DETERMINING THE READING PREFERENCES OF THIRD, FOURTH, AND FIFTH GRADE DISADVANTAGED PUPILS

George McNinch*

Abstract

Using third-, fourth- and fifth-grade disadvantaged pupils, the investigator sought to test the null hypotheses that children would not demonstrate uniformity of interest across a three grade span or by selected groups, and that children would not reflect common interests in picture selection of most and least preferred interest categories. In testing the hypotheses an instrument was designed, similar in some respects to the one developed by Koplyay and Ford, in which the subjects expressed their reading preference by ranking stimuli pictures in order of preferences. A free choice selection does seem to be an indicator of interest; however, the procedure does not appear to possess the reliability necessary to warrant its use as a broad research tool. Synthesizing the findings of this study and others concerning reading preferences, the conclusion was drawn that children's reading preferences have not been definitively established, nor have reliable instruments been developed.

Emphasis is usually placed by reading specialists on selecting the "right book" for the child. The need of proper book selection is not one of instructional level only, but also proper selection based on the reader's interest.

Establishing the reading preferences of children remains a valid research direction, but as yet reliable, practical instruments have not been reported. Improvement in the method and depth of analysis used in preference determination is needed before wide surveys of preferences can be sampled and discussed (Weintraub, 1969). Traditionally, the reading preferences of children have been determined by administering interest inventories or questionnaires (Kottmeyer, 1958), analyzing free-choice library selections (Smith, 1962), discussing open-ended questionnaires (Shores, 1964), relating freely discussed topics to interests (Byers, 1964), or by using non-verbal, non-reading evaluations (Ford and Koplyay, 1968). The latter method, non-verbal picture evaluation, seems to be the more valid research technique.

Ford and Koplyay used a Story Preference Test based on six categories of pictures. These categories, represented by ten pictures each, were presented in book form to urban Negro first-graders and their white suburban counterparts. The pupils were asked to circle "most liked" and "most disliked" pictures. Chi square analysis of the frequency distribution indicated that the choices were not due to chance factors (p<.01). For the total sample, Negro heritage and children

* Dr. George McNinch is Assistant Professor at the Reading Center of the University of Southern Mississippi, Hattiesburg.
in the ghetto ranked first, and animal and fantasy ranked last. The authors concluded that “children who participated were more attracted by stories in the areas of Negro heritage and children in inner-city environments than by stories built around animal or fantasy themes.” These results are contrary to the earlier findings of Witty et al., (1946) and Norvell (1958) who cite fantasy, animal, and humor as children's favorites.

The techniques developed by Ford and Koplyay has not been refined into manageable categories, nor have adequate statistical techniques been used to establish the reliability of the ordinal, non-parametric rankings involved. Rankings, even when viewed as polar opposites, are ordinal in nature. The distance between “most preferred” and “least preferred” will naturally vary from child to child or group to group. Intergroup reliability can be determined by application of the appropriate non-parametric statistical technique.

The present study adopted and modified the non-verbal, free choice picture selection concept instigated by Ford and Koplyay (1968). The present measuring device drew from the previous test, but the concept of measurement is slightly different. Preferences for four general categories, not six, were tested. Also, the manner of stimuli presentation, movable picture selection, differed from the booklet form of exposure. Fewer pictures per category reduced the length of the testing sequence. Ranking of picture preference, not just polar opposites was possible. The study was conducted on the assumption that in a free choice situation, under specific instruction, children would tend to select pictures that conformed to the rank hierarchy of their reading interests. Specifically, the study sought to answer two posited questions. The two questions, stated declaratively and tested in the null form were: 1) Children would not demonstrate uniformity of interest across a three grade span, or by selected groups; and 2) Children would not reflect common interests in picture selection of most and least preferred interest categories.

**Procedures**

Fifty-nine third-, fourth-, and fifth-grade pupils enrolled in a summer reading program served as subjects for the study. The sample sizes were fourteen, nineteen, and twenty-six at the third, fourth, and fifth grades, respectively. The students were drawn from the county areas adjacent to Hattiesburg, Mississippi. All the students were loosely classified by the school as disadvantaged, and all of the pupils had been encountering academic difficulty during the regular school session.

Reading preference was established by asking each child to look at twelve individual pictures presented in a random 4"x3" display and then select the pictures that represented the story he would most like to read. Further instructions asked the child to remove the pictures from the table in the order in which he would most like to read.
the stories. The last picture designated would represent the story he would least like to read. The rank order of selections was recorded by the examiner by noting numbers on the reverse side of the card. The chosen rank order for the twelve pictures was then recorded and used for the determination of reliability.

The stimulus pictures represented categories of stories shown to be representative of children’s preferences, or were pictures that predominated in children’s reading material (Smith, 1962 and Byers, 1964). The stimuli included three pictures in each of the four following categories: fairy tales, wild animal stores, peer or community relationships, and peer or community relationships representing ethnic backgrounds. Three pictures were included at each category level so that the emotive value of a particular picture would be reduced. Designation of the preferred category, or least preferred category, would be represented by the first, or last, selection regardless of the actual picture.

The stimuli pictures were cut from basal readers or children’s picture books and laminated to 5” x 8” white paper. All pictures were in color and approximately the same size.

Validity of category fit was demonstrated by asking a jury of ten graduate students in the field of reading to sort the pictures into the named categories. The generic labeling was done correctly by each jury member. To adults, at least, the pictures were representative of the desired categories.

Question one, concerning uniformity of stimuli selection and test reliability, was investigated by application of Kendall’s Coefficient of Concordance (Siegel, 1956). Question two, the determination of least and most preferred categories, was investigated by chi square analysis. Prior to the analysis of the data, the critical level of significance was set at .05.

Results

The associations between ranks may be determined and analyzed by application of the Kendall Coefficient of Concordance (W), a non-parametric statistical procedure. The coefficient of concordance expresses the ordinal relationship between ranked variables, and thus may be used as a measure of interjudge or interest reliability. The determined value of W should be interpreted in the same manner as more commonly used correlation techniques. A chi square test can be employed to test the significance of the coefficient.

Eight separate estimates of the reliability of stimuli selection were computed for the data. A W coefficient was computed separately for the following groups: total sample, fifth-grade, fourth-grade, third-grade, boys, girls, Negroes, and whites. The absolute values of the computations are reported in Table 1.

The W coefficients ranged from .03 to .11. None of the eight estimates of interjudge or interest reliability were significantly different
from zero. Therefore, the first null hypothesis (children would not demonstrate uniformity of interest across a three grade span, or by selected subgroups) was retained. Uniformity or reliability of picture selection was not apparent in the responses of the sample.

Interjudge reliability would be demonstrated if a significantly high correlation existed among the various rankings. The near zero order correlations evident in this sample make interpretation extremely difficult. Generally, the rankings within the various subgroups (fifth-graders, .04; fourth-graders, .06; third-graders, .11; boys, .08; girls, .03; Negroes, .04; whites, .07) were more consistent than the W value of .03 found for the total group. This internal consistency was expected and would be a useful indicator of interest reliability. However, since none of the coefficients are significantly different from zero, or significantly different from each other, the results must be interpreted as a rather weak trend. Reliability was not demonstrated for the ranked data.

A chi square analysis was used to test the second posited hypothesis (children would not reflect common interests in picture selection of most and least preferred interest categories). A frequency count of the number of first selections for each of the four categories is presented in Table 2. The chi square analysis computed for first category selection, assuming equal chance of selection per category, was significant at the .01 level of probability. The value of 27.85 with 3 degrees of freedom seemingly indicates that factors other than chance dictated the selection of the pictures of interest themes. The three pictures representing category 2, wild animal stories, received the highest frequency of first choice responses. Category 1, fairy tales, received the second highest number of first rankings. The three pictures representing category 4, peer and community relationships representing ethnic backgrounds, garnered the third highest number of first place rankings.

### Table 1
Absolute Values of Kendall's Coefficient of Concordance (W) for the Total Groups and Component Subgroups

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>59</td>
<td>.03</td>
</tr>
<tr>
<td>Fifth grade</td>
<td>26</td>
<td>.04</td>
</tr>
<tr>
<td>Fourth grade</td>
<td>19</td>
<td>.06</td>
</tr>
<tr>
<td>Third grade</td>
<td>14</td>
<td>.11</td>
</tr>
<tr>
<td>Boys</td>
<td>33</td>
<td>.08</td>
</tr>
<tr>
<td>Girls</td>
<td>26</td>
<td>.03</td>
</tr>
<tr>
<td>Negroes</td>
<td>23</td>
<td>.04</td>
</tr>
<tr>
<td>Whites</td>
<td>36</td>
<td>.07</td>
</tr>
</tbody>
</table>

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Table 2
A Frequency Count of the Number of Most Preferred and Least Preferred Selections for Each of Four Interest Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Most Preferred Selections</th>
<th>Number of Least Preferred Selections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairy tales</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Wild animals</td>
<td>32</td>
<td>5</td>
</tr>
<tr>
<td>Peer or community relationships</td>
<td>8</td>
<td>23</td>
</tr>
<tr>
<td>Peer or community relationships representing ethnic backgrounds</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>59</td>
<td>59</td>
</tr>
</tbody>
</table>

Peer and community relationships, category 3, also represented by three pictures, ranked last in the number of first place rankings. A summary of the chi square analysis is presented in Table 3.

Table 3
Summary of Chi Square Analysis of Most Preferred and Least Preferred Selections

<table>
<thead>
<tr>
<th>Rank</th>
<th>Categories</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>df</th>
<th>X²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td></td>
<td>12</td>
<td>32</td>
<td>8</td>
<td>7</td>
<td>3</td>
<td>27.80</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Last</td>
<td></td>
<td>16</td>
<td>5</td>
<td>23</td>
<td>15</td>
<td>3</td>
<td>17.17</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

Table 2 also depicts the number of last place rankings for each of the three categories. The frequency values for last place selection were also subjected to chi square analysis. The chi square value of 11.17, with 3 degrees of freedom, was significant at the .01 level. One of the three pictures representing category 3 was chosen last by twenty-three pupils, one of the pictures in category 1 was selected last sixteen times, fifteen last place selections were attributed to category 4, and category 2 had one of its three pictures selected last only five times. The significant chi square apparently indicated that factors other than chance also dictated picture selection for the last ranking. Therefore, the second tested null hypothesis was not accepted. The subjects’ most preferred choice was wild animal stories and least preferred was peer community situations.
Discussion

Free choice picture selection does seem to be an indicator of interest; however, the procedure does not seem to possess the reliability necessary to warrant its use as a broad research tool. The procedure seems to discriminate "most preferred" from "least preferred" categories when a broad group is considered. However, it must be noted that only four categories were presented. The results may have been different if more groupings had been entered as possible choices.

The results of this study tend to support the earlier findings of Witty (1946) and Norvell (1958). Animal stories and fairy tales (fantasy) ranked first in the present study as well as in these two previous research projects even though the instruments, procedures, and populations differed markedly. Children today are apparently interested in the same type of reading materials that interested children in previous decades.

There is a conflict between the findings of the Ford and Koplyay (1968) study and the findings of this study. The children tested by Ford and Koplyay ranked animal and fantasy stories as least preferred. However, the present study used third-, fourth-, and fifth-grade pupils as subjects, and the previous study used first graders only. The disparity in grade levels may have been a possible factor contributing to the disparity of designated interest.

It appears that the question of defining children's interests is a problem that has not been definitely answered. Enough conflict still exists to warrant further investigation. Further investigation should not be confined merely to the determination of interests, but to the construction of reliable, valid tests.

Summary

Reading preferences of third-, fourth-, and fifth-grade disadvantaged pupils were measured by free choice picture selection. Preferences for four different categories of interests were measured. The children in the sample did show common interests. Pictures representing wild animal stories were selected significantly more often than pictures of the other categories. Pictures representing peer or community relationships were selected last more often than pictures representing the other categories. Reliability of the testing instrument, computed by the Kendall Coefficient of Concordance, was determined. The resultant coefficients were quite low and not different from random chance selections.

The results of this study confirmed earlier research findings, at the same time conflicting with other conclusions. Children's reading preferences have not been definitively established, nor have adequate reliable instruments been developed.
References


SHORES, J. H. Reading interests and informational needs of high school students. *Reading Teacher*, 1964, 17, 536-544.


