Two studies addressed the effects of failure in reading test performance. In experiment 1, 36 students in 3 intact reading and study skills courses at an upstate New York community college completed a questionnaire, were administered an "unsolvable" reading test, were either given no feedback or "failure feedback," an assessment and placement test, and a cognitive interference questionnaire. In experiment 2, similar subjects from the same community college were restrained from engaging in off-task cognitions to test whether performance decrements following failure would be reversed. Results indicated that students who attributed failure to universal causes exhibited performance deficits and increased off-task thoughts following the unsolvable tests. Results also indicated that instruction that discouraged students from engaging in off-task thoughts eliminated the detrimental effects of universal attributions of failure. Findings suggest that instructions to restrain from off-task thoughts can reduce performance deficits in reading tests. (Contains 23 references and 2 tables of data.) (RS)
THE EFFECTS OF PERCEPTIONS OF FAILURE ON TEST PERFORMANCE OF COMMUNITY COLLEGE STUDENTS

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ABSTRACT

This paper addresses the effects of failure in reading test performance. In Experiment 1, specific attributors were exposed to no feedback or failure feedback in dissimilar reading tests in order to address the impact of attribut- tional styles. In Experiment 2, subjects were restrained from engaging in off-task cognitions to test whether performance decrements following failure would be reversed.

Students who attributed failure to universal causes, exhibited performance deficits and increased off-task thoughts, following unsolvable tests. Instructions that discouraged students from engaging in off-task thoughts eliminated the detrimental effects of universal attributions of failure.
Most decisions regarding student performance are based on tests. These decisions are valid only if they reflect the students' knowledge. Consequently, reading research has addressed a variety cognitive factors that influence test performance (Hare, Rabinowitz and Schieble, 1989; Stahl and Fairbanks, 1986; Paris, Lawton, Turner and Roth, 1991). Test performance is also affected, however, by non-cognitive factors such as failure (Peterson and Seligman, 1984). Since some reading is involved in practically all test situations, one would expect to find an abundance of reading research dedicated to the impact of perceived failure on reading test performance. But this is not the case. Despite the considerable amount of research that dealt with the effects of failure on performance, in general (Dweck and Licht, 1980; Mikulincer, 1986), to date there has been no research addressing specifically reading test performance following failure. As a result, this important area of study is little understood.

A framework that address the effects of perceived failure is the anxiety/excuse construct of the attribution theory. The attribution theory states that exposure to uncontrollable events causes people to feel helpless in many situations, including testing (Seligman and Peterson, 1984; Weiner, 1986). The way they transfer their feelings of helplessness from one test situation to another depends on 3 critical dimensions: whether their helplessness is directed internally or externally, whether it is global or specific to their situation and whether it is stable, long lasting or transient. People who attribute failure to global, stable and internal causes, in other words, people who have universal attributional style are more helpless than people who attribute failure to specific, unstable and external causes or people who have specific attributional style. When exposed to uncontrollable events, universal attributors transfer their perceptions of failure to future events and exhibit motivational deficits which impair their performance.
Universal attributors also exhibit more functional deficits as compared to specific attributors; this is explained by the excuse/anxiety hypothesis of the attribution theory (Kuhl, 1981; Snyder and Higgins, 1988). This hypothesis states that exposure to uncontrollable events provokes anxiety which then causes inability to use excuses and encourages off-task thoughts which then cause functional deficits and impair performance.

Mikulincer and Nizan (1988) conducted a study in which they addressed the effects of off-task thoughts on universal and specific attributors. The results of Mikulincer and Nizan's (1988) study showed that exposure to unsolvable problems and attributions of universal causes for failure produced both deteriorated performance in dissimilar tasks and more off-task thoughts. They also found that the introduction of instructions that discouraged subjects from engaging in off-task thoughts eliminated the detrimental effects of the universal attributions of failure. Mikulincer and Nizan's (1988) research did not address the effects of perceptions of failure as they relate to reading test performance, therefore, the purpose of the current study was to replicate their study substituting a series of reading tests for their tests.

The study was performed in two experiments. Experiment 1 was designed to address the impact of universal and specific attributional styles on off-task thoughts and performance following induction of failure in an unsolvable reading test. Experiment 2 was designed to replicate Experiment 1 and to test whether performance decrements (following universally attributed failure) would be reversed by discouraging subjects from engaging in off-task thoughts. The basic prediction was that the elimination of off-task thoughts in reading tests would decrease the attributions of failure for subjects who gave universal rather than specific attributions of failure for their test performance.
Specifically, the predictions included the following:

1) Subjects who attribute failure in unsolvable reading tests to universal causes would perform worse on dissimilar reading tests than subjects who attribute failure to specific causes.

2) Subjects who attribute failure to universal causes would engage in more off-task thoughts during reading tests following failure in an unsolvable test than subjects who attribute failure to specific causes.

3) Subjects who have more off-task thoughts would perform worse following failure in dissimilar reading tests than subjects who have fewer off-task thoughts.

4) Instructions aimed at restraining subjects from engaging in off-task thoughts would eliminate the detrimental effects of attributions for failure on performance in reading tests.

The first three predictions were addressed in Experiment 1 and Experiment 2 addressed the fourth prediction.

EXPERIMENT 1: METHOD

Subjects

The subjects were 36 students enrolled in three intact reading and study skills courses at an upstate New York community college. The sample consisted of 17 females and 19 males ranging in age from 19 to 44 (M = 24.3). The students were not pretested specifically for this experiment for their reading level. Instead, their available placement scores, based on the Nelson-Denny Reading Test, were used. The knowledge of the students' reading level was necessary in order to eliminate possible test difficulty-attribution to failure interaction.
Instruments

Attributional style was assessed by the Attributional Style Questionnaire (Semmel, Von Baeyer, Abramson, Metalsky, Seligman and Peterson, 1984). It consists of 12 hypothetical events, six negative and six positive. Each event has four questions. The first question asks the subjects for one major cause for each event which is not used in the scoring but is necessary for the test taker to answer the next three questions. Each event has to be rated on three 7-point scales, tapping the dimensions of internality, stability, and globality. Scores are derived by averaging across dimensions and across events. Each individual dimension ranges from 1 to 7 scores, therefore, the range is from 3 to 21 for composite positive and negative events. In order to arrive at the final attributional style scores, the composite negative scores were subtracted from the composite positive scores.

The dissimilar reading tests consisted of the "Unsolvable Reading Test" (Ackerman, 1978) and the verbal (reading) section of the Assessment and Placement Test for Community College Students (The College Board, ETS, 1985).

The Unsolvable Reading Test was developed by Ackerman (1978) in order to assess children’s ability to make presuppositional inferences and consisted of two contextual variants and a series of questions. For the present experiment, one of the contextual variants and the 10 unsolvable questions were used. The Unsolvable Reading Test is written at the fifth grade level as determined by Flesh’s 1974 (Singer and Donlan, 1980) reading formula. The low level was necessary in order to exclude reading difficulty as a possible confounding factor. The first part of the Unsolvable Reading Test consists of six paragraphs which tell a simple story. The second part of the Unsolvable Reading Test consists of 10 "Yes" or "No" questions.
The instrument used to induce failure was the "Reading Memory Test Results" which consisted of a message of 70% of incorrect answers.

The second test was the reading comprehension (verbal) section of the Assessment and Placement Test for Community College Students (1985) which provides reading texts in different content areas and students are asked to choose the correct answer out of four possible answers. The Assessment and Placement Test consists of 35 questions and the scoring is done by tallying the correct answers.

The students' performance on the Assessment and Placement Test was compared with their previous performance on the reading comprehension section of a comparable test, the Nelson-Denny Reading Test (Form E and F, 1981) (correlation .86).

Reading performance of the subjects was obtained by calculating the difference between the percentage of correct answers of the Nelson-Denny Reading Test and the Assessment and Placement Test for Community College Students.

Task-irrelevant thoughts were assessed using the Cognitive Interference Questionnaire (Sarason, Sarason, Keefe, Hayes and Shearin, 1986). The Cognitive Interference Questionnaire consists of 21 items. Of these items, 10 are task-relevant thoughts and 11 items are task-irrelevant thoughts. Subjects are asked to rate on a five point bipolar scale (1 = never and 5 = very often), the frequency with which they occur. In addition, the Cognitive Interference Questionnaire measures the degree of which the subjects' minds wander using a global rating on an 8-point scale.
Procedures

Experiment 1 was conducted in two sessions. In the first session, the subjects received the Attribution Style Questionnaire. Based on the scores on the Attributional Style Questionnaire, the subjects were divided into two groups (a) Universal attributors (M = 1.7) and (b) specific attributors (M = 4.9) (t = -8.6, p < .01).

The second session started with the perceived failure training phase. All the subjects were told that they would be administered a test designed to assess their "reading memory" and they received the Unsolvable Reading Test. Next, the subjects were asked to write a free recall on a blank sheet of paper. This procedure was necessary because there was a need for a 10 minute time period to prepare for the next phase of the experiment. The activity of free recall was chosen for this purpose because it was best suited to be perceived by the subjects as an integral part of the so-called "Reading Memory Test."

While the subjects were writing the free recall they were randomly divided into two conditions: (a) no feedback condition and (b) failure feedback condition. The subjects in both groups received the Assessment and Placement Test, but the subjects in the failure feedback condition also received the message of failure in the form of the "Reading Memory Test Results." The next phase consisted of the test task which was the verbal section of the Assessment and Placement Test and it was given to subjects in both conditions. Immediately following the Assessment and Placement Test, the subjects were administered the Cognitive Interference Questionnaire. Finally, the students were debriefed.
Results

For each of the two experimental conditions (i.e., no feedback and failure feedback) and each of the attributional styles (i.e., universal and specific), mean scores were calculated for reading performance efficiency and three measures of off-task thoughts (i.e., task-irrelevant thoughts, task-relevant thoughts, and mind-wandering thoughts). Means and standard deviations of performance efficiency and off-task thoughts by experimental conditions and attributional styles are presented in Table 1.

Table 1: Experiment 1

Means and standard deviations of performance efficiency and off-task thoughts by experimental conditions and attributional styles.

<table>
<thead>
<tr>
<th>Categories</th>
<th>No Feedback</th>
<th>Failure Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Universal</td>
<td>Specific</td>
</tr>
<tr>
<td>Performance</td>
<td>M</td>
<td>2.97</td>
</tr>
<tr>
<td>Efficiency</td>
<td>SD</td>
<td>4.71</td>
</tr>
<tr>
<td>Task-Irrelevant</td>
<td>M</td>
<td>1.83</td>
</tr>
<tr>
<td>Thoughts</td>
<td>SD</td>
<td>.62</td>
</tr>
<tr>
<td>Task-Relevant</td>
<td>M</td>
<td>2.06</td>
</tr>
<tr>
<td>Thoughts</td>
<td>SD</td>
<td>.45</td>
</tr>
<tr>
<td>Mind-Wandering</td>
<td>M</td>
<td>4.22</td>
</tr>
<tr>
<td>Thoughts</td>
<td>SD</td>
<td>1.92</td>
</tr>
</tbody>
</table>

In order to address the first prediction, concerning performance of universal and specific attributors of failure in dissimilar reading tests under failure conditions, a 2 (universal attributors vs. specific attributors) x 2 (failure feedback vs. no feedback) analysis of variance (ANOVA) was used to analyze the data.
The results tended to confirm the predictions that universal attributors would have higher performance deficits than specific attributors at the trend level and the failure condition had a significant effect.

In order to address the second prediction concerning off-task thoughts of universal and specific attributors in dissimilar reading tests, a 2 (universal attributors vs. specific attributors) x 2 (failure feedback vs. no feedback) analysis of variance factorial design was used to analyze the data. The results confirmed the second prediction that universal attributors would have significantly more mind-wandering and task-irrelevant thoughts than specific attributors. The results also showed that failure had a significant impact on the task-irrelevant thoughts and an impact on the trend level on the mind-wandering thoughts of both universal and specific attributors. Contrary to the prediction, neither failure nor attributional style had an impact on task-relevant thoughts.

In order to address the prediction concerning the influence of off-task thoughts on performance deficits in a dissimilar reading test following failure, Pearson correlation and regression analyses were carried out. The positive correlation between the three dimensions of off-task thoughts confirmed the trend that the change for all three dimensions was in the same direction. The correlation results of off-task thoughts and performance confirmed the prediction that off-task thoughts would have a detrimental effect on performance. Subjects who had more off-task thoughts performed worse than subjects that had fewer off-task thoughts.

The multiple regression analysis which was run to address the relations between the three off-task thoughts indicated that off-task thoughts accounted for 54% of the variance of performance deficits with task-irrelevant thoughts showing significance (p < .01).
EXPERIMENT 2: METHODS

In order to test the prediction that performance deficits following universally attributed failure would be reversed by discouraging subjects from engaging in off-task thoughts while solving unsolvable questions, Experiment 2 addressed four predictions under two conditions. In addition to the three predictions addressed in Experiment 1, Experiment 2 addressed also the fourth prediction that: instructions aimed at restraining subjects from engaging in off-task thoughts will eliminate the detrimental effects of attributions for failure on performance on reading tests. The two conditions were (a) induction of universal attributions of failure without task-orientation and (b) induction of universal attributions of failure with task-orientation.

Subjects

Subjects were 36 students in other three intact reading and study skills courses at the same upstate New York community college. The sample consisted of 19 females and 17 males ranging in age from 18 to 45 (M = 22.7).

Instruments

The instruments were identical to the ones used in Experiment 1.

Procedures

The procedures were similar to the procedures in Experiment 1. Based on the scores on the Attributional Style Questionnaire, the subjects were divided into two groups: universal attributors (M = 7.3) and specific attributors (M = 6.7) (t = 2.19, p < .05). Then subjects were divided into two experimental conditions: no-task-orientation and task-orientation. Subjects in the no-task-orientation condition received universal induction of failure by the same
instructions like in Experiment 1. Subjects in the task-orientation condition, however, received additional instructions requiring them to justify their choice for each answer because this procedure has been found to prevent subjects from engaging in task-irrelevant thoughts (Kuhl, 1981; Mikulincer and Nizan, 1988). For each of the two experimental conditions (i.e., induction of universal attributions of failure without task-orientation and induction of universal attributions of failure with task-orientation) and each of the attributional styles (i.e., universal and specific), mean scores were calculated for reading performance efficiency and three measures of off-task thoughts (i.e., task-irrelevant thoughts, task-relevant thoughts, and mind-wandering thoughts). Means and standard deviations of performance efficiency and off-task thoughts by experimental conditions and attributional styles are presented in Table 2.

Table 2: Experiment 2

Means and standard deviations of performance efficiency and off-task thoughts by experimental conditions and attributional styles.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Universal Induction of Failure</th>
<th>Universal Induction of Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No-Task-Orientation</td>
<td>Task-Orientation</td>
</tr>
<tr>
<td>Universal</td>
<td>Specific</td>
<td>Universal</td>
</tr>
<tr>
<td>Performance M</td>
<td>-9.33</td>
<td>9.59</td>
</tr>
<tr>
<td>Efficiency SD</td>
<td>8.14</td>
<td>8.95</td>
</tr>
<tr>
<td>Task-Irrelevant Thoughts M</td>
<td>2.28</td>
<td>1.89</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.45</td>
</tr>
<tr>
<td>Task-Relevant Thoughts  M</td>
<td>2.60</td>
<td>2.23</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.95</td>
</tr>
<tr>
<td>Mind-Wandering Thoughts M</td>
<td>3.00</td>
<td>3.49</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.12</td>
</tr>
</tbody>
</table>

Table 2: Experiment 2

Means and standard deviations of performance efficiency and off-task thoughts by experimental conditions and attributional styles.
In order to address the first prediction concerning performance of universal and specific attributors of failure in dissimilar reading tests under induction of universal attributions of failure without task-orientation and universal attributions of failure with task-orientation conditions, a 2 (universal attributors vs. specific attributors) x 2 (induction of universal attributions of failure without task-orientation vs. induction of universal attributions of failure with task-orientation) analysis of variance (ANOVA) was used to analyze the data.

The experiment confirmed the predictions that universal attributors would perform worse than specific attributors. Both attributors performed significantly worse in the no-task-orientation condition than in the task-orientation condition; universal attributors performing worse than specific attributors at the trend level. The prediction that reading performance deficits following failure would be eliminated under task-orientation conditions was confirmed.

In order to address the second prediction concerning off-task cognitions of universal and specific attributors in dissimilar reading tests, a 2 (universal attributors vs. specific attributors) x 2 (induction of universal attributors of failure without task-orientation vs. induction of universal attributions of failure with task-orientation) analysis of variance factorial design was used to analyze the data.

The prediction that subjects in the no-task-orientation condition would have more mind-wandering thoughts was confirmed. The prediction that they would have more task-irrelevant thoughts in the no-task-orientation condition approached significance. The prediction about task-relevant cognitions was not supported. Further, universal attributors had more off-task thoughts than specific attributors in the no-task-orientation condition, but the same trend
was not found in the task-orientation condition. This confirmed the prediction that the reversal of the reading performance deficits of universal attributors would be more significant than the reversal of the performance deficits of specific attributors.

In order to address the prediction concerning the influence of off-task thoughts on reading performance deficits in a dissimilar reading test following failure under task-orientation and no-task-orientation conditions, Pearson correlation and regression analyses were carried out. The correlation coefficients between performance and the three dimensions of off-task thoughts. The correlation results of off-task thoughts and performance seemed to confirm the prediction that off-task thoughts would have a detrimental effect on performance. Subjects who had more off-task thoughts performed worse than subjects that had few off-task thoughts.

The positive correlation between the three dimensions of off-task thoughts confirmed the trend that the change for all three dimensions of off-task thoughts was in the same direction. The multiple regression analysis that was run to address the relations between the three off-task thoughts indicated that off-task thoughts accounted for 59% of the variance of performance deficits with task-irrelevant and mind-wandering thoughts showing significance (p < .01).

General Results

The basic prediction of this study was that elimination of off-task thoughts in reading tests would decrease the effects of attributions of failure for students who gave universal rather than specific attributions of failure.
for their performance. To address the basic prediction of this study, the results were analyzed across the two experiments. The results compared were:

- the control group which was the no feedback condition in Experiment 1 and three experimental groups which were: (a) the no attribution of failure condition in Experiment 1, (b) the universal induction of failure condition in Experiment 2, and (c) the treatment group which was the task-orientation condition in Experiment 2.

In order to address the prediction that universal attributors would perform worse on dissimilar reading tests than specific attributors, the results concerning specific attributions of failure and universal attributions of failure were compared. The results across all conditions confirmed the prediction that subjects who attribute failure to universal causes would perform worse than subjects who attribute failure to specific causes. In addition, both universal and specific attributors in the two experimental failure conditions had more performance deficits than subjects in the no feedback condition. In the treatment or task-orientation condition, both specific and universal attributors had the least performance deficits.

The results across all the experimental conditions also indicated that subjects who attributed failure to universal causes engaged in more task-irrelevant and mind-wandering thoughts during reading tests than specific attributors in the control group or no feedback condition and the two failure conditions, but not under the treatment or task-orientation condition.

In addition, both universal and specific attributors had more task-irrelevant and mind-wandering thoughts under the two failure conditions than in the control group or the no feedback condition and the treatment group or the task-orientation condition. There was one exception to this trend: specific attributors in the no-attribution condition had fewer mind-wandering thoughts.
than the specific attributors in the control group or no feedback condition and
the treatment or task-orientation condition.

Contrary to the prediction, task-relevant thoughts, however, were not more
prevalent among universal attributors than among specific attributors.

For the prediction that subjects who have more off-task thoughts would
perform worse, the findings were, in general, supportive. There was a higher
negative correlation between task-irrelevant cognitions and performance
deficits in both failure conditions (−.68 and −.65) than the control group or
no feedback condition (−.40) and the treatment group or task-orientation condi-
tion (−.31). Contrary to the prediction, correlations between task-relevant
thoughts and performance deficits were found lowest in one of the failure
condition (no attribution) (−.11) and the highest in another failure condition
(universal induction of failure) (−.61).

Further, the multiple regression analyses showed that the three dimensions
of off-task thoughts accounted for between 49% and 63% of the variance of the
performance deficits in both failure conditions with task-irrelevant thoughts
and mind-wandering showing consistent significance were in line with the basic
prediction that instructions aimed at restraining subjects from engaging in
off-task thoughts have been successful in reducing the performance deficits of
universal attributors rather than specific attributors.

Discussion

The results of both experiments confirmed the major prediction that the
elimination of off-task thoughts in reading text would affect the attributions
of failure for students who are universal rather than specific attributors of
failure.
Those findings were basically consistent with Mikulincer and Nizan’s (1988) results. There were, however, a few discrepancies. Both Mikulincer and Nizan’s (1988) study, and the present study, found evidence that under failure conditions, universal attributors performed worse than specific attributors and that the conditions of failure had an impact on performance. The salience of the two experimental conditions, however, was reversed in the two studies. In Mikulincer and Nizan’s (1988) study, the effects of attributional style were more powerful than the effects of failure, while in the present study, the effects of failure had a more profound effect than the attributional styles. In Mikulincer and Nizan’s (1988) study, the difference in performance deficits between universal and specific attributors was significant and, in the present study, it was at the trend level. On the other hand, in Mikulincer and Nizan’s (1988) study, the effects of the experimental conditions of failure on test performance were not always significant. For example, in Experiment 2 in Mikulincer and Nizan’s (1988) study, only the condition of universal failure without task-orientation had a significant impact on performance.

In the present study, the effects of the experimental conditions of failure were significant across all conditions. It could be that, in the present study, the effects of the failure conditions were more powerful than the effects of attributional style of the subjects because in the context of the study, the experimental tests were associated with real college testing situations. This association with real tests might explain why the performance of both universal and specific attributors was strongly affected.

A further inconsistency between the findings of Mikulincer and Nizan’s (1988) study and those of the present study was related to the impact of task-relevant thoughts on performance deficits. In Mikulincer and Nizan’s (1988) study, task-relevant thoughts had similar impact on test performance
deficits following failure like task-irrelevant and mind-wandering thoughts. In the present study, however, task-relevant thoughts had little impact on reading performance deficits following failure. This inconsistency might be explained by the different ways the sense of failure was induced in the two studies. In Mikulincer and Nizan's (1988) study, the sense of failure was induced primarily by the experimenter's telling them they failed.

In the context of Mikulincer and Nizan's interpersonal failure, task-relevant thoughts are considered still task-irrelevant or off-task in the sense of efficient task-oriented self instructions. For example, worrying about one's performance is task related but not task-relevant because it does not promote efficient performance (Mikulincer and Nizan, 1988). In the present study, however, the students' perception of failure was induced by the reading task. Possibly, in a reading task-based failure, some of the off-task thoughts, which are task-relevant, can become a call for positive action by changing some of the detrimental effects of failure into a situational challenge (Meichenbaum and Butler, 1980). These speculations, however, should be further addressed in future studies in other educational environments.

As it has been mentioned before, the results of the present study basically confirm the findings of Mikulincer and Nizan's (1988) study. The study confirmed that students who attributed failure to universal causes exhibited performance deficits and increased off-task thoughts following unsolvable reading tests. Also, increased off-task thoughts interfered with performance in new tests. Finally, instructions which discouraged students from engaging in off-task thoughts eliminated the detrimental effects of universal attributions of failure. One should be cautious, however, in the interpretation of these results because some results were at the trend level.
These findings seem to suggest that causal attributions of failure in reading tests, like in other tasks, are related to both the students' generalizations of control expectancies (as proved by the classical learned helplessness and attribution studies, e.g., Abramson, Seligman and Teasdale, 1978), and to the anxiety and related off-task cognitive states which prevent students from concentrating on their reading tests. In addition, off-task activities may impair students' ability to invoke excuses as alternative reasons for their poor performance on reading tests (Bradley, 1978; Mehlman and Snyder, 1985; Weary, 1980; Zucherman, 1979). Sarason (1984) and Wine (1982) hypothesized that inability to use excuses and anxiety cause the attentional block to situational information which prevent students from discriminating dissimilar tasks and cause deficits in all tasks. It seems that the same processes might be at work with regard to reading tests too, where the emphasis is on functional helplessness.

Implications

The findings of the present study suggest that instructions to restrain from off-task thoughts can reduce performance deficits in reading tests, therefore, it might indicate that affective deficits can be alleviated by the manipulation of off-task thoughts. This fact can have implications for the field of test development. For example, both traditional multiple choice reading tests and tests in which readers have multiple choices (e.g., the new Illinois reading test) could incorporate instructions directing students to explain why they have chosen a particular answer. These instructions could help students overcome their attributions of failure because they could guide the students to channel their negative thoughts caused by perceptions of lack
of control, worry, and anxiety to test related tasks. Since students would have to concentrate on their tests, their performance would be enhanced. These results also tie in with results from metacognitive studies (Langer and Applebee, 1986; Sivan and Roehles, 1986; Rohrkenper and Corno, 1988).

In the future, however, the effects of perceptions of failure on reading test performance should also be investigated as they relate to other kinds of learners, such as more proficient learners or learners from different cultural groups. Research should also address the effects of perceptions of failure on reading test performance utilizing different types of tests. These future studies would provide additional information about the effects of the impact of perceptions, of failure on reading test performance, and would add to the body of knowledge about affective factors on reading test deficits.
REFERENCES


