

The Impact of an Extrinsic Reward in Intensive Reading Activities on Learners' Intrinsic Motivation and Performance

Imene BILOUK

Faculty of Arts and Foreign Languages, Mentouri University Bros

Abstract

Notwithstanding the incontrovertible role of reading in English as a foreign language in advancing students' literacy levels, not all students are successful readers, nor are all of them endowed with the desire to read. This paper is rather an attempt to scrutinize the long-term impact of a literacy-related reward, a type of extrinsic rewards, on concurrently learners' intrinsic motivation and reading performance. A total sample of 91 LMD students enrolled in the second year—at the Department of Letters and English Language, Mentouri University Bros.—was partaken in two experimental conditions. In the no-reward condition, the subjects were involved in reading and performing intensive reading activities, whereby the reward was internal to the experimental activities. In the reward condition, the same subjects performed intensive reading activities; however, their successful performance was rewarded tangibly by a short story. The major findings substantiated that there was a statistically significant difference between the two experimental conditions, submitting that short stories were a good incentive to enhance adult students' intrinsic motivation as well as performance during an intensive reading practice phase.

Keywords: a literacy-related reward, extrinsic rewards, intensive reading activities, intrinsic motivation, reading performance

Introduction

Central to the role played by motivation, as a key factor for learners' scholastic achievements, in second/foreign language learning, successful foreign language learning also compels the language learner to surmount all the impediments encountered when mastering the four skills of that language. As a salient language skill, reading, however, remains a challenging task for many EFL learners. Indisputably, undergraduate students require high level reading skills, awareness, appropriate utilization of a number of reading strategies to ease the wide range of reading required from them, and in actuality a desire to read. In an endeavour to enhance learners' reading motivation as well as reading performance, and reciprocally promote proficiency gains, many teachers adopt different motivating strategies, such as rewards. Nevertheless, the use of rewards in learning settings remains contentious. Some researchers (e.g., Pintrich & Schunk, 2002; Flora, 2004; Brophy, 2004) believed in their positive effects, submitting that they can be a very effective motivating strategy in producing long-term desired behaviours. Others (e.g., Kohn, 1993; Deci, Koestner, & Ryan, 1999), on the other hand, condemned their use in virtue of their detrimental effects on learners' intrinsic motivation in learning. The *raison d'être* of this research is that students of English as a foreign language were constantly observed to display serious problems and lack of interest when they read different academic subjects, and that reading, as a language skill, is not independently taught at the Department of Letters and English Language, Mentouri University Bros. To refine upon previous work on extrinsic rewards' effects (Deci, 1971; Marink & Gambrell, 2008) so that it most directly fits the present research setting, we attempted to implement a new motivating strategy during a reading practice phase by initially arousing the subjects interest to read and perform reading activities in the classroom, for no extrinsic reward; then we offered an extrinsic reward, namely short stories, to elicit information about their levels of intrinsic motivation with regard to the reading activities, which would improve, remain the same, or decrease, and by the same token, whether or not there is a room for this new motivational environment to ameliorate or impede their reading performance.

1. Literature Review

1.1. Reward defined

The word reinforcement, which is parallel with the term reward, was initially utilized by behaviourists (B.F. Skinner) to mean any consequence that strengthens the behaviour it follows and increases the likelihood for that behaviour to transpire in comparable situations. To put it another way, any consequence can be a reinforcer granted that it enhances students' task performance and their participations in analogous tasks.

1.2. The controversy over rewards' effects on intrinsic motivation

If intrinsic motivation, in many laboratory investigations, was repeatedly delineated in relation to the time participants persist at performing something (e.g., solving puzzles), when the reward is no more dispensed (Deci, 1972) and self-report of enjoyment, then intrinsic motivation, pertains to this work, is defined as students' persistence and the enjoyment they gain from reading and performing variety of intensive reading activities under the command of a reward based-system.

Cognitive Evaluation Theory (CET) (Deci, 1980; Deci & Ryan, 1982) addresses the value of people's perception of perceived competence and autonomy in enhancing intrinsic motivation, and concurrently it warns against the detrimental effects of external events on intrinsic

motivation. It substantiates how the effects of external events, specifically rewards, rely upon how they affect perceived self determination as well as perceived competence. In this regard, the term interpersonal context has been utilized to denote the social settings (such as, home, classroom) under which rewards are administered, and the extent to which they are controlling or non-controlling. Thereupon, interpersonal events (e.g., rewards, feedback) have two aspects: an informational aspect (indicators of competence and self-determination) and a controlling aspect (controllers of behaviour), as Deci and Ryan (1985) presumed.

The informational or feedback aspect refers to significant information about performing effectively the target activity, personal progress, or it even provides performers with information that can assist them in becoming more efficient at the target activity in a future performance (it informs about competence). Accordingly, rewards having the possibility to inform about learners' skills instil into them high perceived competence as well as self-determination. The controlling aspect, on the other hand, heightens an external locus of causality and thereby diminishes intrinsic motivation. A reward is experienced as controlling provided that it is administered in an interpersonal style that presses students to think or behave in a specific way. Since the informational aspect of external events (rewards) conveys both self-determination and competence, intrinsic motivation is likely to be promoted.

However, espousal of the aforementioned claim discerned (Deci & Ryan, 1985; Deci, Koestner, & Ryan, 2001) that rewards undermine intrinsic motivation. The rationale is a change in perceived locus of causality. When individuals are intrinsically motivated, the locus of causality is internal: They perform a task as it provides them with an internal satisfaction. On the contrary, the locus of control alters from internal to external when recipients perceive their performance to be more amenable to external factors (e.g., money). They perceive themselves controlled by the environment, performing the task due to mere external factors—and this is what rewards generally do to behaviour. It indicates that the informational or controlling aspect of rewards is more strongly dependent on a reward's type, contingency, and expectancy, respectively.

Tangible rewards (e.g., money, trophy, prizes, and certificate) are any symbolic rewards that are offered in response to someone's performance. It is worth noting that the effects of extrinsic tangible rewards are heterogeneous. Accordingly, rewards that are announced at the beginning of an activity (expected) are deemed to be harmful and lessen motivation. Conversely, rewards that are administered at the end of an activity (unexpected) are not (Deci et al., 2001; Cameron & Pierce, 2002). Task-non-contingent rewards (Brophy, 2004), as the first example of reward contingency, correspond to expected rewards that are presented to participants for taking part in an experiment, a task which they are not obliged to complete. People, under this type of reward contingency—not decreasing their performance—are merely rewarded for their presence, neither for completing a task, nor for achieving high standards. Task-contingent rewards (Brophy, 2004) are made conditional on engaging and completing the target activity, regardless of any standard of performance. Completion-contingent rewards are regarded to control behaviour since they do not enhance perceived competence. Another type of reward contingency is performance-contingent rewards or performance-dependent rewards (Brophy, 2004). Essentially, this reward contingency is largely dependent on students' performance, in that they are delivered when students attain a definite standard level. In other words, when students successfully perform the target activity so that a standard of excellence is reached, rewards are then delivered. They are controlling since performers are required to meet absolute performance standard to earn them.

However, they can also be informational as long as they convey positive competence feedback: Rewards are offered as a result of meeting a level of excellence.

Kohn (1993) strongly deemed rewards to be a failing strategy to heighten behaviours' outcomes. Virtually, rewards do not motivate learners to do something; they rather coerce them to receive the rewards. Together, rewards and punishment manipulate behaviour. They are only efficient in ensuring impermanent compliance; nevertheless, they are ineffective in producing long-term desired behaviours or attitudes alterations or even advance performance. Given that the reward is always contingent on doing something, once the reward system or punishment ceases, people go back to their old behaviours. In like manner, the effects of "do this and you will get that" are identical to "do this or here's what will happen to you". Making students think about what they will earn in return to their performance diminishes risk-taking, creativity, and intrinsic interest in the activity as they will concentrate on receiving rewards, and that their work is driven by the reward. Therefore, rewards undermine the behaviour they are intended to enhance.

Flora (2004) extremely disputed Kohn's (1993) claim who considered reinforcement to look like carrot-and-stick. She regarded it as a failing approach to motivation since it is built merely upon negative reinforcement. "The carrot-and-stick criticism generally reflects an ignorance of the reinforcement process and is a tiny disguised insult to professionals who use or advocate the use of reinforcement to ameliorate human problems"(Flora,2004, p.27). The assumption that rewards undermine intrinsic interest in an activity has also been challenged. If a student is offered an extrinsic reward for reading, then to read voluntarily will not occur. It rather conveys how reading becomes a means to obtain a reward rather than reading is the reward per se. Reinforcement is very effective for humans' accomplishments and in compelling them value their behaviour, and thus it enhances desired outcomes.

In Cameron and Pierce's (1994) meta-analysis, which was republished by Eisenberger and Cameron (1996) who in fact added divergent groupings studies, they distinguished between verbal versus tangible rewards, tangible rewards as expected versus unexpected, expected rewards as contingent on task completion or performance versus rewards that are not dependent on completion or performance. They separately scrutinized task-non contingent, task contingent, and performance-contingent rewards. The findings illustrated that verbal rewards increase significantly "free-choice" and self-reported interest. Whereas, tangible rewards, expected tangible rewards, and non-contingent rewards undermine the behavioural measure of intrinsic motivation, but not self-reported interest. Performance-contingent rewards have no overall significant effect on the "free-choice period", but significant effect on self-reported interest. Task-contingent rewards undermine both "free-choice" and self-reported interest. Nevertheless, unexpected tangible rewards and contingent rewards have no significant thwarting effects on intrinsic motivation. Therefore, they concluded that there is no reason not to use rewards in educational settings for the rationale that their detrimental effects can be effortlessly prevented.

Deci, Koestner, and Ryan (1999), on the other hand, harshly criticized the preceding meta-analysis's findings, for they incorporated studies that used dull and boring tasks. It is because intrinsic motivation has been defined in relation to interesting tasks and that rewards undermine intrinsically interesting tasks, with boring tasks, therefore, there is no intrinsic motivation to decrease.

Deci et al. (1999) conducted a meta-analysis of 128 studies that examined the effects of all rewards on intrinsic motivation, but for interesting tasks only. The results indicated that rewards can have both incremental and detrimental effects on intrinsic motivation. Their findings

strongly supported cognitive evaluation theory's claim. Free-choice behaviour was undermined by engagement-contingent, completion-contingent, performance-contingent, tangible, and expected rewards. Self-reported interest was also diminished by engagement-contingent, completion-contingent, tangible, and expected rewards. Nevertheless, tangible rewards were found to be harmful for children than college students, and performance-contingent rewards did not negatively affect self-reported interest.

Later on, Pierce, Cameron, Banko, and So (2003) inquisitively investigated the effects of rewards on 60 undergraduate students' intrinsic motivation during a puzzle-solving task to falsify the claim that rewards undermine intrinsic motivation. Some subjects in the experimental group were offered \$1.00 for attaining increasingly demanding performance standards, others for accomplishing a constant performance standard, and the control group was not rewarded. The major findings indicated that subjects who were rewarded for meeting increasingly demanding performance standards spent more time on the experimental task during the free-rewarded phase vis-à-vis the other groups. The findings of the subjects' self-enjoyment of the task displayed that there was a short-term loss of intrinsic motivation by the experimental groups than the control group. Pierce et al. (2003) concluded that rewards for meeting progressively demanding and attainable performance standards can be used in different settings to enhance performers' preference for challenging activities and thereupon increase intrinsic motivation.

Chen and Wu (2010) conducted another investigation to examine the longitudinal effects of rewards on extensive reading activities. The Elementary School Students' Reward Experience Questionnaire was used to inspect the reward's type, contingency, and expectancy that were received during the time of their enquiry and students' attributions for receiving these rewards. Another questionnaire was submitted to concurrently measure the subjects' pre- and post-reward reading motivation. The results of the 772 surveyed pupils, from four different elementary schools in southern Taiwan, revealed that the reward's type and attribution predicted intrinsic and extrinsic reading motivation, and the intangible reward and effort attribution bolstered pupils' intrinsic and extrinsic reading motivation. Luck of attribution, reward expectancy, and contingency, on the other hand, predicted negatively intrinsic reading motivation. The researchers recommended that teachers would use rewards to inspire students to read, they should be, however, intangible and attributed to effort rather than luck.

The preceding empirical studies represent discrepant findings that substantiate how rewards can have negative, positive, or neutral effects on intrinsic motivation's measures, whereas the effects are limited to divergent sets of conditions. How to effectively offer rewards in educational settings and to mediate their effects for better scholastic achievements are still controversial among researchers as far as the findings are not unified.

2. Hypotheses for the Present Work

The research predicts that if we create a reward-based system during an intensive reading practice phase (through the use of an extrinsic reward to signify learners' excellent performance in the target tasks), both students' intrinsic motivation and performance would be probably enhanced. Therefore, we hypothesize the following:

- If an extrinsic reward is delivered for meeting a standard of excellence in the intensive reading activities performed in the classroom, then learners' intrinsic motivation would be enhanced.
- If an extrinsic reward (short stories) is administered for learners' successful performance in the reading comprehension activities, then learners' performance would be improved.

3. Method

3.1. Subjects

A random sample of 91 students enrolled in the second year was drawn from a population size of 671 (537 females and 134 males) LMD students of English as a foreign language, at the Department of Letters and English Language-Mentouri University Bros., and assigned to two experimental conditions, during the academic year 2013-2014. Participants were 79 (11.77%) girls and 12 (1.78%) boys between the ages of 19 and 38 years old ($M=21.21$, $SD = 2.60$).

3.2. Measures

The measures we utilized to confirm (or disconfirm) the present hypotheses are as follows:

3.2.1. The intrinsic motivation inventory

A modified version of the self-report measure of intrinsic motivation, namely the Intrinsic Motivation Inventory (IMI) was correspondingly administered at the end of the no-reward and reward condition in an ordinary Written Expression tutorial session. The rationale is to quantify the students' situational levels of intrinsic motivation with regard to the target tasks, to determine the change (if there is any) the extrinsic reward would bring to their intrinsic motivation, and to strongly ascertain that intrinsic and extrinsic motivation can have additive influence on reading activities. The modified version of the IMI contains 20 items on a five-point Likert scale (from 0 = *strongly disagree*, 1 = *disagree*, 2 = *neutral*, 4 = *agree*, to 5 = *strongly agree*) activities they performed in the classroom, during the two conditions, 4 items measure their perceptions of competence, 4 other items unveil the effort they put to achieve these intensive reading tasks, 4 items tackle the value/importance they place on these tasks, and the last 4 items detect how the motivational environment would contribute to lowering or raising their anxiety.

3.2.1. The pre-and post-reward reading comprehension tests

A pre-test-post-test design is the second measurement we followed to concurrently determine the students' pre-and post-reward reading performance. The subjects took both tests in an ordinary Written Expression tutorial session. The pre-test was adopted from TOFEL and the post-test from Mikulecky and Jeffries (2001). Although the topic of the pre-test is different from that of the post-test, both tests have a medium length passages that are divided up into two exercises. The first exercise contains 6 multiple-choice questions, with four alternatives for each. It reflects the subjects' understandings of the passages in terms of their main and supporting ideas as well as their abilities to synthesize information. Whereas, the second exercise, which I constructed myself, consists of 6 vocabulary questions (word meaning) that is intended to measure their comprehension of the passages through indicating their understandings to some important key words. Hence, both tests assess the subjects' critical understandings of the texts by emphasizing on their mastery of word meaning, determining relationships among ideas, and drawing conclusions. The rationale for pre-post tests is to reveal whether or not creating a reward-based system in intensive reading activities would contribute to advancing the subjects' comprehension skills, which would be reflected by an improvement in their reading comprehension performance from the pre-test to the post-test.

3.3. Research design

This work is rather an exploratory study that purports to examine the nature of the causal impact of extrinsic motivation on students' intrinsic motivation and performance during their

achievements in a reading practice phase. To this end, we launched reading in the classroom (specifically in Written Expression sessions) where learners spent class time or extra-class time reading different materials and performed intensive reading activities (e.g., multiple-choice items, pronominal questions, yes/no questions, true/false statements, summarizing, and vocabulary questions). The treatment of interest was to create a reward-based system in reading sessions. Therefore, participants were assigned to two experimental conditions. Experiment one took place during the first semester and lasted approximately two months. It is pertinent to say that one month elapsed before the second experiment was conducted. This experiment was carried out during the second semester and lasted approximately three months. The reading materials, the questions' type, and the researcher's intervention (reward) are what made the first experiment different from the second.

3.3.1. Experiment one

Experiment one is the no-reward condition. The ultimate focus of this experiment, which was run during the first semester, is to create and maintain indulgence in reading by driving learners to devote some of their class or extra-class time reading different materials and performing some reading activities for no extrinsic reward, but as an end in them. The reward is internal to the target activity. The reading environment in the no-reward condition proceeded as follows:

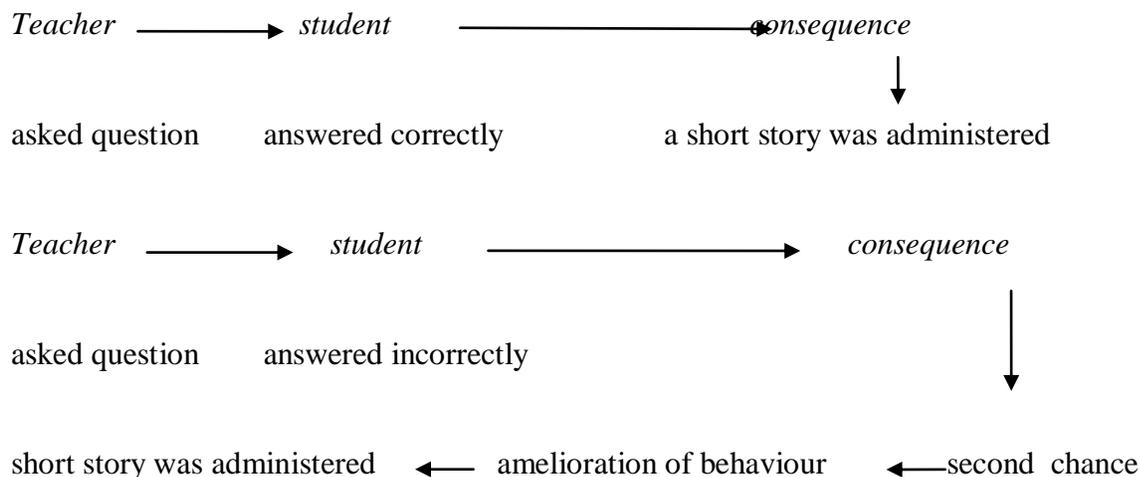
- Learners were engaged in silent reading for approximately 20 minutes (the allotted time for reading varies based on the length and complexity of the topics).
- Then, the teacher called on for volunteers to answer the questions relevant to the content of the passage.
- Whole class debate to discuss students' answers was to follow.
- Students were provided with immediate feedback on their responses.

3.3.2. Experiment two

This experiment is the reward condition. In the second semester, the students were involved in reading different materials and performing intensive reading activities, whereby the desired behaviour was rewarded tangibly by a short story. In this regard, the reward is external to the activity. Clearly, the choice of offering short stories rather than relying on other reinforcers (for example, marks or verbal rewards) is not to coerce the subjects to compete for the reward, nor feel controlled or gain recognition, but due to the closeness of the reward (short stories) to the desired behaviour (reading), and to contribute to raising their awareness of the message that is carried through the reinforcer we dispensed (reading). This is why we conducted two quasi experiments to investigate the longitudinal impact of the use of such literacy-related reward on the target population's intrinsic motivation as well as reading performance. The incentive reading environment proceeded as follows:

- At first, learners were engaged in silent reading for approximately 20 minutes (the allotted time for reading varies based on the length and complexity of the topics).
- Then, the teacher called on for volunteers to answer the reading comprehension questions.
- Students' answers were written on the board.
- Whole class discussion, to decide on the correct answers, was to follow.
- Correct answers were rewarded extrinsically, but incorrect ones were not punished; they were just provided with another chance. Accordingly, our schedule of reinforcement was as follows:

Diagram1. Schedule of Reinforcement in Intensive Reading Activities



- After rewarding the desired behaviours, some students were asked to read the text out loud in front of the whole class.
- Students were provided with immediate feedback on their responses.
- Finally, they, in each reading session, were allowed to critically respond to the subject read by verbally expressing agreement or disagreement with the ideas of the texts (do you agree with the writer’s opinion? Why?) as well as share their opinions with their classmates.

4.Results

The fact that the data are not independent (rather it is dependent), as the same subjects were measured twice (paired data) before and after our motivational intervention (reward), a t-test for related samples was utilized to determine the significant differences in students’ intrinsic motivation and reading performance under the two experimental conditions.

4.1. Results of the IMI in the no-reward and reward condition

Individual item scores were summed to provide us with the total scores of each item on the IMI. However, before moving to the analysis phase, the scores of the negatively worded items (Q8, Q12, Q14, Q15, Q17, Q18, Q19) were reversed scores, the overall alpha of the IMI in the no-reward condition was (.71), and the reward condition yielded an overall alpha of (.80), indicating high internal reliability of this measure in the present work. We can notice that the reliability of the scale was substantially enhanced from the first (.71) to the second experiment (.80).

Table1.Means and Standard Deviations of the IMI’s Items in Condition 1 and 2

Conditions	Interest/ Enjoyment		Competence		Effort		Value/ Importance		Tension	
	M	SD	M	SD	M	SD	M	SD	M	SD
No-reward	3.20	1.62	2.80	1.30	2.72	1.66	3.70	1.58	2.41	1.52

Reward	3.42	1.44	2.95	1.22	3.01	1.48	3.96	1.96	3.22	3.21
--------	------	------	------	------	------	------	------	------	------	------

Table1 depicts that the means of condition1 ranged from (2.41) to (3.70), and the standard deviations laid between (1.30) and (1.66); whereas, the means of condition 2 ranged from (2.95) to (3.96), and the standard deviations between (1.22) and (3.21). By examining carefully the means of all the items on condition 1, it is apparent that the means of the value/importance (3.70), interest/enjoyment (3.20), effort (2.72), and competence (2.80) subscales were higher than the mean of the negative predictor of intrinsic motivation (tension/pressure: M= 2.41). This can be a good indicator that the interpersonal context was not controlling to learners. In the reward condition, the means of the interest/enjoyment (3.42) and the value/importance subscales (3.96) were higher than the mean of the tension subscale (3.22), whereas the mean of the foresaid subscale was higher than both the competence subscale (2.95) and the effort (3.01) subscale. Indisputably, there is a substantial increase in the mean scores from condition 1 to 2.

Table2. The Mean Scores of Students’ Intrinsic Motivation in Condition 1 and 2

	M	N	SD	SD Error M
Condition1	11.44	91	2.66	0.279
Condition 2	13.3275	91	2.56	0.26859

In table 2, one can observe the mean, the standard deviation, and the standard error of the mean of the subjects in the no-reward and reward condition, respectively. The mean score of the first condition was (11.44), the standard deviation was (2.66), and the standard error of the mean was (0.27). The mean score of the second condition, on the other hand, was (13.32), the standard deviation was (2.56), and the standard error of the mean was (0.26). Hence, the mean of the reward condition is by far higher than that of the no-reward condition.

Table3. The Mean Difference between the IMI’s Scores in Condition 1 and 2

	Paired Differences					
	M	SD	SD Error M	t	df	Sig. (2-tailed)
Condition2-condition 1	1.89121	3.16778	0.33207	5.695	90	.0001

The output in table 3 presents the subjects’ scores in the IMI under the two experimental conditions. The mean difference between the two conditions was (1.98), with a standard deviation of (3.16), and a standard error of the mean of (0.33). With 90 degrees of freedom, and at 0.001 level of significance, the required critical value for significance for the t-ratio (one-tailed test) is not tabulated in the significance levels of the t-ratio (Guilford & Fruchter, 1978). Thus, we looked at 120 degrees of freedom as it is the highest and near to 90 degrees of freedom. As

the obtained t-ratio is much higher (5.69) than the required t-ratio (2.35), we can say that the results were highly significant.

4.2. Results of the pre-and post-reward reading comprehension tests

Whether or not the reward of the present study has advanced or impeded students' reading comprehension performance is what the subsequent section will disclose.

Table 4. The Mean Scores of Students' Performance in the Pre-and Post-Tests

	M	N	SD	SD Error M
Pre-test scores	14.1758	91	4.31687	0.45253
Post-test scores	19.1868	91	3.09807	0.32477

Table 4 displays the mean, standard deviation, and standard error of the mean of the subjects in the pre-and post-tests. The mean score of the pre-test was (14.17), the standard deviation was (4.31), and the standard error of the mean was (0.45). Conversely, the mean score of the post-test was (19.18) with a standard deviation of (3.09) and (0.32) standard error of the mean. Therefore, the expected mean is higher than that of the pre-test.

Table5. The Mean Difference between the Pre-and Post-Test Scores

	Paired Differences					
	M	SD	SD Error M	t	df	Sig. (2-tailed)
Post-test scores-pre-test scores	5.01099	4.24132	.44461	11.271	90	.0001

As it can be clearly seen in table 5, there was a mean difference between the two tests of (5.01) with a standard deviation of (4.24) and (.44) standard error of the mean. With 120 degrees of freedom, and at 0.001 level of significance, the required critical value for significance for the t-ratio is (2.35) (one-tailed test), for a two-tailed test, it is much lower, since the predicted difference (or significance) is in either direction, on the contrary of a one-tailed test which predicts a directional result, i.e. in one direction, in our case the significance of the difference between the two tests' scores, whereas the results of the post-test should have higher means (2 higher t-ratios). As the obtained t-ratio was much higher (11.27), we can say that the results were highly significant (the post-test has a t-ratio higher than the required t-ratio).

5. Discussion

The major findings of the items on the IMI indicated that the classroom reading environment, of condition 1, was effective in supporting largely and enhancing salient positive determinants of intrinsic motivation as reflected by interest/enjoyment, value/importance, and effort, it was, however, fairly supportive for the basic innate need of competence. It is pertinent to concede that the same motivational environment was a source of making learners feel tense,

yet any foreign language learning environment is vulnerable to anxiety. Therefore, all the IMI's items were enhanced, but they were not sufficiently supported in the reward condition.

The results of the t-test for related samples yielded statistically significant differences (as there was a notable mean difference between condition 1 and 2). It denotes that the reward was effective in enhancing all the items on the IMI through which we intended to measure intrinsic motivation. Consequently, we reject the null hypothesis (H₀) that the difference is due to chance and accept the alternative hypothesis (H₁). In effect, intrinsic and extrinsic motivation have been found to be additive in reading, resulting in a positive causal relationship.

For the major reason that the mean difference between the pre-test and post-test was (5.01) (which is not in fact equal to 0), and the t-value was higher than the required t-ratio, inescapably, the results are in the same direction of the researcher's contention. The results of the two tests indicated that there is enough statistical evidence to say that the null hypothesis of no difference between the means is clearly rejected, and that the alternative hypothesis, in contrast, is utterly accepted. Thereupon, the statistically significant differences between students' performance in the pre-and post-tests are not due to chance; rather, it is due to our motivational intervention. The incentive-based system in reading was effective in advancing students' comprehension skills and did not impede their comprehension.

Conclusion

This paper is sought out to provide prominence to the longitudinal impact of creating an incentive-based system— as a new motivating strategy— during a reading practice phase (wherein we offered short stories in response to students meeting a performance standard in intensive reading activities) on learners' intrinsic reading motivation and performance. We departed from the supposition that engaging learners to productively work under a reward-based system in reading would probably enhance their intrinsic motivation and performance. The major findings of the IMI in the two experimental conditions aligned with those of the pre-and post-reward reading performance tests substantiated positive effect of the reward on the subjects' levels of intrinsic motivation and even noteworthy improvements in their reading performance. They further illustrated that intrinsic and extrinsic motivation can have additive and positive influence on a reading practice phase. Accordingly, the present results are congruent with the findings (Cameron, Pierce, Banko, & Gear, 2005) that achievement-based rewards for reading activities enhance subsequently students' intrinsic motivation.

However, the subjects were prone to anxiety in the reward condition. This can be attributed neither to the reward's type nor contingency, yet it is more strongly related to the reward's expectancy. Because the reward, through time, became expected, it emerges that the motivational environment coerced learners to feel stressed (they ought to produce a desired behaviour to be rewarded tangibly in front of their classmates). In view of that, intrinsic and extrinsic motivation can be additive in reading, but what really matters is when the reward becomes expected. In essence, it is quite feasible to admit that students' perceived competence is still very moderate. The reward did not instil into them high self-appraisal of their reading performance. Thereupon, as the reward became expected to our learners, it might suggest that students enjoyed the act of receiving the reward more than the reading environment per se.

The present findings have paved the way for the following recommendations :

- Integrating reading in the EFL curricula is a challenging task that requires to be rigorously thought of by senior teachers of English, at the Department of Letters and English Language-Mentouri University Bros. in virtue of its incontrovertible role in enhancing and paving the way

for students' literacy development. Teachers would be first attuned to learners' problems in reading through a series of reading activities at the beginning of the year, and then develop an appropriate reading curriculum to remedy these problems. In like manner, EFL teachers are also required to set up a reading program wherein it targets learners' motivation in reading. This can be achieved by collecting data on the topics learners have preference for reading. If learners meet their interests and their needs in reading are partially satisfied, they are willing to collaborate and put high effort and may be, through time, they will internalize the value of reading and integrate it to their own behaviour.

- Together, the habit and frequency of L1 and L2 reading have become a serious handicap in the Algerian society, and I dare say we are one step away from becoming a 'dead-society readers'. As a university researcher, it is high time to commence searching for possible solutions to this 'epidemic'. In an attempt to foster the amount of time students spend reading in the classroom and thus ameliorate their motivation, proficiency gains, and the prerequisite skills and knowledge in the target language, another alternative motivating strategy, for adult university students, could be simply sustained silent reading. For second/foreign language learners, sustained silent reading has become one among the best strategies for improving intrinsic motivation, gains in literacy, and language development. It refers to students reading self-selected books with no assessment on what they read. Thereupon, this type of reading is not a time-consuming classwork, and it could create a desire to read (Krashen, 2004) that our students lack in the language they are expected to achieve a native-like fluency.

About the Author

Imene BILOUK is fourth year of Ph.D. studies at the Department of Arts and English Language, Faculty of Arts and Languages-Mentouri University Bros.-and a teaching assistant of English at the University of Mentouri Bros. She holds an MA in Language Sciences and currently pursuing her doctoral of philosophy in Didactics of Foreign Languages (educational psychology). Her research interests include mainly—but not exclusively—: Rewards, L2 Reading Motivation, Reading Comprehension, and Intrinsic Motivation.

References

- Brophy, J. (2004). *Motivating students to learn* (2nd ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Cameron, J., & Pierce, W. D. (1994). Reinforcement, reward and intrinsic motivation: A meta-analysis. *Review of Educational Research*, 64, 363-423.
- Cameron, J., & Pierce, W. D. (2002). *Rewards and intrinsic motivation: Resolving the controversy*. Westport, CT: Bergin & Garvey.
- Cameron, J., Pierce, W.D., Banko, K.M., & Gear, A. (2005). Achievement based rewards and intrinsic motivation: A test of cognitive mediators. *Journal of Educational Psychology*, 97(4), 641-655.
- Chen, P., & Wu, P. (2010). Rewards for reading: Their effects on reading motivation. *Journal of Instructional Pedagogies*, 3,1-8.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18,105–115.
- Deci, E. L. (1972). The effects of contingent and non-contingent rewards and controls on intrinsic motivation. *Organizational Behaviour and Human Performance*, 8,217-229.
- Deci, E. L.(1980). *The psychology of self-determination*. Lexington, MA: D. C. Heath

- (Lexington Books).
- Deci, E. L., & Ryan, R. M. (1982). Intrinsic motivation to teach: Possibilities and obstacles in our colleges and universities. In J. Bess (Ed.), *New directions in teaching and learning* (pp. 27-36). San Francisco: Jossey- Bass.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York: Plenum Publishing Co.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125, 627-668.
- Deci, E. L., Koestner, R., & Ryan, R. M. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of Educational Research*, 71, 1-27.
- Eisenberger, R., & Cameron, J. (1996). Detrimental effects of reward: Reality or myth? *American Psychologist*, 51, 1153-1166.
- Flora, S. R. (2004). *The power of reinforcement*. Albany, NY: State University of New York Press.
- Guilford, J.P., & Fruchter, B. (1978). *Fundamental statistics in psychology and education* New York: McGraw Hill.
- Kohn, A. (1993). *Punished by rewards: The trouble with gold stars, incentive plans, A's, praise, and other bribes*. Boston: Houghton Mifflin Company.
- Krashen, S. (2004). *The power of reading* (2nd ed.). Portsmouth, NH: Heinemann Publishing Company.
- Marink, B. A., & Gambrell, L. B. (2008). Intrinsic motivation and rewards: What sustains young children's engagement with text. *Literacy Research and Instruction*, 47, 9-26.
- Mikulecky, B. S., & Jeffries, L. (2001). *More reading power*. New York: Addison Wesley Longman.
- Pierce, W. D., Cameron, J., Banko, M. K., & So, S. (2003). Positive effects of rewards and performance standards on intrinsic motivation. *The Psychological Record*, 53, 561-579.
- Pintrich, P. R., & Schunk, D. (2002). *Motivation in education: Theory, research and applications*. (2nd Ed). Upper Saddle River, NJ: Merrill Prentice Hall.

I, Imene BILOUK, hereby declare that this written work is my original work, and affirm that this article has not been submitted to any publishing review.