be conducive to learning. If *i* is the language learner's current level of competence in the foreign language, then *i + 1* is the following prompt advance along the improvement continuum. Accordingly, if the objective is to help the language student advance in their task, it is basic to furnish the learner with comprehensible input [*i + 1*].

The researcher observed that the students were more motivated to read and understand the texts that were more difficult for them, they seemed curious to know the meaning of unfamiliar words and phrases, consequently, they asked the researcher to provide the meaning of unknown words, phrases, and sentences, and this attempt led to their success in reading comprehension.

More significantly, based on the comparison made between two groups of varying text difficulty, the *i + 1* group performed better in reading comprehension and gained better results at the end of the study. This finding is in line with Krashen's (1982) input hypothesis. According to Krashen (1982), it was expected to observe the development of reading comprehension only in the '*i + 1*' group. For that reason, the similar development in the '*i - 1*' group's reading comprehension seems skeptical. The results of statistical analysis accepted such an idea and showed that reading the '*i - 1*' materials did not improve participants' reading comprehension. This finding is in contrast with Chiang's (2015) research in which the '*i - 1*' group's reading comprehension was developed. The results can be due to using '*i + 1*' materials which provided a situation for participants to expand their reading comfort zone in which they had the opportunity to build up their reading confidence and develop a large sight vocabulary rather than learning new linguistic elements (Abedi et al. 2019b; Day and Bamford 1998; Azadi et al. 2018).

Based on Krashen's (1985) claims regarding language input and SLA, the basic assumptions of the input hypothesis are summarized as: (1) access to comprehensible input is the main feature of all cases of effective SLA, (2) more quantities of comprehensible input seem to cause faster or better SLA, and (3) lack of access to comprehensible input causes little or no SLA.

A few researchers (Ellis and He 1999; Gass and Varonis 1994; Long 1982) have advocated the input hypothesis by suggesting modified input, interactionally modified input, and modified output as three rich sources of comprehensible input for SLA. Modified input refers to a type of language input that has been modified or simplified in some ways before the language learners are exposed to it, interactionally modified input, on the other hand, originates from input modification that occurs when language learners experience difficulty comprehending a message in interaction with interlocutors, and

**Table 10** Paired samples t-tests of both groups (MRQ before and after treatment)

	Mean differences	SD	SEM	t	df	p	Cohen's <i>d</i>
<i>i + 1</i>	-5.14815	8.86525	1.70612	- 3.017	26	.006	0.969698
<i>i-1</i>	.70370	8.96495	1.72531	.408	26	.687	0.127414

modified output refers to language learners' efforts to modify their output to make it more comprehensible to the interlocutor (Ellis and He 1999; Long 1996; Namaziandost et al. 2019b).

Based on the results of this study, the author has reformulated Krashen's designation of the FL/SL comprehensible input hypothesis (1985) and further recommends that the materials for automaticity training of beginning FL/SL reading be at the level of  $I$  or  $I - 1$ , containing linguistic elements at or below the learners' target language competence. On the other hand, the materials for the higher level of linguistic acquisition of advanced second language reading can be at the level of  $i + 1$ , containing linguistic elements beyond the learners' target language competence (Namaziandost et al. 2019d). As Krashen (2007) stated, "the wrong way is the hard way; the right way is the easy way" (p. 2). With the wrong reading material, the students may suffer frustration and lose interest in reading; on the other hand, with appropriate reading material, reading can become effortless. When selecting reading material for an extended reading activity, an instructor should consider both text difficulty and learner language proficiency (Namaziandost and Ahmadi 2019).

Reading extensively is found to be the single most important source of English input in the foreign language setting. Its aim is mostly two folded in learning: reading to comprehend English and reading to learn English. However, on the one hand, many English learners ignore it's another important function, i.e. it facilitates speaking by enlarging their knowledge and providing them with more topics to talk about. English should not be only as a subject to be learned, but as a means of communication as well. Not many realize it's the opportunity to improve speaking by telling others orally what they have read. According to the SLA theories, comprehensible input alone is not enough and when input is negotiated, the learners will possibly internalize what they have learned and experienced (Namaziandost et al. 2018a). On the other hand, while reading many students tend to focus on syntax and vocabulary and as a result the flow of reading may be interrupted, important information may be ignored and the passage may not be comprehended as a whole. After reading the passage, they may not be able to express its main idea and significant factors orally with fluency. In fact, the poor speaking ability of English learners is not due to their inadequate command of English syntax and vocabulary; but it is due to their too much emphasis on vocabulary, idiomatic usage and sentence structure. David's success suggests that reading for information and reading to talk about it should be one of the aims sought by learners to practice their English in a foreign language setting.

This study is supported by Bahmani and Farvardin (2017) who discovered the effectiveness of different text difficulty levels on FLRA and reading comprehension of EFL learners. The final findings uncovered that both text difficulty levels significantly enhanced the participants' reading comprehension. The outcomes additionally revealed that, the ' $i + 1$ ' group's FLRA enhanced, while that of the ' $i - 1$ ' group lessened.

The results of this study also revealed that there was significant effect of time suggesting substantial difference in the reading comprehension scores across two periods. However, regarding the other previous studies, time might be less crucial in affecting participants' reading comprehension. Whether the time of intervention was two months (Mason and Krashen 1997), five months (Tanaka 2007) or even one year (Chiang 2015), reading comprehension increased. It might be possible to identify more



obvious differences in reading comprehension between the two groups if the duration of participation in ER could be extended.

To sum up, the positive effect of  $i + 1$  viewed in this study can be ascribed to the vital role of comprehensible language input providing learners with linguistic data that they are able to understand. In the field of SLA, there is a mimic metaphor about language input proposed by VanPatten (2003) "input is to language acquisition what gas is to a car". There is language input that is better than other input, just like there is high octane gas that is better than low-octane gas. The "better input" here is comprehensible and meaning bearing. The more comprehensible and meaning-bearing the input is, the more likely it will be turned into intake that learners are able to internalize into their cognitive systems.

In contrast to the common belief that easy materials may increase the motivation of EFL learners, this study proved that the more difficult materials could increase Iranian EFL learners' motivation towards reading English. It can be claimed that difficult materials have discovery nature, meaning that, students want to discover and understand new things. In addition, students may not have much more motivation to learn easy and ordinary materials without rich content. These results are congruent with former study (Chiang 2015; Tanaka 2007). Constant offering input appears to have had a significant impact on developing learners' reading comprehension.

## Conclusion

This study compared the effects of  $i + 1$  and  $i - 1$  materials on Iranian EFL learners' reading comprehension and reading motivation. The findings revealed that  $i + 1$  group outperformed the  $i - 1$  group.  $i + 1$  material increased reading comprehension and reading motivation of the participants. In addition, it can be concluded that the materials of EFL English textbooks should be one level higher than the current level of the students to motivate and challenge them. This study comes to the conclusion that the input hypothesis of Krashen (1982) "learners progress in their knowledge of the language when they comprehend language input that is slightly more advanced than their current level" is valid.

The other conclusion which can be drawn from this study is the importance of the EFL learners' motivation. The motivation of the students should be increased to learn English language more easily since motivation directs behavior toward particular goals, it will augment students' time on task and is additionally a momentous factor having effect on their learning and development. Motivation boosts cognitive processing. Motivation specifies whether a student will pursue a task (even a difficult one) with enthusiasm or a lackluster attitude. So, it is important to recognize aspects that foster internal motivation in English language learning.

This study provides some implications for teachers who are interested in using ER in their classes. Teachers can take benefit of the ' $i + 1$ ' or the ' $i - 1$ ' in ER as a supplementary activity in English courses. This study suggests that ER is effective in improving EFL learners' reading comprehension, and helpful in enhancing vocabulary, grammar and reading speed regardless of the level of materials learners choose. This study indicates whether the learners choose easier or harder ER materials, they gain more or less similar results in reading comprehension. According to this study, choosing novels based on the participants' own interests can encourage them to eagerly participate in

ER program. Ideally, teachers should consider the value of self-selected materials as a key to a successful implementation of ER.

There are, however, some limitations in the study. The first and actually the major limitation of this study is that as it was carried out on a sample in Ahvaz city of Iran, so the sample could not strongly represent Iranian EFL learners. It means that it was not possible to enjoy randomization since the researcher had access to only these Iranian EFL participants. The second limitation is that there were 54 participants in the current study. In order to gain more evidence about the influence of text difficulty on participants' FLRM and reading comprehension, more participants are recommended. Third, lack of random sampling was one of the limitations of the study. Random sampling will provide more concrete evidence for the effects of text difficulty on FLRM and reading comprehension. It is recommended to invite larger samples of learners in order to provide an opportunity for selecting them randomly. Fourth, future research can be replicated in ESL contexts. Fifth, in the current study, participants read four novels. Future research needs to provide a big stock of books and also ask participants to read more to maximize the effects of ER. Sixth, future research can focus on the effects of the 'i + 1' and the 'i - 1' hypotheses on other areas of language learning like grammar. Finally, time commitment is important for ER to be reasonably successful; this study lasted for three months which may not be enough for full benefits of ER. Future studies can gain better results if learners participate in ER program for a longer time.

#### Abbreviations

EFL: English as a Foreign Language; ER: Extensive Reading; FLRM: Foreign Language Reading Motivation; MRQ: Motivation for Reading Questionnaire; OQPT: Oxford Quick Placement Test; SLA: Second Language Acquisition; SPSS: Statistical Package for the Social Sciences

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#### Authors' contributions

All authors of the research had more or less equal contributions in the process of conception and design, acquisition of data, and analysis and interpretation of data. They have all been involved in revising the manuscript critically to the same extent. All take public responsibility for the whole content. All are equally accountable for all aspects of the work. All authors read and approved the final manuscript.

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