Numerous studies have focused on attitudes toward reading and how to measure such attitudes. The present study examined the effects of both the survey format and the reading abilities of 82 sixth graders at a middle school in McDuffie County, Georgia. Since all of the students had taken the Iowa Tests of Basic Skills, the language arts composite scores of those tests were used to group the students into categories: below average, average, and above average. Two formats of the attitude survey were used, one with the Likert-type scale (four options), the other with a pictorial representation of the Likert-type scale using sketches of the comic strip character, Garfield, as very happy, slightly smiling, mildly upset, or very upset. Results showed that student ability did not significantly affect attitude test scores. However, the main effect due to format was significant; the Likert-type format produced significantly higher scores than the Garfield format. The interaction between ability level and format also was significant. Tukey's tests indicated that there was no significant difference between attitudes of above average students given the Likert-type scale and above average students given the Garfield format. However, average students and below average students both had significantly higher attitude scores when they were given the Likert-type format than when they were given the Garfield format. Findings suggest that attitude responses of adolescents can be manipulated by varying the survey format. (Includes three tables of data and the survey instrument.)
LANGUAGE ARTS ACHIEVEMENT LEVEL, ATTITUDE SURVEY FORMAT, AND ADOLESCENTS' ATTITUDES TOWARD READING

Bazy E. B. Ryan and Lyle R. Smith

ABSTRACT

The joint effects of achievement level and attitude survey format upon attitudes toward reading were investigated. Sixth grade students completed attitude surveys involving a standard Likert-type format or a format involving pictures of the comic strip character, Garfield. There was no significant main effect on attitude responses due to achievement level, but the main effect due to survey format, as well as the interaction between achievement level and format were significant. The results imply that attitude responses of adolescents can be manipulated by varying the format of the survey.
Numerous studies have focused on attitudes toward reading and how to measure such attitudes (e.g., Heathington & Alexander, 1978, Noland & Craft, 1976, Reeves & Thames, 1994, Roettger, 1980). In these studies, little attention has focused on the differential impact of survey format on attitudes.

The present study examined the joint effects of attitude survey format and language arts achievement level on attitudes toward reading. A total of 82 sixth graders at a middle school in McDuffie County, Georgia, were involved in the study. All of the students had taken the Iowa Tests of Basic Skills (ITBS) in the fifth grade. The ITBS language arts composite scores were used to classify each student as being above average, average, or below average in language arts achievement. State norms concerning the ITBS were used in the classification process, yielding 30 students with above average scores, 30 students with average scores, and 22 students with below average scores.

Two forms of attitude survey were used. One form used a Likert-type scale with four options: 4 = makes you very happy, 3 = makes you slightly smile, 2 = makes you mildly upset, 1 = makes you very upset. For each response item on the attitude survey, the students were asked to
write the number of the response that best described their feelings. The second form of attitude survey involved the use of pictures of the cartoon character, Garfield. In this form, the four options were as follows: 4 = very happy Garfield, 3 = slightly smiling Garfield, 2 = mildly upset Garfield, 1 = very upset Garfield. Next to each response option was a corresponding picture of Garfield, with a facial expression concurrent with the respective option. The questionnaire items were exactly the same for both formats. The 20 items used are shown in Table 1. The items are phrased so that higher scores indicate higher attitudes toward reading.

The surveys were randomly distributed to the 30 students in the above average group, with 15 students receiving the Likert-type survey and 15 students receiving the Garfield survey. A similar process was used to distribute the surveys to the average group and the below average group. A composite attitude score was obtained for each student by adding the 20 scores for the items, thus yielding a possible low score of 20 and a possible high score of 80. Two of the students did not complete the survey and their scores were not included in the analysis.
RESULTS

A 2(format: Likert, Garfield) x 3(achievement level: above average, average, below average) analysis of variance was performed on the attitude scores. Table 2 shows the group means and standard deviations. Table 3 shows the results of the ANOVA.

There was no significant main effect on attitude scores due to student ability. However, the main effect due to format was significant, with the Likert-type format producing significantly higher scores than the Garfield format. The interaction between ability level and format also was significant. Tukey's (a) tests indicated that there was no significant difference between attitudes of above average students given the Likert-type scale and above average students given the Garfield format. However, average students and below average students both had significantly higher attitude scores when they were given the Likert-type format than when they were given the Garfield format. For students who were given the Garfield format, above average students and average
students had significantly higher attitude scores than did below average
students. For students given the Likert-type format, average students and
below average students had significantly higher attitude scores than did
above average students.

The reasons for the results can only be conjectured. It may be that
average students and below average students felt insulted by the Garfield
format, whereas above average students were amused by this format. Or
it may be that average students and below average students are reluctant
to admit to being very upset or mildly upset, but are not reluctant to select
a frowning Garfield. Regardless of the underlying reasons for the results,
this study indicates that attitude responses of adolescents can be
manipulated through the use of various response formats.

References
observation checklist to assess attitudes toward reading. The Reading
Teacher, 31, 769-772.
Reeves, C. K., & Thames, D. G. (1994). Poor readers' attitudes. Effects
of using interest and trade books in an integrated language arts approach.

*Reading Research and Instruction, 33*, 293-308.


*The Reading Teacher, 33*, 451-453.
Table 1: Reading Attitude Survey

Directions: Answer using the following numbers. Place your answer in the blank beside the question.

4 = makes you very happy
3 = makes you slightly smile
2 = makes you mildly upset
1 = makes you very upset

1. How do you feel when you read a book on a rainy Saturday?
2. How do you feel when you read a book in school during free time?
3. How do you feel about reading for fun at home?
4. How do you feel about getting a book for a present?
5. How do you feel about spending free time reading?
6. How do you feel about starting a new book?
7. How do you feel about reading during summer vacation?
8. How do you feel about reading instead of playing?
9. How do you feel about going to a bookstore?
10. How do you feel about reading different kinds of books?
11. How do you feel when the teacher asks you questions about what you read?
12. How do you feel about doing reading workbook pages and worksheets?
13. How do you feel about reading in school?
14. How do you feel about reading your school books?
15. How do you feel about learning from a book?
16. How do you feel when it's time for reading class?
17. How do you feel about the stories you read in reading class?
18. How do you feel when you read out loud in class?
19. How do you feel about using a dictionary?
20. How do you feel about taking a reading test?
Table 2. Group Means and Standard Deviations.

<table>
<thead>
<tr>
<th>Group</th>
<th>Count</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Ave-Garfield</td>
<td>15</td>
<td>50.93</td>
<td>11.37</td>
</tr>
<tr>
<td>Above Ave-Likert</td>
<td>15</td>
<td>49.00</td>
<td>6.73</td>
</tr>
<tr>
<td>Ave-Garfield</td>
<td>15</td>
<td>45.47</td>
<td>8.55</td>
</tr>
<tr>
<td>Ave-Likert</td>
<td>15</td>
<td>59.27</td>
<td>8.33</td>
</tr>
<tr>
<td>Below Ave-Garfield</td>
<td>11</td>
<td>48.55</td>
<td>8.08</td>
</tr>
<tr>
<td>Below Ave-Likert</td>
<td>9</td>
<td>59.67</td>
<td>8.09</td>
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Table 3. Results of the Analysis.

<table>
<thead>
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<th>Source</th>
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<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
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</thead>
<tbody>
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<td>Ach Level</td>
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<td>107.51</td>
<td>1.42</td>
<td>.25</td>
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<td>1127.50</td>
<td>14.86</td>
<td>.0002</td>
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<td>Ach x Format</td>
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<td>6.78</td>
<td>.002</td>
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<tr>
<td>Residual</td>
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<td>5614.33</td>
<td>75.87</td>
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