

## THEMATIC CONTENT PREFERENCES OF FIVE-YEAR OLD CHILDREN

M. Elizabeth Gray\*

*Stranmillis College of Education*

The thematic content preferences of a representative sample of children (N=899) attending primary school in Northern Ireland, in the age range four to six years, were assessed by a specially devised picture test. Major differences were found between the preferred themes of girls and of boys. Girls were more interested in home-environment themes, while boys stated an interest in themes of violence and adventure.

While a considerable amount of research exists concerning the tastes of children of ten years of age and upwards, little has been undertaken in the area of the thematic content preferences of younger children. Books for readers at the beginner stages are still published primarily as a technical device for teaching the skills of decoding words; relatively little attention is paid to thematic content in them. The purpose of the study reported in this paper was to investigate the theme preferences of children at the beginner-reader stage. 'Beginner reader' is defined as the stage at which a child has acquired basic pre-reading skills and is beginning to use a book for formal instruction.

Byers (7) based an American study of six-year old children on the assumption 'that children who are beginning to read will wish to read about people, objects and events with which they have some familiarity'. A sample of first-grade children, representing a balance in rural-urban population and a cross-section of social class, was tape-recorded during unstructured sessions termed 'sharing periods'. Analysis showed that 'science and nature' was the topic holding greatest interest for approximately one quarter of the children sampled, both boys and girls. In another American survey, the Beta Upsilon Chapter Pi Lambda Theta project (4), seven year old boys' and girls' first preferences were also for

\* Requests for offprints should be sent to M. Elizabeth Gray, Stranmillis College of Education, Belfast BT9 5DY. The author wishes to acknowledge the advice on statistical analysis of Dr Karen Trew, Queen's University, Belfast.

animal themes Kirsch and Robinson (12) included England in a sample of children in their first and second year at school in ten countries, they found that 'fairy and fantasy tales', the overall first choice of both boys and girls, was also the first choice of the English sample. These findings are not compatible with those of Byers (7) or of Beta Upsilon (4) but, when considering English children, they should be viewed with caution because of the small size of the sample

A search of the literature failed to locate any studies in Britain or Ireland of children's interest in thematic content at the age of six years or under. One study in Northern Ireland gathered information about the 'in school' reading of eight to eleven year olds (1). In this study, animal stories were popular with both boys and girls but sex differences in preference were not investigated

In summary, for children under seven years of age, the literature offers conflicting evidence on the major issue of theme preference

#### METHOD

##### *Instrument*

A pilot study was undertaken to collect for classification data describing children's story preferences, to try out methods of obtaining this information, and to assess administrative procedures. Eighty-eight boys and girls, ranging in age from four to seven years, were selected. The children came from five primary schools judged to be representative of school types in Northern Ireland. The investigation, carried out by the class teacher on an individual basis, was divided into four areas of procedure as follows: (i) choice of theme stated by children during discussions, (ii) choice of theme read to children, (iii) themes of stories dictated by children, (iv) selection of theme represented by a picture. On the basis of the incidence of themes in each of the different studies within the pilot study, it was decided to include the five most popular categories in the instrument for the main investigation. These categories were fantasy, adventure, animals, within our-own experience or close environment, and other people and their work. It was found that the theme preferences of some children in the adventure category related to 'soldiers, war, and fighting'. This seemed to indicate that Northern Ireland children showed a strong interest in themes of violence. It was decided, therefore, to remove the theme of war and fighting from the 'adventure' classification and present it as a category on its own so that the interest in violence, if present,

might be explored. Thus, a sixth category of 'war and fighting' was created.

Teachers unanimously agreed that the most effective procedure for eliciting theme preferences was through the use of pictures. Pictures produced more valid data because they cut across language difficulties and held the interest of the children throughout the enquiry.

The subject content of the pictures, which represented the six theme categories which had emerged in the pilot study, was selected in the following way. The fantasy theme, which had to be divorced from real-life situations, seemed best represented by a dragon flying through the air above a castle. To distinguish between the fantasy theme and the theme of adventure, the latter had to be set in a realistic background. A 'cowboys and Indians' picture seemed best suited to represent adventure themes, as few children would not have come in contact with 'the Western adventure' through cinema, television, or comic pictures. The close environment theme seemed ideally represented by a mother nursing a baby outside a house. Wild animals were chosen to represent the animal theme. The theme of war and fighting seemed adequately represented by the picture of a soldier with a gun standing near a tank. The theme of other people and their work, was a difficult one to represent as pictures, for example, of nurses, of lorry, bus and train drivers, or of farmers, were regarded as being sex biased. It was decided that the fire service, though male, could best represent people whose life and work might hold an interest for young children of both sexes.

Pictures crammed with detail may confuse young children to the extent that the main theme of the picture is obscured. Line drawings seem to be more easily interpreted by them (15). Furthermore, because boys may be more field-independent than girls (9), girls might be expected to have more difficulty in picture perception (23). To allow for this sex difference in cognitive style and to endeavour to maintain validity, it was decided to use outline pictures, with as little distraction as possible in the background. Blue seemed the colour best suited to the age range of the study and the colour least likely to introduce bias through defective visual perception of the subjects (2, 11, 22, 23, 25).

An artist prepared six pictures within the above confines, each measuring 25 x 18 centimetres. The finished pictures were Picture I: Fantasy (dragon); Picture II: Close Environment (mother and baby); Picture III:

Adventure (cowboys and Indians), Picture IV Other People and their Work (firemen), Picture V Animals (wild animals), Picture VI War and Fighting (a soldier and tank)

In a second study a set of pictures in the form intended for circulation to schools was tried out with 54 boys and girls in grade 1 of primary school, some from a large urban school and some from a rural school. The themes of the pictures were correctly identified by 96.5% of the children. A sheet for teachers giving administration instructions was also piloted and found to be functional.

#### *Sample*

The population sampled was all primary schools in Northern Ireland which had children in the first grade (P1) (N=1,096). There were 30,439 children in such classes. A random sample of 116 schools was selected. Ninety six schools actually participated. A random sample of five children of each sex was drawn from each P1 class in participating schools. If there were less than ten pupils in a class, as in some rural schools, then all pupils were included. Data were obtained for 899 children (433 boys and 466 girls).

#### *Procedure*

Information on five types of variables was collected for each subject: individual characteristics, school characteristics, reading scheme usage, illustrated themes, and the thematic picture test.

The individual characteristics were age, social class, using the British Census (10) classification, and religion. Although the age range was from four to six years, the majority of the sample were more than five years old. School characteristics considered were school locality, size, type, and sex (mixed or single sex). The Education and Library Board Area in which a school was situated was also identified.

Although several schools used more than one reading scheme, only the main schemes were taken into consideration when classifying subjects according to the reading scheme which was being used to teach them to read at the time of the investigation.

The children were asked to draw a picture of something about which they would like to hear a story. A description of the picture, in the child's own words, was written by the teacher on the back of the drawings.

These were subsequently classified according to the theme categories used for the test pictures.

In the thematic-picture test, children were asked to rank the six pictures using a system of repeated selection over a period of five days as follows. On the first day, children were presented with the six pictures and asked 'Which picture would you like to hear a story about?' On the second day, the children were presented with five pictures, the one chosen on the previous day having been removed, and the question, 'Which picture would you like to hear a story about?' was asked again. This procedure was repeated for a further three days until one picture remained.

## RESULTS

The data were submitted to regression analysis. The dependent variable was childrens' ranking of each picture. The independent variables were sex of pupil, age at testing, religion of pupil, social class, location of school, school type, school size, school sex, illustrated theme, reading scheme, and Area Board. Although a range of eight reading schemes and 'Breakthrough to Literacy' (14) materials were used across the sampled schools, only the five most used schemes were included in the analysis. These were 'Ladybird' (16), 'Happy Venture' (21), 'Janet and John' (20), 'Through the Rainbow' (6) and 'Breakthrough to Literacy' (14). Dummy variable coding (one and zero) was used for location of school, illustrated theme, major reading schemes, and Area Board (5, 8).

An exploratory model was used as there was no logical basis on which to hypothesize a hierarchy of simple effects. Accordingly, the variables were made available for unordered step-wise regression on the basis of maximally increasing assigned variation at each successive step. When entry of a further variable did not increase assigned variation by an amount significant at the .05 level, the sequence was stopped. The analyses were carried out using the 'Statistical Package for the Social Sciences' (19).

### *Mean rankings of pictures*

An examination of the mean ranking scores of boys and girls for each of the pictures indicates that the contribution of sex to the ranking of Pictures II to VI inclusive was highly significant ( $p < .001$ ). Large differences in means were noted in scores for Pictures II and VI (see Table 1). Boys ranked Picture II at 5.07 (the lowest) and girls ranked it at 2.07

(the highest) Picture VI was given a mean rank of 2.87 (the highest) by boys and 4.23 (the lowest) by girls. The mean ranking for Picture III was 3.01 for boys and 4.01 for girls. Boys' mean ranking for Picture IV was 2.9 and girls' mean ranking was 4.02, while Picture V was given a mean ranking of 3.9 by boys and 3.25 by girls. Picture I was the exception. For this picture there was only a slight non-significant difference in the mean ranking scores of boys and girls.

TABLE 1  
MEAN RANKING AND STANDARD DEVIATIONS  
FOR EACH THEME (PICTURE) BY SEX

|       | Picture I |      | Picture II |      | Picture III |      | Picture IV |      | Picture V |      | Picture VI |      |
|-------|-----------|------|------------|------|-------------|------|------------|------|-----------|------|------------|------|
|       | Mean      | sd   | Mean       | sd   | Mean        | sd   | Mean       | sd   | Mean      | sd   | Mean       | sd   |
| Boys  | 3.21      | 1.63 | 5.07       | 1.46 | 3.01        | 1.61 | 2.94       | 1.40 | 3.90      | 1.41 | 2.87       | 1.60 |
| Girls | 3.39      | 1.59 | 2.07       | 1.46 | 4.01        | 1.64 | 4.02       | 1.48 | 3.25      | 1.56 | 4.23       | 1.58 |

When boys' mean scores for the pictures are ordered, the pattern of ranking beginning with the most popular picture and ending with the least popular, is Picture VI, IV, III, I, V and II. When girls' mean scores are likewise ordered, the pattern of ranking is Picture II, V, I, III, IV and VI, the exact opposite.

#### *Regression Analysis*

Zero-order correlations between variables are presented in Table 2. Correlations are nearly all statistically significant and negative. There is a non significant positive correlation between Picture IV and Picture VI. Picture II and Picture V are also positively correlated.

TABLE 2  
ZERO-ORDER CORRELATIONS BETWEEN PICTURES

|             | Picture I | Picture II | Picture III | Picture IV | Picture V |
|-------------|-----------|------------|-------------|------------|-----------|
| Picture II  | - .1915   |            |             |            |           |
| Picture III |           | - .1255    | - .4064     |            |           |
| Picture IV  |           |            | - .1781     | - .3826    | - .0624   |
| Picture V   |           |            |             | - .2809    | - .2474   |
| Picture VI  |           |            |             |            | - .0188   |
|             |           |            |             |            | - .3108   |

The order of entry of variables in the overall regression analysis equation, with cumulative step-wise increase in assigned variation, is presented in Table 3. The overwhelming importance of sex in the ranking of the test pictures is evident. Close Environment (Picture II) emerged as the most popular theme with sex accounting for 50.78% of explained variance. War and Fighting (Picture VI) and Other People and Their

TABLE 3  
SIGNIFICANT ASSIGNED VARIATION IN RANKING OF PICTURES

| Picture | Variables                | Cumulative<br>Step-wise<br>Increase |        |       |       |
|---------|--------------------------|-------------------------------------|--------|-------|-------|
|         |                          | F                                   | df     | p     |       |
| I       | Illustration (Theme I)   | 1.50                                | 12.76  | 1,825 | <.001 |
|         | Area Board (2)           | 3.02                                | 13.18  | 1,825 | <.001 |
|         | Reader (Ladybird)        | 3.49                                | 4.10   | 1,825 | <.05  |
|         | Total assigned variation | 3.49                                | 10.10  | 3,825 |       |
| II      | Sex                      | 50.78                               | 867.67 | 1,821 | <.001 |
|         | Social Class             | 51.13                               | 5.97   | 1,821 | <.05  |
|         | School Sex               | 51.46                               | 5.70   | 1,821 | <.05  |
|         | Total assigned variation | 51.46                               | 296.46 | 3,821 | <.001 |
| III     | Sex                      | 8.29                                | 76.00  | 1,820 | <.001 |
|         | School Size              | 9.08                                | 7.32   | 1,820 | <.01  |
|         | Total assigned variation | 9.08                                | 41.95  | 2,820 | <.001 |
|         |                          |                                     |        |       |       |
| IV      | Sex                      | 12.75                               | 122.92 | 1,825 | <.001 |
|         | Reader (Janet and John)  | 13.46                               | 6.82   | 1,825 | <.01  |
|         | Total assigned variation | 13.46                               | 65.30  | 2,825 | <.001 |
|         |                          |                                     |        |       |       |
| V       | Sex                      | 4.98                                | 44.10  | 1,819 | <.001 |
|         | Illustration (Theme I)   | 5.67                                | 6.15   | 1,819 | <.01  |
|         | School Type              | 6.14                                | 4.12   | 1,819 | <.05  |
|         | Total assigned variation | 6.14                                | 18.28  | 3,819 | <.001 |
| VI      | Sex                      | 16.82                               | 170.11 | 1,820 | <.001 |
|         | Reader (Happy Venture)   | 17.39                               | 5.72   | 1,820 | <.05  |
|         | Total assigned variation | 17.39                               | 88.40  | 2,820 | <.001 |

Work (Picture IV) were also popular themes, though the variance explained by sex for both was much smaller, 16.82% and 12.75% respectively. The contribution made by sex to explained variance for Adventure (Picture III) and Animals (Picture V), though highly significant, was below 10 percent. Sex did not appear as a predictor for Fantasy (Picture I). The contribution of variables, other than sex, to explained variance for the children's ranking of pictures was as follows: Illustrated theme contributed to Pictures I and V, reading scheme to Pictures I, IV, and VI, Area Board to Picture I, school size to Picture III, social class to Picture II, and school type to Picture V. Although the contributions of illustrated theme and Area Board to variance for Picture I were highly significant ( $p < .001$ ), the amount of variance explained by any of the above variables was less than 2 percent. There was no evidence that age, religion of pupil, or locality of school were variables of consequence.

#### DISCUSSION

Results of this study do not support the findings of Byers (7) or of Kirsch and Robinson (12), who investigated six-year old children and found no preference difference between the sexes for first choice of theme. My findings follow the trends of the findings of a study of older children (24), suggesting that differences in taste may also exist between the sexes at an earlier age. Results are also in accordance with the conclusion of Barker Lunn's (3) study of the interests of nine to eleven year old children in that the greatest single factor affecting the pattern of interests was the sex of the child.

These findings on sex differences in young children are supported by other observations on the behaviour of boys and girls. For example, boys and girls are seemingly not interested in the same pastimes or play things (18). Further, boys indicate a strong preference for same-sex clothes and objects at as young an age as five years (17). At six years of age, children choose toys they have come to regard as those their own sex prefer (13). By the time boys and girls reach seven years of age, polarization of play preferences, according to sex, is quite striking (18). It is this difference between the sexes that seems to be reflected in the behaviour of boys and girls in their selection of themes for stories in this present study.

## REFERENCES

1. ABERNETHY, D., FERGUSON, S., MCKAY, Y., & THOMPSON, F. Children's in-school reading in Belfast - A suggestive survey. *Reading*, 1967, 1(3), 10-18.
2. ALSCHULER, R.H., & HATTIWICK, La B.W. *Painting and personality: A study of young children*. (2 Vols.) Chicago: University Press, 1947.
3. BARKER LUNN, J.C. *Streaming in the primary school*. Slough, Berks: NFER Publishing Co, 1970.
4. BETA UPSILON CHAPTER PI LAMBDA THETA. Children's reading interests classified by age level. *Reading Teacher*, 1974, 27, 694-700.
5. BOTTENBERG, R.A., & WARD, J.H. *Applied multiple linear regression*. Lackland, Texas: Personal Research Laboratory, Aerospace Medical Division, Air Force Systems Command, 1963 (PRL/TDR/63).
6. BRADBURNE, E.S. *Through the rainbow*. Huddersfield: Schofield & Sims, 1964.
7. BYERS, L. Pupils' interests and the content of primary reading texts. *Reading Teacher*, 1964, 17, 227-233.
8. COHEN, J. Multiple regression as a general data-analytic system. *Psychological Bulletin*, 1968, 70, 426-443.
9. FARNHAM-DIGGORY, S. *Cognitive processes in education*. London: Harper & Row, 1972.
10. GREAT BRITAIN: REGISTRAR GENERAL. *Census 1961: Classification of occupations*. London: HMSO, 1966.
11. KATZ, S.E., & BREED, F.S. The colour preferences of children. *Journal of Applied Psychology*, 1922, 6, 255-66.
12. KIRSCH, D., & ROBINSON, H.A. Expressed reading interests of young children: An international study. *Bookbird*, 1976, 14(3), 30-36.
13. LIEBERT, R., McCALL, R., & HANRATTY, M. Effects of sex-typed information on children's toy preferences. *Journal of Genetic Psychology*, 1971, 119, 133-136.
14. MACKAY, D., THOMPSON, B., & SCHaub, P. *Breakthrough to literacy*. London: Longman, 1970.
15. MOYLE, D. *The teaching of reading*. (4th ed.) London: Ward Lock Educational, 1976.
16. MURRAY, W. *Ladybird key words reading scheme*. Loughborough: Willis & Hepworth, 1964.
17. NADELMAN, L. Sex identity in American children: Memory, knowledge, and preference tests. *Developmental Psychology*, 1974, 10, 413-17.
18. NEWSON, J., & NEWSON, E. *Seven years old in the home environment*. London: Allen & Unwin, 1976.
19. NIE, N.H., BENT, D.H., & HULL, C.H. *Statistical package for the social sciences*. New York: McGraw-Hill, 1970.
20. O'DONNELL, M., & MUNRO, R. *The Janet and John books*. New York: Harper & Row, 1949.
21. SCHONELL, F.J., & SERGEANT, L. *Happy venture readers*. Edinburgh: Oliver & Boyd, 1939.
22. VALENTINE, C.W. *The experimental psychology of beauty*. London: Methuen, 1962.

23 VERNON, M D *The psychology of perception* (2nd ed) Harmondsworth, Middlesex Penguin 1962

24 WHITEHEAD, F, CAPEY A C, MADDREN, W, & WELLINGS A *Children and their books*. London Macmillan 1977

25 WINCH W H Colour names of English school children *American Journal of Psychology*, 1910, 21, 453-482