Effects of Goal Setting and Self-Monitoring Instruction on EFL Learners’ Goals and Motivation

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Abstract

This study examines the effects of goal setting and self-monitoring instruction on students’ goals in the classroom and motivation toward learning English. In order to promote autonomous learning, goal setting and self-monitoring instruction were integrated in the English extensive reading (ER) program in the classroom. Sixty first-year university students participated in this study. After 12 weeks of ER sessions, changes in three goal attributes—namely, specificity, difficulty, and commitment—were examined on the basis of goal setting theory (Locke & Latham, 1990). In addition, changes in motivation were examined on the basis of self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2002). Significant positive changes were observed in goal specificity and commitment as a result of the implementation of educational intervention. Moreover, students enhanced more self-determined forms of motivation. Therefore, these findings suggest that goal setting and self-monitoring instruction can motivate the students effectively and promote autonomous learning.

1. Introduction

Many students tend not to have clear learning goals. Without any clear goals, it would be difficult for them to be motivated to learn English. Tremblay and Gardner (1995) suggest that specific goals and frequent reference to these goals are useful in enhancing learners’ motivation in language learning. In addition, Mikami (2010) finds that more self-determined learners are likely to set specific and difficult goals for English learning in the classroom. Therefore, teachers need to make students aware of the values of goals. However, the relationships between goals and motivation of EFL learners have not yet been clarified. The present study addresses this issue by examining the effects of goal setting and self-monitoring instruction on EFL learners’ goals and motivation.
2. Literature Review

2.1 Goal Setting and Self-Monitoring

Pintrich and Schunk (2002) define motivation as "the process whereby goal-directed activity is instigated and sustained" (p. 5). As this definition suggests, a goal is most important to stimulate and maintain motivation. They also state that "students with a goal are apt to experience a sense of self-efficacy for attaining it and engage in activities they believe will lead to attainment" (p. 165). Therefore, a goal is expected to enhance students' self-efficacy and motivation.

However, it is very difficult to make students set their own goals and engage them in learning successfully. Goal setting theory (Locke & Latham, 1990) serves as a reference when deciding what kind of goal should be set to improve performance. There are three attributes of goals that have been studied in goal-setting research: specificity, difficulty, and commitment. The specificity and difficulty of a goal are related to goal content, while commitment to a goal is based on goal intensity and refers to the degree to which an individual is attached to a goal. According to goal setting theory, goals should be specific and difficult, and the higher commitment to a goal leads to better performance. The theory also suggests that the commitment to a goal is enhanced when the individual is convinced that a goal is important and attainable. Thus, setting a clear and challenging goal and generating commitment to a goal are crucial factors for improving performance.

Furthermore, goal setting should be accompanied by feedback about progress toward the goal (Locke & Latham, 1990; Oxford & Shearin, 1994). On the basis of this feedback, students can pursue their goals effectively. Therefore, it is useful for students to self-monitor their learning so as to get a clear indication of progress. Lan (1998) points out two important characteristics for effective self-monitoring: regularity and proximity. Regularity means that "learners continuously, rather than intermittently, monitor their own learning behavior" (p. 90). Proximity means that "a behavior is self-monitored close to the time of its occurrence, rather than a long time afterward" (p. 90). Accordingly, teachers should encourage students to continually self-monitor their learning activities right after they study and to determine how well they are progressing toward their personal goals.

During extensive reading (ER) sessions, students choose books that they want to read and read them extensively at their own pace. The success of ER depends on students' autonomy and motivation for learning English. Therefore, in order to promote learning, goal setting and self-monitoring instruction were introduced into the ER program in the classroom. In this study, students were given an opportunity to set a clear and challenging goal for ER and continually self-monitor their learning activities right after they read extensively during classes.
2.2 Motivation in Self-Determination Theory

In this study, motivational development was examined on the basis of self-determination theory (SDT) (Deci & Ryan, 1985; Ryan & Deci, 2002). According to the theory, different types of motivation exist along a continuum based on the extent to which the motivation is self-determined. Intrinsic motivation is the state of performing an activity out of interest and inherent satisfaction; it is autonomous or self-determined. On the other hand, extrinsic motivation is divided into three types of regulations according to the degrees of autonomy (i.e., identified regulation, introjected regulation, and external regulation). The most self-determined form of extrinsic motivation can be categorized as identified regulation, which is “an acceptance of the behavior as personally important” (Ryan & Deci, 2002, p. 17). Introjected regulation is a type of extrinsic motivation that has been partially internalized; it is “within the person but is not considered part of the integrated self” (Ryan & Deci, 2002, p. 17). The least autonomous form of extrinsic motivation is external regulation. In contrast with intrinsic and extrinsic motivations, amotivation is the state of lacking the intention to act; it is non-self-determined.

In language learning, Noels, Pelletier, Clément, and Vallerand (2000) argue that “to foster sustained learning, it may not be sufficient to convince students that language learning is interesting and enjoyable; they may need to be persuaded that it is also personally important for them” (p. 75). Hayashi (2009) also points out that the collaboration between intrinsic motivation and identified regulation is important in order to develop overall motivational intensity in the Japanese EFL context because it may be difficult for EFL learners to become intrinsically motivated. Therefore, in the EFL context, it may be necessary to enhance not only intrinsic motivation that stems from interest and enjoyment but also identified regulation where learners act in order to achieve personal goals. Thus, this study investigates whether educational intervention will enhance both intrinsic motivation and identified regulation from the SDT perspective.

3. Purpose of the Study

The purpose of the present study is to examine the effects of goal setting and self-monitoring instruction on students’ goals in the classroom and motivation toward learning English. Goal setting and self-monitoring instruction were used during ER programs in the classroom. The present study focused on the following three research questions:
1. What are the effects of goal setting and self-monitoring instruction in an ER program on students’ goals in the classroom?
2. Do goal setting and self-monitoring instruction in an ER program enhance students’ motivation toward learning English?
3. How are students’ goals in the classroom related to their motivation toward learning English?
4. Method

4.1 Participants

Sixty university students who were first-year non-English majors at a private university in Osaka participated in this study. They were all registered in required English language classes from April to July 2010.

4.2 Materials and Procedure

Two questionnaires were used in this study. One was used to examine students' goal attributes for learning English in the classroom on the basis of goal setting theory. Since there is no appropriate questionnaire to measure goal attributes, the goal questionnaire was developed with reference to prior research (Locke & Latham, 1990; Tremblay & Gardner, 1995) by the author (see Mikami, 2010, for more details). The questionnaire items were then partially revised for this study with the aid of a university English teacher so that students could better understand them. The goal questionnaire consisted of 18 items in Japanese, containing three subscales, that is, the specificity of a goal, difficulty of a goal, and commitment to a goal. Goal specificity includes the items that assess the degree of specificity of an individual's goals (e.g., "I have a clear idea of where I want to reach in an English class"). Goal difficulty includes the items that assess the level of difficulty of an individual's goals (e.g., "I want to be able to perform activities whose difficulty level is greater than my proficiency level in an English class"). Goal commitment includes the items that assess the degree to which an individual is attached to a goal (e.g., "I make plans for what I have to do in an English class to reach my goals"). These subscales consisted of three positively worded and three negatively worded items each (see the Appendix for the final version of the goal questionnaire).

Additionally, in order to measure students' motivation toward learning English, the motivation questionnaire developed by Hiromori (2006) on the basis of SDT was used. This questionnaire consisted of 18 items in Japanese, containing five subscales, that is, intrinsic motivation, identified regulation, introjected regulation, external regulation, and amotivation.

The questionnaires were administered before and after the 12-week ER classes. With regard to the assessment of these two questionnaires, the students were asked to rate the extent to which they agreed with the proposed item by using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

4.3 Educational Intervention

An ER program with goal setting and self-monitoring instruction was implemented for 20 minutes during classes. Before the first ER session, students were given guidance regarding ER, goal setting, and self-monitoring. ER sessions were conducted once a week for 12 weeks. The ER record sheet was used to help them understand how much they read, and the self-evaluation sheet
was also used to help them to reflect on their progress toward their goals.

4.3.1 ER

About 130 books, including Leveled Readers and Graded Readers such as Oxford Reading Tree, Oxford Bookworms Library Starters, and Penguin Readers Easystarts, were used for the classes. Easy books were chosen because none of the students had previously experienced ER. Students read the books extensively at their own pace. They were allowed to change books when they thought one was not suitable for them. After they finished reading a book, they had to write down the title of the book, the number of words read, and a brief comment about the content on the ER record sheet. When they changed books halfway or the ER session was over before they finished reading the whole book, they were asked to calculate the approximate number of words read in proportion to the pages read.

ER record sheets were collected after each class, which helped the teacher to check what kind of books students read and how well they understood the content of a book. Students sometimes needed advice about choosing books that would help them achieve their goals.

4.3.2 Goal Setting and Self-Monitoring

The teacher (author) set a common goal for all the students because ER was new to them. Taking into account the data of students from the same classes in the previous year, it was decided that students should aim to read 1,500 words in 20 minutes. The goal of 1,500 words was chosen because it was specific and easy to understand, and many students from the previous year were able to achieve this goal.

After the ER session, students wrote down the number of words read in 20 minutes and a brief comment about their progress toward the goal on the self-evaluation sheet. In other words, they monitored the number of words read and reflected on the activities right after each ER session. This reflection enabled students to check their progress toward the goal and consider what they had to do to achieve it. Self-evaluation sheets were collected at the end of each ER session and returned to the students in the following class after the teacher checked them. By checking the self-evaluation sheets, the teacher could understand their progress and problems and give appropriate feedback to individual students as well as to the whole class.

4.4 Analysis Procedures

The Cronbach alpha coefficient was calculated for each subscale in both the goal and motivation questionnaires in order to examine whether the items in the same subscale were internally consistent. Subscale scores were calculated by averaging the scores of the items in the same subscale. Paired sample t-tests were then conducted to analyze changes between pre and posttests. In addition, correlation coefficients were calculated between changes in the goal subscales and changes in the motivation subscales before and after educational intervention. These
analyses were carried out using PASW Statistics 18.0.

5. Results and Discussion

Table 1 shows the descriptive statistics and the Cronbach alpha coefficients of the pre and posttests for all the subscales of the two questionnaires. Reliability coefficients were acceptable for all the goal subscales, varying between .70 and .90. Therefore, the total number of items in the goal questionnaire remained unchanged at 18. With regard to motivation subscales, reliability coefficients were acceptable for intrinsic motivation and identified regulation, varying between .81 and .86. However, regarding external regulation, one item was deleted in order to improve reliability. Regarding introjected regulation and amotivation, further deletion of any items would not cause any improvements, although the subscales were still not sufficiently reliable. Thus, the final number of items in the motivation questionnaire was changed to 17 in total.

Table 1

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Subscale</th>
<th>No. of Items</th>
<th>Pretest M</th>
<th>SD</th>
<th>α</th>
<th>Posttest M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal</td>
<td>Specificity</td>
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<td>2.46</td>
<td>.87</td>
<td>.85</td>
<td>2.98</td>
<td>.72</td>
<td>.80</td>
</tr>
<tr>
<td></td>
<td>Difficulty</td>
<td>6</td>
<td>2.85</td>
<td>.91</td>
<td>.90</td>
<td>3.03</td>
<td>.88</td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td>Commitment</td>
<td>6</td>
<td>2.38</td>
<td>.67</td>
<td>.74</td>
<td>2.67</td>
<td>.60</td>
<td>.70</td>
</tr>
<tr>
<td>Motivation</td>
<td>Intrinsic Motivation</td>
<td>4</td>
<td>2.66</td>
<td>.89</td>
<td>.86</td>
<td>3.23</td>
<td>.70</td>
<td>.81</td>
</tr>
<tr>
<td></td>
<td>Identified Regulation</td>
<td>4</td>
<td>3.38</td>
<td>.99</td>
<td>.84</td>
<td>3.85</td>
<td>.77</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>Introjected Regulation</td>
<td>3</td>
<td>3.04</td>
<td>.81</td>
<td>.55</td>
<td>3.32</td>
<td>.74</td>
<td>.46</td>
</tr>
<tr>
<td></td>
<td>External Regulation</td>
<td>2</td>
<td>3.35</td>
<td>.92</td>
<td>.56</td>
<td>3.55</td>
<td>.97</td>
<td>.81</td>
</tr>
<tr>
<td></td>
<td>Amotivation</td>
<td>4</td>
<td>2.58</td>
<td>.71</td>
<td>.61</td>
<td>2.28</td>
<td>.65</td>
<td>.63</td>
</tr>
</tbody>
</table>

Note. *N* = 60

5.1 Research Question 1: What Are the Effects of Goal Setting and Self-Monitoring Instruction in an ER Program on Students’ Goals in the Classroom?

In order to investigate the effects of educational intervention, mean scores of pre and posttests for all subscales in the goal questionnaire were compared by paired sample *t*-tests. As shown in Table 2, the changes in specificity and commitment were significant, and the changes in difficulty barely failed to achieve significance at the .05 level. The results showed that goal setting and self-monitoring instruction in the ER program had positive effects on the specificity of a goal and commitment to a goal. It can be said that a goal in the classroom became clearer for the students because they were given a goal for ER, that is, to read 1,500 words in 20 minutes.
Moreover, with the aid of the self-evaluation sheet, they continually self-monitored the number of words read right after they read extensively in the classroom and determined how well they were progressing toward the goal. As a result, they increased their commitment to the goal and challenged themselves to achieve it. Furthermore, in self-evaluation sheets, students wrote such comments as the following: "I am approaching the goal gradually, and my reading speed has increased" and "I want to read a little faster because I have almost reached 1,500 words." In short, they raised their awareness of a goal in the classroom and increased their commitment to the goal through the implementation of educational intervention.

Table 2

| Goal Subscale  | Pretest | Posttest | \( \Delta \text{M} \) | SD | | \( t \) (59) | \( p \) |
|----------------|---------|----------|----------------|----| |  |  |
| Specificity    | 2.46    | 2.98     | 0.52           | 0.72 | | -4.64 | .00 |
| Difficulty     | 2.85    | 3.03     | 0.18           | 0.88 | | -1.87 | .07 |
| Commitment     | 2.38    | 2.67     | 0.29           | 0.60 | | -3.42 | .00 |

Note. \( N = 60 \)

On the other hand, there was no significant change in the difficulty level of a goal. This may be attributed to characteristics of the ER program that the students were engaged in. The ER program in this study focused on students' enjoying contents of books and not on raising the levels of difficulty of books. Therefore, the students may be willing to read easier books rather than challenge themselves to read more difficult books. Comments of this kind in self-evaluation sheets included the following: "I got tired reading the book that was difficult for me, so I want to read easier books next time" and "I enjoy reading easier books because they are easily understood." In addition, some students might have considered the given goal outside the range of their abilities and hesitated to aim for higher goals. Comments of this kind in self-evaluation sheets included the following: "I understood the content, but I was not able to increase the number of words read since reading took much time" and "I think reading 1,000 words is too much for me". Therefore, in order to improve students' perceptions of the value of a challenging goal, it may be important to make them set challenging goals on the basis of their individual abilities.

To sum up, the results mentioned above have presented favorable changes in the specificity of a goal and the commitment to a goal, although the difficulty of a goal presented no significant change. This indicates that goal setting and self-monitoring instruction in the ER program helped in making students' goals in the classroom more specific and in increasing their commitment to a goal.
5.2 Research Question 2: Do Goal Setting and Self-Monitoring Instruction in an ER Program Enhance Students' Motivation Toward Learning English?

In order to investigate the effects of educational intervention, mean scores of pre and posttests for all subscales in the motivation questionnaire were compared by paired sample t-tests. As shown in Table 3, the changes in intrinsic motivation, identified regulation, introjected regulation, and amotivation were significant, while no significant change was found in external regulation. In particular, significant positive changes in terms of both intrinsic motivation and identified regulation imply that the students developed more self-determined forms of motivation after educational intervention. It may be mainly because the students enhanced their motivation owing to their strengthened self-efficacy, as Pintrich and Schunk (2002) point out. Dörnyei and Ushioda (2011) also suggest that setting an attainable and proximal goal in language learning can develop students' self-efficacy. It is inferred that the students perceived the goal in this study as attainable and proximal because they tried to achieve the goal in stages during each class. Actually, only one student was able to read more than 1,500 words in 20 minutes at the first ER session. However, 36 out of 60 students became able to achieve 1,500 words during 12 ER sessions. It can be said that the students’ perception of the attainable and proximal goal could increase their self-efficacy and motivation.

Table 3
Changes in the Motivation Subscales Before and After Educational Intervention

<table>
<thead>
<tr>
<th>Motivation Subscale</th>
<th>Pretest</th>
<th>Posttest</th>
<th>M_diff</th>
<th>t (59)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Intrinsic Motivation</td>
<td>2.66</td>
<td>0.89</td>
<td>3.23</td>
<td>0.70</td>
<td>-5.92</td>
</tr>
<tr>
<td>Identified Regulation</td>
<td>3.38</td>
<td>0.99</td>
<td>3.85</td>
<td>0.77</td>
<td>-4.44</td>
</tr>
<tr>
<td>Introjected Regulation</td>
<td>3.04</td>
<td>0.81</td>
<td>3.32</td>
<td>0.74</td>
<td>-2.68</td>
</tr>
<tr>
<td>External Regulation</td>
<td>3.35</td>
<td>0.92</td>
<td>3.55</td>
<td>0.97</td>
<td>-1.53</td>
</tr>
<tr>
<td>Amotivation</td>
<td>2.58</td>
<td>0.71</td>
<td>2.28</td>
<td>0.65</td>
<td>-0.30</td>
</tr>
</tbody>
</table>

Note. N = 60

As Oxford and Shearin (1994) suggest that learners' goals, along with feedback about progress, stimulate L2 learning motivation, continuous feedback by self-monitoring in this study may have increased students' motivation toward learning English. The students may have perceived more strongly that they were capable of achieving the goal by constantly self-monitoring their learning. Such positive feedback about progress can help motivate students to pursue the goal and learn English for themselves.

Moreover, the mean score of the posttest for identified regulation (3.85) was the highest of all the subscales. This result indicates that the students came to value goal attainment and consider
their English learning to be more important through the implementation of educational intervention. Although the teacher forced students to set the goal for ER at first, they began to enthusiastically aim at achieving the goal. As a result, it appears that they became more responsible for their own learning.

As mentioned above, it was confirmed that the students enhanced self-efficacy and more self-determined forms of motivation through the ER program with goal setting and self-monitoring instruction. Moreover, the educational intervention enabled them to assign more importance to their given goals for ER and to become more responsible for their own learning.

5.3 Research Question 3: How Are Students’ Goals in the Classroom Related to Their Motivation Toward Learning English?

In order to examine the relationship between the goal attributes and motivation, correlation coefficients were calculated between changes in the goal subscales and changes in the motivation subscales. As shown in Table 4, the changes in intrinsic motivation and identified regulation demonstrated a positive correlation with the changes in specificity \((r = .32 \text{ and } .31 \text{ respectively})\) and difficulty \((r = .34 \text{ and } .37 \text{ respectively})\). This indicates that students may be more motivated and self-determined to learn English when their goals in the classroom are more specific and challenging. Hayashi (2009) points out that the collaboration between intrinsic motivation and identified regulation is important, and it is possible that setting a specific and difficult goal enhances both types of motivation. Therefore, from a motivational perspective, teachers should specify clear goals for all students in the class and keep goals difficult but not too far beyond their abilities.

Furthermore, the change in identified regulation demonstrated a positive correlation with the change in commitment \((r = .31)\), although the change in intrinsic motivation had no significant correlation with the change in commitment \((r = .16)\). This indicates that goal commitment is related to identified regulation—in particular, the self-determined form of extrinsic motivation. It implies that students tend to regard their learning as more important when they are more enthusiastically engaged in achieving their goals through goal setting and self-monitoring. By giving students an opportunity to set a goal and encouraging them to achieve it, teachers may enable them to consider their learning more valuable. As Noels et al. (2000) mention, language learning should be personally important for learners to maintain it.

In addition, the change in amotivation demonstrated a negative correlation with the changes in specificity \((r = -.35)\) and commitment \((r = -.34)\). This indicates that an adverse reaction to learning English in the students may decrease when their goals in the classroom are clearer and they are involved in attaining the goals.

To sum up, goal specificity and difficulty may be related to both intrinsic motivation and identified regulation. Moreover, goal commitment may be related to identified regulation in particular.
Table 4
Correlation Coefficients Between Changes in the Goal Subscales and Changes in the Motivation Subscales

<table>
<thead>
<tr>
<th></th>
<th>Change in Specificity</th>
<th>Change in Difficulty</th>
<th>Change in Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in Intrinsic Motivation</td>
<td>.32*</td>
<td>.34**</td>
<td>.16</td>
</tr>
<tr>
<td>Change in Identified Regulation</td>
<td>.31*</td>
<td>.37**</td>
<td>.31*</td>
</tr>
<tr>
<td>Change in Introjected Regulation</td>
<td>.19</td>
<td>.29*</td>
<td>.21</td>
</tr>
<tr>
<td>Change in External Regulation</td>
<td>.02</td>
<td>.16</td>
<td>.21</td>
</tr>
<tr>
<td>Change in Amotivation</td>
<td>-.35**</td>
<td>-.19</td>
<td>-.34**</td>
</tr>
</tbody>
</table>

Note. \( N = 60; *p < .05, **p < .01 \)

6. Conclusion

In summary, this study suggested that goal setting and self-monitoring instruction in the ER program raised students’ awareness of goals for learning English in the classroom and motivation toward learning English. Although it is not easy to identify the main factor that brought about the favorable changes mentioned above, it can be concluded that students enhanced self-efficacy and motivation through goal setting and self-monitoring. These findings imply that the teacher should provide the students with more opportunities to set their own goals and monitor their progress toward the goals in the classroom. This can lead to autonomous learning.

However, some limitations remain in this study. For example, the subscales for introjected regulation and amotivation were not sufficiently reliable. Moreover, the subscale for external regulation had a small number of items.

Finally, further research is required in the three main areas. First, the level of goal difficulty ought to be in accordance with the individual ability in order to improve students’ perception of the value of a challenging goal. Second, this study used a quantitative approach, but a qualitative approach should also be used to understand in detail how students’ goals and motivation are influenced by goal setting and self-monitoring. Third, it is necessary to investigate the effects of goal setting and self-monitoring on students’ performance.

Acknowledgments

I would like to thank Akihiro Mikami for his insightful comments on the earlier version of this paper. I am also grateful to anonymous reviewers for their invaluable comments on this paper.
Footnotes

1 The scoring for negatively worded items was reversed before including them in multi-item scales.
2 The relatively low reliability of this subscale might also account for the lack of effects on this type of motivation.

References


Appendix

The Final Version of the Goal Questionnaire
(Originally in Japanese)

Goal specificity
1. I have a clear idea of where I want to reach in an English class.
2. I have a clear idea of the level of English I want to reach in an English class.
3. I know what is most important among the things I want to reach in an English class.
4. I have a vague idea of where I want to reach in an English class. (R)
5. I have a vague idea of the level of English I want to reach in an English class. (R)
6. I just want to get a credit for an English class. (R)

Goal difficulty
1. I want to be able to perform activities whose difficulty level is greater than my proficiency level in an English class.
2. I want to be able to perform generally difficult activities in an English class.
3. I want to try challenging but reasonable activities in an English class to reach my goals.
4. I think easier activities compared to my proficiency are sufficient for me in an English class. (R)
5. I think generally easy activities are sufficient for me in an English class. (R)
6. I want to perform easy activities in an English class. (R)

Commitment to a goal
1. I make plans for what I have to do in an English class to reach my goals.
2. I think about what I have to do in an English class to reach my goals.
3. I evaluate the progress relative to my goals in an English class.
4. It is sufficient for me to perform only the activities prepared in an English class. (R)
5. I am poor at making plans for what I have to do in an English class to reach my goals. (R)
6. I am not concerned about the progress relative to my goals in an English class. (R)

Note. (R) indicates a reversed item score.