
Reading and Use of Informational Material by South African Youth

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Research on children's reading habits, preferences, and use of information provides useful insights for those working to motivate children and young people to read and use information. This study, conducted by the Children's Literature Research Unit (CLRU) in the Department of Information Science at the University of South Africa (Unisa), Pretoria, was modeled on a study of children's reading habits in England conducted by the Roehampton Institute in the 1990s. Findings reported in this article are related to the reading of informational material by children between the ages of 9 and 16 in South Africa. Although many learners in South Africa have limited access to school libraries or public libraries, the study participants had a positive attitude to reading and nonfiction texts. They were developing strategies to deal with information texts by using retrieval tools, and they were prepared to persevere with books even if they did not understand some words. The study showed that children's reading interests in South Africa are not radically different from those of children in England. However, because many young people in South Africa read in a second language, information books need to be written with this in mind.

Background to the Study

About a decade ago, the Children's Literature Research Centre, Roehampton Institute in London, United Kingdom, carried out a research project on children's reading interests that resulted in the publication *Young People's Reading at the End of the Century* (1996). This was a detailed, in-depth study of young people's reading habits in England that covered a broad range of aspects such as children's preferences as regards genre, subject matter, format, covers, series, and where to obtain books and other reading matter. It also dealt with young people's reading in relation to various social issues such as drugs, AIDS, and pregnancy. Because of its depth of coverage, the range of topics covered, and the representative nature of the sample, it was an extremely important survey of children's reading in England.

Following the success of the British study, researchers from Roehampton proposed that similar studies be conducted in other countries such as South Africa. This would enable them to compare findings from the UK with findings on children's reading from other countries. The Children's Literature Research Unit (CLRU) in the Department of Information Science at the University of South Africa (Unisa) in Pretoria agreed to implement the research project, beginning with a pilot project. The CLRU thought that a preliminary project phase would offer insight into the most efficient ways of

conducting a research project of this magnitude in a country undergoing great political and social change.

In many countries, extensive research has been done on children's reading interests. To date no extensive research has been carried out in South Africa, and although some isolated studies have been done over the past decades, this work has usually tended to focus on particular groups such as white or Black children. For example, Radebe (1995) studied Black primary school children.

One reason the CLRU decided to conduct this research project in South Africa was because of the real need for accurate information on children's reading and information use by people working in the fields of education, library and information science, and publishing; as well as for local authors and illustrators of books for children. Without insight into children's reading habits, preferences, and information use, it is difficult for publishers, librarians, teachers, and others to motivate children and young people to read and to use information. Information skills such as collecting, analyzing, and organizing information and communicating ideas and information have been identified as key competences for effective participation in the emerging patterns of work and work organization in the 21st century. In fact, they are essential competences for effective functioning in today's world.

Historically, library services and publishing in South Africa have been based on Western patterns and models. However, this approach does not necessarily meet the needs of South Africa where the population is multilingual and multicultural. Reliable information on the reading interests and information needs of South Africa's young people is required so that effective library services can be provided and so that books that young people find interesting can be published to motivate reading and thus promote literacy.

In this article, I discuss the findings of this pilot project that relate to the reading of informational material by children between the ages of 9 and 16 in an urban area of South Africa. The findings from the project that relate to children's reading of fictional material and the key findings have been presented in a report and in other articles (Machet, 2002a, 2003; Machet, Olén, & Chamberlain, 2001).

Research Method

The Children's Research Centre in the UK provided the CLRU with a copy of each of the questionnaires used in their research project. For the Roehampton project, three key stages were identified: Key Stage 1 (4-7 years); Key Stage 2 (7-11 years); and Key Stage 3 (11-16 years). However, the South African project was restricted to Key Stages 2 and 3. This is because participants in Key Stage 1 would have required too much assistance to fill in the questionnaires. Researchers at Roehampton Institute had found that teachers needed to help these young learners to complete the questionnaire, and this was a

time-consuming process. Unfortunately, we did not have the financial resources to pay for field workers to do this for our study.

The terminology in questionnaires was modified for use with South African learners to ensure that the language used was familiar to them. For example, *newsagents* was changed to *supermarkets* and *films* to *movies*. In addition, some questions were added to address aspects of particular interest in South Africa. For example, questions were added on language preferences (there are 11 official languages in South Africa), the reading of traditional folk stories, preferences for oral stories on tape, and so on. All changes made to the questionnaires were for purposes of clarity and relevance to South Africa.

The researchers presented the questionnaires to youth librarians from the main branch and the Mamelodi (a Black township close to Pretoria) branch of the Pretoria City Library and to students in the Department of Information Science at Unisa in order to receive comments and suggestions from the perspective of librarians and various ethnic groups. The Departments of Sociology and Religious Studies at Unisa were contacted to determine proper terms for race classification, to identify the common religious affiliations, and to develop a complete list of the official languages in South Africa. Otherwise, as few textual changes as possible were made to the Roehampton Institute's questionnaires in order to ensure that results could be compared.

Permission was sought from the Educational Research Unit of the Gauteng Department of Education to carry out the pilot phase of the research project in schools in one of the 16 school districts under its jurisdiction. Gauteng is the most heavily populated province in South Africa and includes the major cities Johannesburg and Pretoria. The Educational Research Unit requested that the questionnaire for Key Stages 3 and 4 be divided into three separate questionnaires and the questionnaire for Key Stage 2 into two separate questionnaires. They further requested that each respondent complete only one questionnaire. This meant that the researchers had to use three times the number of secondary school learners and double the number of primary school learners in their samples than would have been used if only the original questionnaires had been completed by learners. The Educational Research Unit gave permission for the researchers at the CLRU to use schools in the Gauteng area and provided a complete list of all the schools in this district so that a sample could be drawn.

In order to provide a representative sample taking into account the variables of language of instruction, school funding, and the gender of students, the CLRU researchers met with statistical consultants in the Department of Statistics at Unisa to decide how many schools were needed to acquire a representative sample. The schools were divided into categories according to the variables of language (schools may offer education in any of the 11 official languages depending on the composition of the student body and preferences of the parents), funding (i.e., privately or state-funded), and

gender (although most schools are mixed, there are a number of single-sex schools in South Africa). The name of each school was then placed in an envelope according to the category into which it fell, and a volunteer randomly chose one school from each envelope. Because three larger secondary schools had more learners in each grade, researchers asked only half the learners in each grade to participate in order not to alter the representative balance from each institution. The researchers requested that the students be selected on a purely random basis (e.g., every second class or every second learner be selected to take part in the survey). We were assured by the principals of the schools that the classes were not graded or streamed according to ability, but that all classes had learners of varying abilities.

It was deemed essential that the questionnaires be translated into the relevant languages for learners in Key Stage 2 so that Black learners could answer in their home language, as their English would not be fluent enough to answer the detailed questionnaire in English. After discussion with the relevant provincial Education Department and the schools selected for the survey, the questionnaires were translated into Northern Sotho and Setswana because all the students attending the schools selected for the survey were fluent in these two languages. The questionnaires were translated by lecturers at Unisa and checked by first-language speakers. The CLRU also used mother-tongue speakers of those languages to assist the students in filling out the questionnaires to ensure that the respondents understood what was required. Regular class teachers were not present when the learners filled in the questionnaires to avoid the students being inhibited by their presence. This was important because in South Africa, teaching tends to be autocratic and teachers may be intimidating.

One of the limitations of the study is that, although every effort was made to ensure that the sample was representative of the general population of South Africa in terms of racial composition, the respondents were all from one urban area. It was impossible to include other areas in the study due to budget constraints.

Questionnaires were checked, coded, and loaded into MS-DOS/SPSS, a statistical analysis and data management system also used by researchers at the Roehampton Institute. Percentages of responses for each option were calculated.

Description of Study Participants

The sample for the pilot project was drawn from primary school learners (grades 5, 6, and 7) in eight schools and from secondary school learners (grades 8, 9, and 10) from five English-medium schools in Tshwane, a municipal district that includes the city of Pretoria and the various townships nearby. Pretoria lies 50 kilometers north of Johannesburg and is the administrative capital of South Africa. English-medium schools were used as most learners in secondary school study in English, although only

9% of the population speak English as a first language (*South African Survey, 1995/96, 1996*). This is because a lack of proficiency in English would place people at a disadvantage in tertiary educational institutions, in the world of commerce and industry, and in dealings with countries beyond South Africa's borders. English has become the *de facto* official language of South Africa.

The sample selected for the pilot study consisted of 1,403 learners from eight primary schools (grades 1-7) and 877 learners from five secondary schools (grades 8-12). The composition of the sample in Key Stage 2 consisted of 696 boys and 707 girls and in Key Stage 3 of 462 boys and 415 girls. As can be seen, the numbers of boys and girls in Key Stage 2 were similar, but significantly different in Key Stage 3. Unfortunately, as in other developing countries, the number of boys in higher standards tends to be greater than that of girls, as parents often believe education is less necessary for girls than for boys. Table 1 indicates the composition of the sample according to age.

Table 2 gives the composition of the sample according to school grades. As can be seen, in secondary school, the number of learners in each grade decreases as the higher grades are reached. This is partly a result of increasing dropout rates in the higher grades and also because learners older than 16 were not included in the sample. Many of the learners in grade 10 were older than this. The range of ages in Key Stage 2 was greater than that in the Roehampton study, but many learners (especially in predominantly Black areas) start school at a relatively late age and often drop out for a time. We had to decide whether their responses would be included with Key Stage 2 or Key Stage 3. Ultimately, we decided to include their responses with Key Stage 2 because they were more likely to share reading interests with their peer group at school than with their age group.

Table 1
Sample by Age

Age	Key Stage 2 Number	Percentage	Age	Key Stage 3 Number	Percentage
9	47	3%	12	7	0.8
10	194	13.8%	13	106	12.2
11	394	28.1%	14	263	30.3
12	374	26.7%	15	244	28.1
13	235	16.8%	16	247	28.1
14	132	9.4%			
15	20	1.4%			
16	7	0.5%			
Total	1,403		877		

Table 2
Sample by Grade

Grade	Key Stage 2		Grade	Key Stage 3	
	Number	Percentage		Number	Percentage
5	523	40.5	8	344	40.9
6	567	43.9	9	308	36.6
7	201	15.6	10	190	22.6

The following are languages other than English spoken at home: 4.2% spoke Afrikaans; 0.5% spoke Venda, 6.8% spoke IsiZulu; 3.8% spoke Ndebele; 2.4% spoke Xhosa; 14.7% spoke Setswana; 50.2% spoke Northern Sotho; 4.2% spoke only English; and another language was spoken by 2.7% (missing cases 10.5%). Most homes in urban areas are bilingual or even trilingual. However, reading is predominantly in English because this is the language of education and also few books are available in the indigenous languages, especially for older children (Machet, 2002b). The languages most widely spoken by the study respondents, besides English, were Northern Sotho and Setswana.

The majority of the study respondents (71.2%) indicated that they were Christian. The religions indicated by the remainder of the sample were African Traditional (10.8%), Hinduism (9.3%), Islam (7%), Buddhism (0.8%), and Judaism (0.9%).

Key Findings

As only the responses to questions relating to nonfiction reading and preferences are reported in this article, the complete questionnaire is not included. However, each question used is presented before discussion of the findings.

Time Spent Reading Nonfiction

Respondents were asked how often they chose to read information books or other nonfiction. The options for this question were: *never*, *hardly ever*, *sometimes*, *often*, or *very often*. More than 50% of all participants said that they read such books at least *sometimes*. Generally, more boys than girls claimed to read information books *very often*, *often*, and *sometimes*. However, in most instances, the responses for girls were still above 60%. This suggests that girls have more interest in factual material than is often believed. In fact, in Key Stage 3, more boys (11%) than girls (9%) said that they never read information books. This is a matter of concern as it would be expected that by this stage in their schooling, learners would be regularly consulting and reading nonfiction sources for homework even if they did not read them out of interest.

Preference for Fiction or Nonfiction

Participants were asked if they preferred to read material presented as a novel or story or material that is presented as information, or if they liked both equally. Forty-one percent of the boys indicated that *information* was their preference (compared with 32% of the girls), but 39% of the boys chose *both equally* (compared with 45% of the girls). Girls showed a greater preference for fiction than boys, and boys showed a greater preference for nonfiction than girls. However, for both sexes the most frequently chosen option was *like both equally*.

Type of Nonfiction Read

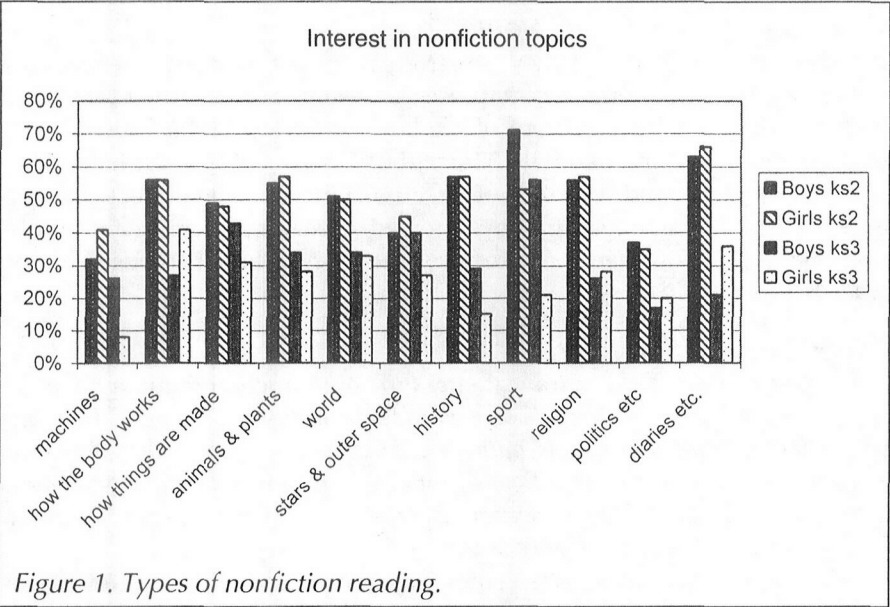
Participants were asked to indicate the type of nonfiction that they liked to read. The categories included were as follows: *how machines work, how their body works, how things are made, animals and plants, other parts of the world, stars and outer space, history, sport, religion, politics, government or law, and true stories about people's lives*. The options were listed on a five-point Likert scale: *never, hardly ever, sometimes, often, and very often*.

The most frequently selected single category for boys in both Key Stages 2 and 3 was *sport*. Girls read considerably less on this topic, with their reading peaking at 53% in Key Stage 2. Sex differences were most marked, as expected, on the subject of machines, with the figures for girls showing a consistent decline from 41% in Key Stage 2 to 8% in Key Stage 3. Interest by girls in the topics *how things work* and *stars and outer space* also decreased from Key Stage 2 to Key Stage 3, whereas boys' interest maintained a level above 40%. Figures on subjects such as *religion* and *the rest of the world* were not notably divergent in terms of sex and age, but those on the topic of *about how your body works* showed considerable divergence in Key Stage 3 although not in Key Stage 2. Girls in Key Stage 3 showed considerably more interest than boys (28% compared with 12% chose *very often*) in reading about body changes. This higher interest by girls compared with boys is also reflected in the responses to questions in the section of the questionnaire that dealt with changes in the body.

In Figure 1 the responses *often* and *very often* are grouped together and are presented as percentages.

Textual Features

Participants were asked about their preferences for various textual features in books. The questions asked if they liked books that had short sentences, short chapters, long chapters (this question was not included in the questionnaire for Key Stage 2), chapter headings, words they did not understand (new words), and books that used easy words. These questions had the options *yes, don't mind, and no*.



Boys and girls in Key Stage 2 were almost equally divided between liking books with *short sentences* and not liking them. Most of the participants in Key Stage 3 indicated *don't mind* (56% of the boys and 50% of the girls).

Over 60% of learners in Key Stage 2 and 50% in Key Stage 3 indicated a preference for short chapters. The Key Stage 3 learners' preference for short chapters was confirmed by their response to the question about long chapters: 43% of the boys and 41% of the girls indicated they did not like long chapters. It is surprising that by this stage they still preferred short chapters. However, the lack of proficiency in reading is well established in South Africa, and this could be the reason for the preference for short chapters (Survey shows, 2002).

A high percentage of the learners in Key Stage 2 (48% of the boys and 52% of the girls) did not like books that had words they did not understand (new words). The learners in Key Stage 3 appeared to be more adventurous and more prepared to deal with the challenge of new words. The most frequent response to this question was *yes* (49% of the boys and 58% of the girls).

A preference for books with easy words was indicated by the majority of the learners in Key Stage 2 (61% of both boys and girls). Although the learners in Key Stage 3 also expressed a preference for books with easy words, this preference is not as strong as that expressed by those in Key Stage 2.

The questions about how the learners dealt with vocabulary they did not understand were included only in the questionnaire for Key Stage 2. Participants were asked the following questions.

- Do you ignore words you do not understand when you are reading?

- Do you ask someone what words mean that you do not understand when you are reading?
- If you do not understand words when you are reading, do you look them up in a dictionary?
- If you do not understand words when you are reading, do you guess the meaning of the words?
- If you do not understand words when you are reading, do you feel discouraged and stop reading the book?

The options for the above questions were *never*, *hardly ever*, *sometimes*, *often*, and *very often*.

Only 10% of the participants indicated that they ignored words they did not understand when they were reading. Thirty-nine percent of boys and 43% of girls *never* ignored them. These responses were substantiated to some extent by the answers to the question that asked if they asked someone what words meant that they did not understand. Twenty-nine percent of the boys and 31% of the girls responded that they did this *very often*. Thirty-six percent of the boys and 34% of the girls *very often* or *often* looked words up in a dictionary. Many learners were reading in a second (or even third) language, and the ability and willingness to use a dictionary is thus important. One of the strategies *sometimes* used by children (28% of the boys and 25% of the girls) is to guess the meaning of words they do not understand. However, 19% of the boys and 23% of the girls claimed *never* to guess. The ability to guess the meaning of words is a strategy usually used by good readers. Thirty-eight percent of the boys and 42% of the girls did not appear to be discouraged by words they did not understand and continued to read the book.

Presentation and Format of Information Books

Participants were asked when they were reading about nonfiction subjects if they liked activity books, magazines, books with lots of pictures, books that gave them lots of facts, encyclopedias, or using a computer. The options for this question were *never*, *hardly ever*, *sometimes*, *often*, and *very often*.

Participants in Key Stage 2 indicated that magazines, books with lots of pictures, and activity books were their first choice for most material on information-based subjects. Lists of facts were less popular and encyclopedias were the least popular source of information. A surprising number of learners in Key Stage 2 (60% of the boys and 58% of the girls) indicated that they liked using a computer to find information, although most of the schools where the surveys were done did not have computers. It is possible that participants had access to computers in public libraries. Another possibility is that participants were focusing on the last part of the question, that is, *if they liked using a computer*. This answer might reflect the learners' positive attitude toward computers rather than that they have access to computerized information.

Both girls (97%) and boys (89%) in Key Stage 3 indicated that magazines were their first choice for most material on information-based subjects, with computers the second most popular source (84% of boys and 75% of girls), followed by books with many pictures (67% of boys and 66% of girls). The final three categories ranked in descending order of popularity for boys were books with many facts, activity books, and encyclopedias. The girls' choices in descending order of popularity were activity books, books with many facts, and finally, encyclopedias. Although encyclopedias do not appear to be as popular as the other categories, percentages of *yes* responses still fell between 44% and 54%.

Reasons for Reading Nonfiction

Participants were asked if they read nonfiction because it was fun and interesting, helped with their homework, or because they wanted to find out things for themselves. These questions had the options *yes* or *no*.

The major reason given by most of the participants in Key Stage 2 was to help with homework, followed by wanting to find things out for themselves, and finally, for pleasure. The main reason given by girls in Key Stage 3 was to help with homework, followed closely by the desire to find things out for themselves. For boys the most important reason was to find things out for themselves followed closely by homework. The question of whether the learners read nonfiction or information books for pleasure did not receive as many positive responses as the other questions from either boys (66%) or girls (64%), although this is clearly still almost two thirds of the participants. The difference between the boys' and girls' responses is negligible, suggesting that there is no deep-seated reluctance of girls to read nonfiction.

Strategies for Using Information Books

Participants were asked when they were looking at information books:

- How often do you read every word?
- How often do you look at the index and contents for guidance?
- How often do you look through the books and choose interesting bits?
- How often do you look mostly at the pictures?

These questions had the options *never*, *hardly ever*, *sometimes*, *often*, and *very often*.

The data indicate that the most common way to use information books by girls in Key Stage 2 was to look at pictures, followed closely by reading every word. For boys the order is reversed. The least frequently used method is to use the index. Fewer boys than girls used the strategies of using the index and choosing interesting bits. In Key Stage 3, more participants indicated that they looked at an index or through a book to select interesting parts rather than read every word (although more boys than girls indicated that they read every word). Looking at pictures also appeared to be a common method of working with information books, but the data show that fewer participants used this method than the two other methods mentioned above.

The percentage of learners who were doing this at Key Stage 3 is lower than the percentage at Key Stage 2.

Reading about Challenging Issues

Participants in Key Stage 3 were asked if they read about health and how often they read about sex, smoking, alcohol, pregnancy, illness, disability, drugs, accidents, and death. The options for these questions were *never*, *hardly ever*, *sometimes*, *often*, and *very often*.

The data indicate that girls read far more about these topics than did boys. The topics that girls read most about (in descending order of frequency) were illness, pregnancy, death, sex, accidents, and drugs. The topics that girls appeared to read little about were smoking, alcohol, and disability. Boys read most about sex, death, drugs, and accidents. They appeared to read little about any of the other topics.

Reading About the Body

Participants in Key Stage 3 were asked a number of questions about reading about the body.

In the question that asked participants how often they read about the changes that affect their body as they mature, the responses indicated that overall, more girls than boys read about this. Twenty-eight percent of the girls compared with 12% of the boys read about this *very often*. However, it is a matter of concern that a third of the boys (34%) *never* or *hardly ever* read about the changes that affect their body.

Participants were asked where they got information about their bodies. The options given were magazines, science books, health pamphlets, and stories or novels. Most indicated that magazines were the most helpful source of information about their bodies, followed by science books for boys and health pamphlets for girls. Stories or novels did not appear to be an important source of information on this topic, although they were marginally more important for girls than for boys.

Participants were asked if reading helped them understand their bodies. The options for this question were *yes* or *no*. The vast majority of participants said that reading did help (93% of the boys and 92% of the girls).

Reading About Pregnancy, AIDS, and Various Sexual Issues

Participants were asked whether they had ever read about pregnancy, AIDS, abortion, sexually transmitted diseases, homosexuality, and sexual abuse. The options for these questions were *yes* or *no*. A high percentage of participants indicated that they had read about these topics as indicated in Table 3.

Although most respondents appeared to read about sexual topics, the data indicate that girls read more about these topics than boys except for sexually transmitted diseases. The difference is most marked in the question about abortion. Abortion is legal in South Africa, and because of the high

Table 3
Reading About Pregnancy, AIDS, and Sexual Ussues

	Pregnancy	AIDS	Abortion	STDs	Homosexuality	Sexual Abuse
Boys	69%	88%	56%	76%	40%	74%
Girls	89%	93%	74%	78%	52%	89%

incidence of teenage pregnancies, this might be an option that many girls consider.

Participants were asked how often they read about these topics in information books, magazines, health pamphlets, science books, or novels/stories. The options in these questions were *never, hardly ever, sometimes, often, and very often.*

The most popular source of information was health pamphlets, followed closely by magazines and then information books, except for sexual topics where magazines and information books were the most frequently used source of information by boys (40%), and magazines were most frequently used by girls (59%), closely followed by health pamphlets (57%).

Participants were asked which of the following sources had been most helpful on pregnancy: information books, magazines, health pamphlets, science books, or novels/stories. The boys' choices in order of popularity were magazines, health pamphlets, information books, science books, and novels/stories. The girls' choices in order of popularity were magazines, information books, health pamphlets, novels/stories, and science books. Novels/stories and health pamphlets were the least important sources of information for both boys and girls.

Their choices for sexual topics were similar. The boys' choices in order of popularity were magazines, information books, health pamphlets, novels/stories, and science books. The girls' choices in order of popularity were magazines, information books and health pamphlets (both 22%), novels/stories, and science books.

Reading About Social Issues

The Key Stage 3 participants were asked if they ever read about the following social issues: bullying, marriage, love or romance, divorce, step-parents, elderly people, work, money, unemployment, homelessness, crime, and violence. The options for these questions were *yes* or *no*.

Boys read most about money, whereas girls read most about love and romance. All the participants read a great deal about crime and violence, which may be a reflection of the high levels of violence and crime in South African society. The participants were also interested in reading about work, which is understandable as they would have to start thinking about further education or training or joining the work force within the next few years.

They also appeared to read about social problems prevalent in South Africa such as homelessness and unemployment. They did not appear to read as much on problems such as divorce, step-parents, and the elderly, although girls read about divorce and step-parents more than did boys. Bullying did not appear to be a topic on which they read much.

Participants were asked in which of the following formats they preferred to read about issues such as these: novels/stories, newspapers, magazines, information pamphlets, or information books.

The boys' choices in order of popularity were newspapers, magazines, novels/stories, information books, and information pamphlets. The girls' choices in order of popularity were magazines, novels/stories, newspapers and information books (both 15%), and information pamphlets. Magazines still featured highly as a favorite source of information on these issues, although boys preferred newspapers. Fictional sources such as novels also featured higher and were girls' second choice and boys' third choice.

Reading About Drugs, Alcohol, and Solvent Abuse

Participants were asked if they ever read about drugs, alcohol, or solvents. The options for these questions were *yes* or *no*.

Most of the respondents indicated that they read about drugs (83% of boys and 84% of girls) and alcohol (74% of boys and 81% of girls) and to a lesser extent about solvents (62% of boys and 53% of girls). The high percentage of respondents who had read about drugs, alcohol, and to a lesser extent solvents is a reflection of the important role that substance abuse plays in their lives.

Participants were asked when they read about these substances how often they did so in information books, magazines, health pamphlets, science books, novels, or stories. The options for these questions were *never*, *hardly ever*, *sometimes*, *often*, and *very often*.

The most frequently consulted source of information on this topic for all participants was magazines, followed by health pamphlets and then information books for boys and novels for girls. Science books were the least popular source for girls, whereas novels were the least popular for boys. Again, it was obvious that magazines were the major source of information for most adolescents.

Participants were asked if they had read anything that had affected their attitudes toward using these substances. The options for this question were *definitely*, *possibly*, or *not at all*. Sixty-five percent of the boys indicated they had, whereas the 58% of the girls indicated they had not.

Participants were asked if reading made them interested in experimenting with these substances. The options for this question were *yes*, *no*, and *don't know*. Fifty-three percent of the boys and 48% of the girls indicated *no*. This is positive, but even so it is a matter of concern that approximately 20% of the participants indicated *yes*.

Participants were asked if reading made them feel that taking drugs, drinking alcohol, or sniffing solvents was exciting, dangerous, harmful, expensive, a way to keep friends, or a way to meet people or related to crime. The options for this question were *definitely*, *possibly*, or *not at all*.

The majority of the participants indicated that reading about using dangerous substances *definitely* made them feel that it was dangerous, harmful, expensive, and related to crime. Most did not believe that reading about substance abuse made them feel that it was exciting, a way to make friends or meet people, or a way to solve problems. The responses indicate that encouraging adolescents to read is an efficient way to pass on to them information about the dangers and negative aspects about drugs. In general, it can be concluded that reading about substance abuse was generally helpful and had a positive influence on most of the participants.

Discussion

Girls' preference for fiction and boys' for factual sources, as indicated in the South African survey, is consistent with other research (Children's Literature Research Centre, 1996; Wolfson, Manning, & Manning, 1984). However, the results of this survey also indicate that one cannot generalize across all categories. Girls' responses indicated that they read a wide range of information books and that at younger ages (Key Stage 2), the differences between boys and girls were much less pronounced. In the older group (Key Stage 3), the differences were more pronounced. Except for the categories of diaries and of religion and politics, more boys than girls read every category regularly. It is not clear why there was this divergence: why girls who at younger ages started reading information books as frequently as boys began to read them less and turn to fiction. The Children's Literature Research Centre (1996), which had similar results, suggested that it is possible that boys may read more nonfiction because this is expected of them, and that girls are steered toward fiction as they get older.

The responses to the section dealing with textual features indicated that the participants preferred books that are relatively easy to read with features such as short chapters and easy words. This preference decreased in the older group, Key Stage 3. However, these data do confirm the relatively low level of reading proficiency in South Africa (Macdonald, 1990; *Survey shows*, 2002). Many participants were not reading in their home language, and this may also explain this preference.

Based on the data in the section of the questionnaire dealing with how Key Stage 2 students deal with words they do not understand when they are reading, it appears that students on the whole respond positively to the challenge of new vocabulary. The majority either used a dictionary or asked the meaning of words. Fewer than a third of the respondents indicated that they were sufficiently discouraged by difficult words to stop reading. It was encouraging to see that more than half the participants used a dictionary

often, very often, or sometimes. This is extremely important as South Africa is a multilingual country. Most children often read in a second or even third language in school because of the dominance of English and also because of the paucity of material published in indigenous languages (Machet, 2002c; Ndiki, 2002; Wessels 1998). Use of dictionaries as an aid to understanding what they read is essential.

In the section dealing with presentation and format of information, there were three categories for which there were gender differences, and these occurred only in Key Stage 3. These categories were magazines, computers, and activity books. Magazines and activity books were more popular with girls than with boys, and computers were slightly less popular. Activity books are a less demanding format, and this may be why this type of format was more popular with girls. Magazines tend to present information in a more accessible manner (e.g., true-life stories) and may be more popular with girls for this reason. As indicated in the survey, girls prefer fiction to nonfiction. It is unfortunate that girls are less enthusiastic than boys about computers as they get older, and perhaps teachers need to address this issue. Girls may not be aware of the possibilities of the computer for subjects that interest them. It is also possible that boys have a more positive attitude toward computers because computer games tend to cater more to boys than girls (Chaika, 2000-2002).

The enthusiasm for the categories of information sources, including lists of facts, magazines, encyclopedias, and computers, all increased with age. Except for magazines, these forms are all more difficult to read and use than activity books and books with lots of pictures, so one would expect interest to increase as learners become more adept at using these various formats. It is interesting to note that more boys than girls in Key Stage 3 used all the various strategies for using information books. This may indicate that boys' greater interest in nonfiction has prompted them to develop more strategies for using information books.

At both key stages, the participants indicated that magazines were the most popular format and encyclopedias the least popular for nonfiction reading. This was substantiated by the responses to other questions in the questionnaire, which confirmed this preference for magazines over other formats. A possible reason for the popularity of magazines is that they are ubiquitous and young people are more likely to find them in their homes than other publications (Machet et al., 2001).

From the section of the questionnaire that asked participants about reading about their bodies, it was clear that girls read about this topic more frequently than did boys. It is possible that more girls read about this topic *very often* because they mature earlier than boys. Another reason may be that girls are more concerned with the possibility of pregnancy. Girls may be reading more about how to avoid pregnancy and the changes that will take place in their bodies if they do become pregnant. As there is a high incidence

of teenage pregnancy in South Africa, it is probable that this is a topic of concern to young girls (*South African demographic*, 1998).

In the question on whether reading helps them understand their bodies, over 90% of both boys and girls indicated *yes*. It is clear from these responses that reading plays an important role in young people's understanding of what happens as their bodies mature. Many young adults find it easier to read about these changes than to talk about them. Reading is a private activity that gives the reader control over the type of information, quantity, nature, method of presentation, and time. Some African cultures in South Africa do not encourage open discussion about changes in the body. This subject was traditionally dealt with in initiation ceremonies, but many children no longer attend these ceremonies and now have to use other sources of information.

In the section on reading about pregnancy, AIDS, and various sexual issues, far more girls than boys indicated that they read about these topics. The lack of interest in pregnancy by boys is similar to the findings from the survey done in England (Children's Literature Research Centre, 1996). The reason for this might be that in a country such as South Africa, where chauvinistic attitudes predominate, boys may feel that pregnancy is the girls' problem and does not concern them. The high incidence of sexual abuse in South Africa (Bancroft-Hinchley, 2001) is reflected in the high percentage of young people (especially girls) who read about this topic. The other factor may be that magazine reading is popular among Key Stage 3 learners. It is possible that there are many articles on these topics in magazines because they are topical, and this may be why so many of the respondents had read them. It is encouraging that such a high percentage of the respondents had read about AIDS, as one way to combat the AIDS pandemic in South Africa is through information.

The most frequently consulted source of information on sexual topics was health pamphlets. This may be the result of a combination of factors. Health pamphlets are usually available free of charge at local clinics. They are also usually available in local libraries and possibly even in schools. Also, they are published in all the indigenous languages and therefore may be more easily read and understood than information in science books. The format of novels or stories was considerably more popular with girls than boys, whereas science books were marginally more popular with boys. Again, this reflects girls' preference for fiction as compared with boys'.

Both boys and girls in Key Stage 3 indicated that magazines were the most helpful source of information on pregnancy and sexual topics. These responses again underline the important role that magazines play in providing information on these subjects.

In the responses to the section on drugs, alcohol, and solvent abuse, reading appears to have a much greater affect on boys than girls. In their response to whether reading on substance abuse affected their attitudes

toward this topic, most respondents indicated that it *definitely* made them feel that it was dangerous, harmful, expensive, and related to crime. Most did not feel that reading about substance abuse made them feel that it was exciting, a way to make friends or meet people, or a way to solve problems. The responses indicated that reading is an efficient way to pass on information about the dangers and negative aspects of drugs to adolescents, especially as they are notoriously unwilling to take advice from adults. It is, therefore, significant that reading can affect their attitudes. Although this is a positive response, it is a matter of concern that approximately 20% of the participants indicated that they had been influenced negatively. This would indicate that reading matter on these topics should be mediated by a parent, class teacher, or school librarian to ensure that a positive message is conveyed.

Conclusions

The findings of this survey need to be considered in the South African context. In a survey carried out by the Education Department in 2001, it was found that fewer than 50% of schools had libraries, even in the form of a box library. (This figure was given to me in an interview on 19 March 2001 by a source in the Education Department who requested to remain anonymous). Many school libraries were closed after the African National Congress (ANC) party came to power after the first democratic elections in 1994 as they needed to redress imbalances in the educational system. This meant that the traditionally white schools now received a reduced subsidy from the government, and many of them no longer had the finances necessary to employ a teacher-librarian or to buy books for the library. Reading was seen in South Africa as an activity undertaken primarily for educational purposes rather than for pleasure. So it was to be expected that nonfiction reading would be seen positively by most of the respondents.

A number of positive results were indicated by the survey. A relatively large number of girls read factual material, especially in the Key Stage 2. This finding is similar to the findings of the survey carried out by the Children's Literature Research Centre (1996). Teachers and librarians need to take note of this positive attitude and do more to sustain this interest as girls mature. The decline in interest in computers and using computers to obtain information should also receive attention. Computer literacy is essential in today's world, and girls need to be encouraged to use computers to find information. It is possible that boys' interest in computers is sustained by games that are predominantly aimed at a male market (Chaika, 2000-2002).

It is encouraging that in South Africa, where many schools do not have libraries (Naidoo, 1997) and where children may have limited access to books, there is still a positive attitude toward reading and nonfiction texts. However, the study also reveals that many learners of both sexes and all ages are reluctant to read books of a factual nature. This is possibly because South

African learners are often exposed to only one text and are seldom taught to evaluate and compare information obtained from various sources (Hart, 1999).

The responses from older study respondents indicated that they were developing strategies to deal with information texts by using retrieval tools such as the index. Although it is a matter of concern that, even at 16, many learners have not yet worked out effective strategies for dealing with factual texts, it is not surprising in the South African context where many learners have limited access to libraries either in the form of school libraries or public libraries (Naidoo, 1997). However, information literacy is essential if young people are to survive in today's information society. With the exponential increase in information, young people must learn to find what they need as speedily as possible.

An encouraging finding was that a relatively high proportion participants were prepared to persevere with books even if there were words they did not understand. The high percentage of participants who used dictionaries or asked the meaning of words they did not understand was also a positive finding. The use of dictionaries is essential if children are to build their vocabularies and become fluent readers, especially in a multilingual society such as South Africa where many children are not reading in their home language. However, publishers and librarians need to take account of the preference for short chapters and sentences. Not enough books take into account the needs of second-language readers, especially in the area of nonfiction.

Analysis of the data indicates that reading conveys a positive message to adolescents on issues that are problematic and of major concern at this important stage in their lives, such as drugs, pregnancy, and AIDS. These are important social problems and issues in South Africa. Society needs to find effective methods of informing adolescents about these issues. Nonfiction reading matter is an important source of information and a means that can be used by society to influence adolescents' attitudes positively. Adolescents are often reluctant to obtain information from people close to them on these sensitive topics. However, it also needs to be taken into account that although most participants were deriving positive messages from what they read, still for a small percentage of participants, reading about substance abuse made them want to experiment with drugs. They believed from their reading that taking drugs was exciting, that it was a way to meet people and keep friends. The message that drugs are expensive and harmful is also not being conveyed. In general, the effects of reading are positive, but obviously a small percentage of adolescents are vulnerable and affected negatively by material that they read. It is possible that more mediation is required, and books and other material that deal with these topics should be discussed by teachers, counselors, and parents.

One of the most important findings of this survey, similar to the survey in the UK (Children's Literature Research Centre, 1996), is that adolescents value reading because it allows them private and controlled access to information that they trust about sensitive subjects such as pregnancy and drugs. Young people generally trust printed material, and they believe that it can and does help them understand themselves and others and the problems they encounter as they mature. One possible reason for the positive attitude toward reading is that reading is a private activity and does not expose ignorance. However, in South Africa, it is important also to encourage a critical attitude in readers. The focus in education has been mainly on content and not on teaching learners the necessary skills to obtain and evaluate information for themselves (Hart, 1999; Pretorius, 1999).

The questionnaire asked young people about the role of reading in relation to a large number of topical issues. Examination of the responses to these sections of the questionnaire showed that more girls read about most of these topical issues than boys. However, one area about which boys appeared to read at least as much as girls was drugs and smoking.

According to their responses to the questionnaire, the kinds of material young people found most helpful when reading about substance abuse were magazines, followed by health pamphlets, and then information books for boys and novels for girls. Science books were the least popular source for girls, whereas novels were the least popular source for boys. Again, it was obvious that magazines were the major source of information for most adolescents. The reason for this may be the accessibility of magazines, both in terms of content and availability at home. In another section of the questionnaire, participants' responses indicated that magazines were usually available at home, whereas other sources of information such as books were not as accessible (Machet et al., 2001). Availability of leisure time could also be an important factor. A survey in the UK found that 15-16-year-olds have limited leisure time and are more likely to read magazines than books (*Reading the situation*, 2000).

One major difference between girls' and boys' reading of informational material was the amount of magazine reading by girls. As was apparent in every aspect of the questionnaire relating to personal development and problem-solving, girls read magazines far more than did boys. Far more girls' and women's magazines are available that deal with these issues. It is possible that greater access to this kind of material would increase the extent to which boys would read magazines. Also, girls showed a definite preference for narrative structure as compared with boys. Information in magazines on these topics is often presented in narrative form (true-life stories), and this also may be why this format is popular with girls.

In conclusion, it is interesting that the results of this survey were not much different from those of the survey carried out by the Children's Literature Unit (1996), which means that the reading interests of children in South

Africa are not radically different from those of children in England. The main difference that needs to be taken into account by authors, especially of information books, is that many young people in South Africa are reading in a second language. Information books need to have more scaffolding in the form of shorter sentences, simpler words, and short chapters to make the content more accessible.

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