A COMPARATIVE STUDY OF THE INFLUENCE OF
THE HIDDEN CURRICULUM ON THE SEX-ROLE
SOCIALIZATION OF AMERICAN AND NIGERIAN
PRIMARY SCHOOL CHILDREN

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CERTIFICATION

THIS IS TO CERTIFY THAT THE THESIS -

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IS A RECORD OF ORIGINAL RESEARCH CARRIED OUT BY

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A B S T R A C T

This thesis demonstrates and compares, in a two-part study, the influence of the school's hidden curriculum on the sex-role socialization of American and Nigerian primary school children. Selected aspects of the hidden curriculum, namely - instructional materials and teacher-classroom behaviour - were investigated. In all, fifteen hypotheses were tested, while six different instruments were used to collect data for testing the hypotheses. These included a Checklist for Coding Sex-bias in Instructional Materials (CACSIM); an adapted version of Flander's (1970) classroom observation schedule into Teacher-Initiated Interaction Analysis Categories (TIAC); researcher-made Teacher Rating Scale (TRS); Children's Sex-role Perception and Adoption Questionnaire (SPAQ); Sex-role Adoption Tests one and two (SRATs I and II), and Mothers' Responsibility training and Activity-exposure Questionnaire (MORAQ).

A total of 252 subjects, consisting of 120 pupils and their mothers; and twelve teachers were involved in the study. In the analyses, cross-tabulations, using percentages, means, chi-square test and t-test were used and the tests were held significant at the $p < 0.05$ and 0.01 alpha levels.

The first part of the study re-establishes and establishes that the hidden curriculum of the American and Nigerian schools was sex-biased, respectively. Employing CACSIM, TIAC and

TRS for this aspect of the study, the findings included the following:-

1.   More male than female characters predominated both as leading and subsidiary characters.

2.   In terms of the quality of character presentation, male characters were more favoured than their female counterparts.

3.   There was evidence of gross inequality in teacher-classroom behaviour both in terms of number and the quality of such interactions.

4.   Teachers had more favourable perception of, and expectations for, boys than for girls on selected personality attributes and school subjects.

5.   However, as anticipated, the hidden curriculum of the Nigerian school was found to be more sex-discriminatory than that of the American School.

Having re-established and established that the hidden curriculum of American and Nigerian schools was sex-stereotypic respectively, the second part of the study focused on the probable influence   of sex-biased schooling process on children's

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sex-role socialization. In addition, a comparison of such influence in the two schools was undertaken. In investigating the likely effect of the hidden curriculum on children's sex-role adoption, we relied on the assumptions inherent in the cognitive developmental approach (Kagan, 1964; Kohlberg, 1966), and the social interactionist self-theory (Mead, 1934; Rose, 1962).

The SPAQ, SRATs I. and II were employed to collect data for this part of the study. Five hypotheses were tested and the findings included the underlisted:-

1. While there was no significant sex difference in children's academic self-concept, we observed a significant sex difference in their social self-concept.

2. There was significant sex difference in children's educational and vocational aspirations.

3. Children were found to be sex-stereotypic in attributing leadership and occupational roles to women and men.

4. Nigerian children were found to be more sex-biased than their American counterparts.

5. Age was a significant factor in children's sex-role adoption.

In addition, familial variables, particularly, mothers'
responsibility training was investigated in order to ascertain
the relative influence of the school over other agencies of
socialization, specifically, the home, on children's sex-role
adoption. MORAQ was utilized to collect relevant data to test
the three hypotheses generated on this part of the study, all
of which were accepted. The findings included the underlisted:-

1.   That children's sex was a significant factor
      in the volume and type of domestic tasks
      mothers allocated to them.

2.   That there was a significant sex differentiation
      in mothers' academic and occupational
      expectations for children.

Data from a subgroup of mother and children subjects indicating
that their homes appeared equigender really highlighted that the
school might be more critical in children's sex-role socialization
because children from such homes were found to be as stereotypical
in attributing leadership and occupational roles to women and men
as their counterparts from sex-stereotypic homes.

Finally, our findings were interpreted based on the assumptions
underlying cognitive-developmental model and social interactionist
self theory. Based on the findings of the investigation, certain
conclusions were drawn and suggestions were made for sex-equity

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in the schooling process. Some of these suggestions
included:-

1. Creating general awareness about the unintended
    outcomes, particularly that of sex-bias in
    the schooling process.

2. Training and retraining of teachers in
    anti-sexism and establishing a non-sexist
    orientation in all academic areas,
    particularly among authors and publishers.

3. The role of the universities should include
    the establishment of women's studies
    programmes and intensifying research work
    on women.

Considering the pioneering nature of the study, and
the limitations which included, among others, the fact that only
two of the three major ethnic groups were represented in the
samples, the findings and conclusions were held generalizable only
to the southern part of Nigeria.

CERTIFICATION

I certify that this work was carried out

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_____
S u p e r v i s o r

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DEDICATION

TO   THE GLORY OF GOD

TO   CHIEF & MRS. S. B. OLOFINTILA (My Parents)
        - **Living Memories of Past Sacrifices**

TO   DR. M. O. ABE (My Husband)
        - **Inspirations for the Present**

TO   OLUMAYOWA   ABE)
        OLUFUNMILAYO   ABE)
                             (My Children)
        OMOBAYODE   ABE)
        OLUJIMISAYO   ABE)
        - **Our hopes for the Future**

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I recall with a deep sense of appreciation the contribution of Dr. (Mrs) Sherrie Akinsanya, under whose supervision the research work reported in this thesis was begun; her assistance in the formation and refinement of the research topic is acknowledged.

My sincere gratitude goes to Dr. (Mrs) B. A. Oloko who kindly took on the supervision of the work at a most critical stage. Dr. Oloko suggested the theoretical approach to the study and offered valuable suggestions at every stage of the work. She also examined in detail the design of the study with particular reference to the familial variables in socialization, and the coding instrument.

Dr. Oloko's exceptional flair for thoroughness, a quality acknowledged by most people around her, has in no small way influenced the course and therefore, the outcome of the work. I am greatly indebted to this respected lady for stimulating me academically. The work also provided me the opportunity for enriched fellowship with her.

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CHAPTER ONE

THE PROBLEM

1.1   Introduction

It is well known that fewer girls than boys attend school and that there is increasing constriction on girls' enrolment at each succeeding level of education. It is also a universal truth that the achievement of girls is lower than that of boys even when they are equal in intelligence. Research findings seem to support that while girls perform better than boys on verbal ability tests, girls score less than boys on numerical, spatial, creativity and analytical tests (Maccoby, 1967; 1975; Gesell, 1940). Thus, fewer girls than boys offer science, technical/technological courses (Osibodu, 1985; National Universities Commission, 1983-4; Jahoda, 1979; Keys and Ormerod, 1976).

In addition, research reports suggest that girls have unrealistically low estimates of their abilities, whereas boys of equal ability do not undervalue themselves (Sears and Feldman, 1965), and consequently,

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· · girls choose lower status jobs of nursing, teaching,
and secretaryship, while boys of equal ability choose
high status occupations like Engineering, Medicine,
Law and Architecture (Durojaiye, 1970; Abiri, 1977;
Osuji, 1976).

Evidence of this kind suggests that some influence
within the school operates to depress girls' self-concept,
aspirations and expectations, and causes them to have
a lower estimate of their ability than boys of equal
ability. If America and Nigeria are to realise their
national objectives of building egalitarian societies
where equal opportunities are to be provided for all
irrespective of social, race (ethnicity), religion and
sex (National Policy on Education, 1981), there is the
need to examine the aspects of the schooling process
that are likely to militate against the realization
of this objective. This is so because there seems to
be new interpretations to the concept of equality of
educational opportunity which appears to be a major
instrument in building an egalitarian society. Some
of the new definitions include the quality of access
in terms of schooling experience and outcome for
different groups of children, more specifically, between

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girls and boys. The new dimensions to the concept

of equality of educational opportunity seems to

indicate that equality of access to education is

not all that there is to the concept, and that when

equal access is guaranteed for all categories of

children, the schooling experiences are different

for each resulting in different school outcomes,

particularly between girls on one hand, and boys on

the other.

Therefore, the present study seeks to investigate

and compare the influence of selected aspects of the

schooling process - the hidden curriculum - on the

sex role socialization of American and Nigerian

primary school children.

1.2   Statement of the Problem:

Maccoby (1966); Frazier and Sadker (1973) suggested

that the different patterns of self-concept, achievement

and aspiration that girls and boys show in school and

elsewhere must be, to some extent, due to the influence

of the school. This influence, invariably, does not

come about by direct or overt teaching of the formal

and visible curriculum. However, the subtle and

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covert messages embedded in the hidden curriculum
of the school, are sometimes stronger and more powerful
than the formal school curriculum.

Those aspects of the hidden curriculum that may
have significant consequences for the differential
self-evaluation, expectations and aspirations of girls
and boys are:

- The instructional materials,
  especially the textbooks which
  children spend a great deal of
  time mastering.

- Teacher-classroom behaviour.

The issue of sex - role socialization is prominent
in the hidden curriculum of the school system. This
curriculum which Holmes (1981) has observed as serving
to remind us of the physical atmosphere of school, is
manifested not only in the content of instruction, but
also in the teaching - learning process. Therefore,
the present study will attempt to compare the American
and Nigerian educational systems with a view to
analysing the influence of the hidden curriculum on
the sex - role socialization of primary school children.

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The study will answer the following questions:

- To what extent is the presentation of female and male characters in instructional materials egalitarian?

- To what extent do teachers manifest equity in their interaction with girls and boys in the classroom?

1.3   Purpose of the Study:

The purpose of the study is fourfold; These are:-

- To re-establish that the hidden curriculum of the America school is sex-biased.

- To establish that the schooling process in Nigeria is sex-discriminatory.

- To assess the contributions of the hidden curriculum to the sex-role socialization of primary school children.

- To compare the American situation with that of Nigeria.

Institutionalized stereotyping which had been identified in the United States of America, manifests itself in various forms and is likely to reveal itself in the

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same manner in Nigeria and elsewhere, in view of the
fact that school systems across cultures have been found
to manifest almost similar norms (Dreeben, 1967);
Through instructional materials and teacher-classroom
behaviour, differential multiple messages, ideas, values,
attitudes and particularly, sex roles, are conveyed to
school girls and boys.

One aspect of the hidden curriculum to be examined
in relation to sex-role socialization is instructional
materials. Instructional materials are of critical
importance in view of their permanence and the intensity
of exposure of children to them. For the purpose of
this study, these include English Language, Mathematics
and Social Studies textbooks. These subjects have been
chosen because they are the core courses at this level.
In addition, teacher-classroom behaviour will be observed
in order to study probable differences in teachers'
contacts with girls and boys. It is assumed that these
aspects of the hidden curriculum which are daily rituals
for school children, will have an influence on the self-
concept, vocational preferences, educational aspiration,
perception of, and expectations of girls and boys;

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Finally, the data and results from both the American
and Nigerian schools will be juxtaposed for the purpose
of comparison.

In broad terms, the present study seeks to investigate
four main problems:-

- To investigate how female and male
  characters are portrayed and treated
  in schools instructional materials.

- To study teacher-classroom behaviour
  for probable bias against any particular
  category of children and to investigate
  - teachers' perception of, and expectations
  held out for girls and boys.

- To study the cumulative effect of the
  above factors on children's sex-role
  socialization.

- To compare the American situation on
  the above three criteria with that of
  Nigeria.

1.4   Hypotheses of the Study:

Based on the importance of instructional materials
and teacher-classroom behaviour in the schooling process,
we postulate that female and male pupils' encounter with
instructional materials, their classroom experience as
a result of teachers' differential interaction and

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evaluation, will have significant consequences on school outcomes for girls and boys. Furthermore, from the review of the literature, some basic issues on the mechanisms cf sex - role learning both within the family and at school, raise certain questions relating to sex - role development. These issues which were all considered, served as rationale for the hypotheses tested in the study which are as follows:

Hypotheses -

1. All things being equal, more male than female characters will tend to be portrayed in schools instructional materials.

2. More male than female actors will tend to be depicted in leading roles.

3. More male than female characters will tend to be presented in high status roles and occupations.

4. The instructional materials of American schools will tend to be more equigender than those of the Nigerian schools.

5. All things being equal, teacher-classroom behaviour will tend to be directed more often towards male than female pupils;

6. Teachers will tend to rate boys more favourably than girls on selected personality traits and academic subjects.

7. Nigerian teachers will tend to be more male-rected than their American counterparts.

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8. All things being equal, boys will tend to score higher than girls on the self-concept scale.

9. American children will tend to score higher than the Nigerian pupils on the self-concept scale.

10. Boys will tend to be less stereotypical than girls in their sex-role socialization/adoption.

11. American children will tend to be less stereotypical than their Nigerian counterparts in their sex-role adoption.

12. Age/class will tend to be a significant factor in children's sex-role socialization/adoption.

13. Sex will tend to be a significant factor in the volume and types of household chores allocated to children by mothers.

14. Mothers will tend to have higher educational expectations for their sons than daughters.

15. American mothers will be less sex-biased in their educational expectation for their children than Nigerian mothers.

1.5 Significance of the Study:

This study is justifiable from both a theoretical and policy implication point of view. Empirically, it will bring into greater focus, the need for comparative educators to study more sociological and psychological constructs such as socialization and sex roles cross-culturally. In addition, by developing and using such tools as the checklist for analysing and coding sex bias in instructional materials (CACSIM); teacher-initiated interaction analysis category (TIAC); teachers' rating scale (TRS); mothers' responsibility training and activity exposure questionnaire (MORAQ) and sex-role adoption tests (SRATS), sex -role

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perception and attitude questionnaire (SPAQ), the
present study will be making a significant contribution
to research progress:

From the point of view of policy making, the study
will highlight a new challenge, particularly from the
Nigerian point of view, to the concept of equality of educational
opportunity. It is hoped that the study will generate
an awareness of the subtle ways in which the schooling
process is repressing a group of pupils. Other principal
actors in the educational enterprise - parents, publishing
houses, authors, the general public, state and the federal
governments will be jolted from their ignorance about
the subliminal influence of the schooling process on
children's self-perception, role expectation and
vocational preference.

Moreover, it is hoped that such an awareness will lead
to various interventions designed to eliminate sexism from
the school system, borrowing and adapting the American or
other similar approaches to the problem. For instance,
state governments which have the sole responsibility for
primary education, may have to make categorical statements
about the kinds of instructional materials to which
pupils are exposed. This is because textbooks and indeed

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other reading materials, do not only teach the children
to read, write and count, but the pupils subliminally
imbibe values, ideas, attitudes, particularly those
relating to sex-roles, from these materials. Also, publishing
houses may be encouraged to start to critically examine how
they portray female and male characters in their books with
a view to correcting the imbalances:

In addition, such a general awareness of the sexist
content of the schooling process may necessitate the
inclusion into teacher training syllabus, programmes
designed to sensitize teachers and teacher trainers to
prevailing sexism. Such interventions through teacher-
training may ensure equity in the schooling process to the
extent that the models portrayed for girls and boys will
be more inspiring, thus leading to the development of
positive self-concept, especially for girls, so that they
can develop their abilities fully and make maximal use
of their potentials.

1.6   DEFINITION OF TERMS

1.6.1   Hidden Curriculum

Davies and Meighan (1975); Frazier and Sadker
(1973) defined the school's hidden curriculum as those
unofficial, unintended, undeclared and incidental
consequences of the teaching – learning process.

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Synder (1971); Dewey (1963); Wallace (1976)
and Czajkowski and King (1975) described the
concept as an embodiment of values, attitudes,
perceptions and sensitivities, subliminally imbibed
in the schooling process, which in turn, influence
what girls and boys see of the world and their
place in it.

Shelly (1973) and Martins (1976) viewed the hidden
curriculum in terms of the courses and their contents,
the organisation and the structure of the teaching -
learning process, and the people who operate the schools.

However, for the purpose of this study, Shelly's
definitions will be adopted. Therefore, the hidden
curriculum is operationalized to include instructional
materials in English Language, Mathematics and Social
Studies; teacher-classroom behaviour and teachers'
evaluation of pupils on selected personality attributes
and school subjects. For our purpose, these are the
media through which girls and boys imbibe ideas,
values, perceptions, adult roles, which in turn,
influence their self-judgement, vocational preference,
educational aspiration and role expectations for women
and men, indeed, their sex-role expectations.

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1.6.2. Sex-Role Socialization:

Broverman et al. (1972) defined sex-role socialization as the transmission of beliefs, values, expectations and roles associated with being female or male.

Weinreich (1978) looked at it as gender-based process of bringing up children to act and behave as female or male. The concept was further defined as training girls and boys to develop attitudes, values and ideas held appropriate for their sex.

Maccoby and Jacklin (1975) viewed it as the shaping of children's behaviour according to their gender.

However, for the purpose of the present study, sex-role socialization is defined as the transmitting of differential self-evaluation, job and educational choice, role expectations about women and men to girls and boys.

1.6.3 Stereotypes:

Mischel (1970) noted that stereotypes involve expectations about the disposition and typical behaviour displayed by members of a category. Similarly, Allport (1954) viewed them as exaggerated beliefs associated

with a group; while Lippmann (1922) simply referred
to them "as pictures in our heads". King (1962)
extended these definitions to include the use of
locally available excuses for social, economic and
educational differences between groups of people.

Leaning on these definitions, the present study assumes
that stereotypes are beliefs, expectations and conjured
excuses for social, economic and educational differences
between females and males portrayed in instructional
materials and those pupils to be observed in classrooms.

1.6.4   Sexism:

Frieze et al. (1978) defined sexism as prejudice
against one sex. They extended this definition to
include both its conscious and institutionalised subtle
nature, the latter being more serious than the former.

Kroske - Akinsanya and Gudinas (1974) referred to
it as those attitudes and actions which relegate women
to a secondary and/or inferior status in society, or
to traditional "feminine" roles.

The Committee on Sexism in Textbooks (1974) defined
sexism as "all those attitudes and actions that
demean or stereotype individuals or groups because
of their sex".

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The Committee of Scott, Foresman and Company on sexism in textbooks (1974) gave an operational definition on sexism in textbooks as:-

> "if they omit the actions and
> achievement of women; if they demean
> women by using patronizing language;
> or if they show women or men only in
> stereotyped roles, with less than the
> full range of human interests, traits
> and capabilities."

In this study, the definitions of the Committee of Scott, Foresman and Company (1974) will be adopted.

1.6.5   Teacher Classroom Behaviour:

Jackson (1968),Sears and Feldman (1966); Brody (1970); Bosset (1981) have examined different aspects of teacher-classroom behaviour. These include teacher feedback, role-opportunity structure and eye contact. However, for the purpose of the study, teacher-classroom behaviour is operationalized to include teacher-initiated instructional contacts.

1.6.6   Sex-Role Adoption:

Perry and Bussey (1979) viewed sex-role adoption by children as learning which behaviour are appropriate to each sex by observing differences in the frequences with which female and male models perform various

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responses in given situation; and these responses
are internalized into their repertoire of sex-role
appropriateness, which later on lead to the
adoption of the attitudes, feelings, behaviours and
motives that are defined as appropriate for their sex.

Lee and Gropper (1974) conceived of it as a
result of constant reinforcement of children's
orientation and preference for sex-typed practices and
behaviour.

The definitions and perspectives of the cited
sources are relevant to its use in the present study;
and these include the roles, occupations, educational
levels which girls and boys consider for each sex;

1.7. Limitations of the Study

The possible interpretations and results of the
study are subject to important limitations which should be
explicitly stated. Ideally, studies in comparative
education are carried out in at least two countries.
Therefore, the first of these limitations was financial
constraints emanating from national economic policy which
made it impossible to travel to the United States to
investigate the aspects of the research as they relate
to that country; Thus, the study has limited itself
to the use of a replica of the home school which is
established in Nigeria.

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A second limitation was that the population of the American school may not be all Americans or Americanized immigrants. Being an international school, it is expected to recruit its pupils from as many as the countries that are represented in Nigeria. However, we are satisfied that the school is typically American in terms of organization, structure, teaching staff, curriculum, extracurricular activities and in its daily routines, observance of holidays and festivities.

Similarly, the Nigerian school, even though a private one, represents a typical Nigerian school in many respects. Furthermore, the present study is delimited by the fact that only selected aspects of the hidden curriculum are of concern. These are instructional materials and teacher-classroom behaviour. Other aspects such as political, social racial/ethnic values and attitudes are not included. The study would have been unwieldy if these had been included. They will form the subject of future studies.

In addition, the research is limited by the fact that not all the instructional materials in the primary school are examined. Selected subject areas such as English Language, Mathematics and Social Studies, which the researcher deems to be the pillar of primary education, both in the United States and Nigeria, are of concern in the present study. Other primary school subjects are outside the scope of the study.

Moreover, there is limitation with respect to the number of schools. Since only one school from each educational system is used in the study, the findings of the study have to be carefully interpreted and generalized to the school systems in both countries.

Furthermore, most of the instruments of the study are being used for the first time, a limitation which arises from the fact that the study represents a first attempt to investigate the problem in the Nigerian setting. Therefore, for their validity and reliability to be established, they have to be used repeatedly and become refined in the process.

Lastly, the present study is delimited by the fact that it views classroom interaction, which is essentially a three-way traffic, that is, between teacher-pupils, pupil-teacher and pupil-pupil; as a one-way process - between teacher and pupil. Thus, the study assumes that the child only responds to teacher-initiated moves in the classroom exchange and transactions. Future studies will include students' mediating factors in classroom encounter.

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1.8   DIAGRAM I: DIAGRAMMATICAL REPRESENTATION OF THE STUDY

A

| THE FAMILY | ──────── | A2 | THE SCHOOL |

Mother	Children	Teacher
Education	Sex	Sex
Occupation	Age/Class	Age
Nationality	Nationality	Nationality
		Qualification
──	Residence	

Years of Experience

B1   B2

| Sex Biased   Hidden Curriculum |
| Teaching-Learning Process. |
| Instructional Materials. |
| Teacher-Classroom Behaviour. |
| Teachers' Evaluation of Pupils. |

| Responsibility Training. |
| Activity Exposure. |

C

Observation, appelation, modelling, reinforcement ─────── Selective processing of information and cues = Cognitive developmental model+ symbolic interactionist self theory.

D

SEX-ROLE ADOPTION/SOCIALIZATION
Differential self-concept, educational/occupational aspirations and role expectations for girls and boys.

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CHAPTER TWO

A REVIEW OF LITERATURE

2.1.0   Introduction.

The present chapter deals with the following areas viz:

A. The conceptual model of the study.

B. Definition of Socialization.

C. Theories of sex-role learning.

D. Mechanisms of sex-role learning in
the school.

E. Definition of the hidden curriculum.

F. A review of relevant literature on sexism
in instructional materials viz:

    i) Quantitative analysis of female-
    male characters.

    ii) Qualitative analysis of female-
    male characters in terms of role/
    occupations, personality attributes
    and activities.

    iii) Cross-cultural studies of sexism in
    instructional materials.

    iv) Sexism in instructional materials
    spanning historical periods.

    v) Sex-typing in non-school materials.

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vi) Sex-bias in picture books.

vii) Sexism in instructional materials after
the issuance of guidelines to publishers.

G. Studies relating to differential interaction and
expectations in the classroom.

2.1.1 Conceptual Framework of the Study:

Allport (1954) presented a thesis on prejudice and all its
attributes which include belief, attitude, categories,
discrimination and stereotypes. His definitions of some of
these concepts are basic to the present study. He viewed
stereotypes as exaggerated belief associated with a category,
and that the function of stereotypes is to justify one's
conduct in relation to that category.

In the same vein, Lippman (1922) saw stereotypes simply
as "pictures in our heads". King (1962), discussing national
stereotypes, referred to the universal use of locally
available excuse for social, economic, educational and
(sex) differences. The present study of sex-role
socialization through the school's hidden curriculum is
based on concepts similar to those inherent in the cited
sources. It is also relevant to Anderson's (1979) diversity
in the patterns of sex differentiation especially through
teacher's condescending attitudes, interiorizing norms
and educational discrimination.

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In addition, the present study rests on the assumptions inherent in symbolic interactionist self theory. (Rose, 1964; Mead, 1934; Siann and Ugwegbu, 1980).

1. That people are moulded by both their symbolic and physical environment and that language is a major facilitator in this environment. Language may be oral, written and non-verbal.

2. That through role-taking, significant symbols, both verbal and non-verbal are communicated. In the process of communicating these symbols, huge numbers of meanings and values are learnt. Hence, it is assumed that most of the adults' behaviour is learned behaviour and it is specifically learned in symbolic communication.

3. That these meanings and values guide and direct a person's behaviour in a given social setting; and the individual defines herself or himself as well as other objects, actions and characteristics based on the internalized meanings and values acquired through social transactions with others.

4. That self emerges as a result of the child having ideas about herself or himself which are similar to those held about her or him by significant 'others' in her or his life. Through the views of these people and the way they treat her or him, the child will form various pictures of her/himself that will influence her or his behaviour in certain situations. The aggregate

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of these various 'selves' in various situations is the child's picture of herself or himself which reflects who s/he is, what s/he feels s/he can do and how best s/he can do it; that is, her or his self-concept, which is the sum total of her or his system of ideas, attitudes and commitments.

5. Symbolic interactionist theory assumes that people never forget anything. In their memories, there is an integration of old and newly acquired meanings and values. In this sense, a person's behaviour is a product of her or his life history; all the experiences, both direct and vicarious that are brought about through communication with others. A conception of self once learned affects an individual's behaviour throughout life.

6. Like the environmentalists (Frazier and Sadker, 1973), the present study assumes that social and cultural determinism, rather than self-determination is the crucial factor in the development of sex-roles. Therefore, the study will attempt to investigate the relationship between those 'pictures in our heads' which are reflected in the contents of instructional materials, teacher-classroom behaviour and teacher's evaluation of children, and the process of internalizing these 'pictures' through social and cultural pressures as contained in the symbolic interactionist self theory, to the extent that girls and boys have differential self-concept, role-expectation, vocational and educational aspirations.

In this context, the hidden curriculum includes selected instructional materials, that is, written language, interaction pattern and teachers'

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evaluation of pupils which are verbal and non-verbal language
of the classroom. It is assumed that the child may not initially
have a clear self picture, but that through social interactions
and transactions in the classroom, s/he learns about her/himself
in three major ways:

a) By relating her or his behaviour to the
behaviour of other children especially
children and adults present in instructional
materials, noting how her or his own category
has been treated in these texts, what s/he
can and cannot do in comparison to the
characters presented and how s/he compares
with them on different measures.

b) From what others tell her or him about her
or himself.

c) From the way others treat her or him.

Gradually, the child's self concept unfolds accompanied by
corresponding attitudes to, and feeling about, herself or
himself. It is postulated that the child's self-concept
which emerges as a result of socialization through the medium
of the hidden curriculum will be sex-differentiated and will
have implications for educational and occupational preferences,
life-style choices and role expectations of girls and boys.
The other theory, that of cognitive-developmental approach which is
relevant to the present study is discussed later in this chapter.

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2.2.0   Definition of Socialization

The word Socialization has been variously
defined by anthropologists, sociologists, historians
and other social scientists. Scholars, in their
definitions, have emphasised different aspects of
the concept. Some view it as enculturation or
intergenerational transmission of culture (Mead, 1963;
1964; Bidwell, 1972; Parsons, 1959); others define
socialization as the acquisition of impulse control
(Whiting and Child, 1953); while some notable
scholars look at the concept as role-taking or training
for social participation (Goslin, 1971). Each of
those definitions is elaborated on below.

2.2.1   Socialization as Enculturation

From the perspective of enculturation or inter-
generational transmission of culture, Mead (1963);
(1964) defined the concept as the development of
the individual, which will enable him to function
in her or his society and the transmitting of values,
beliefs, attitudes and institutional practices from
one generation to the other. Thus, socialization is
viewed as the set of "species-wide requirements" and
exactions made on human beings who arrive "cultureless"
upon human scene and by assimilating these 'requirements'

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and exactions, the individual becomes a full-fledged member of the society: Other writers who share this definitionn of socialization as the development in the i individual of the commitments, capacities and the learning of societal orientation include Baldwin, (1971); Elkin and Handel (1960). These authors view socialization as a process that helps to explain two different kinds of phenomena. On the one hand, it helps to explain how a person becomes capable of participating in society. On the other, it demonstrates how society is possible at all by emphasising the learning of the ways of an established and continuing group.

The cited sources seem to view socialization as the process by which the individual continuously learns through interaction with others, the appropriate behaviours and approved values of the social group. They also seem to conceive socialization as helping the individual to make the culture of her or his society so much part of her or him that s/he may be said to have internalized the prescriptive and evaluative norms of her or his social group.

2.2.2   Socialization from the Social Interactionist Perspective

In defining socialization, social interactionists emphasise interaction with the environment. This emphasis has earlier on been reflected in Mead's (1934) work

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where the basic premises of the social interactionist theory were established.

The social interactionist explanation of socialization was elaborated on by Inkeles (1968). Inkeles highlighted three important determinants of the socialization process as the self, the people who interact with self, and the society in which self will participate as an adult member. Inkeles' explanation of socialization from the social interactionist perspective includes the ideas that self is born with behavioural potentials; these potentials are nurtured and developed through the child's interaction with people who raise and live with her or him. The interaction is, in turn, guided by societal standards of behaviour. Thus, society shapes the socialization process by establishing norms which the socializee is expected to achieve. In this sense, one may view socialization from the standpoint of the group as the moulding and stamping of the individual's feelings and desires to suit the needs of the social group. (Reinshaw, 1973); Peil, 1977).

2.2.3   Socialization from the Input-Output Dimension

In addition to the above definition of socialization, Inkeles introduced the input-output

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five

elements into the definition of the concept. He
described the input as the process of acquisition,
or what is done to the child; and the output as
the results of the process in the form of adult
person having acquired those characteristics which
have major relevance for the particular social
roles . .s/he must play in her or his status -
position as a member of a given group.

It seems that Inkeles is not only concerned
with the social character of socialization, but also,
like Mead and other writers, with its long-term
consequences. Therefore, he lays emphasis on the
societal influence on the moulding of the individual
through direct instruction by the family and the
school; through models, explicit training and
sanctions. For Inkeles, the recognition of the
self by an individual, including, sex, and the
different roles one will play as one ages, is an
important part of the output in his definition.
Therefore, socialization centres on interaction
which enables people not only to learn who or what
they are, but also, to acquire a set of attitudes
about themselves, especially with reference to

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that aspect of the self through how significant others in one's life treat one or by what they tell one about oneself.

In addition, Inkeles emphasises the role of society's folklore, written and oral, and the media of communication, in creating new images of the desirable. The folklore represents a model of behaviour to both the socializer and the socializee, and later, becomes formal system of expectations for the child. These media of communication may include instructional materials and other forms of communciation, such as interaction which are non-verbal (Mead, 1934); Rose, 1962).

2.2.4 Socialization as a Two-Way Process

While Inkeles was concerned with the input-output dimensions of socialization, Clausen (1968); Gorlin (1971); Elkin and Handel (1960) posited that socialization is a two-way process which incorporates individuals into groups or relationships. The child shapes the parent's or socializers' attitudes as much as s/he is shaped by them. Clausen and other exponents assumed that just as the learner is responding to stimuli from others

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around him, his responses constitute significant
stimuli for those responsible for socializing him.
In this respect, the child helps to shape her/his
own environment and in an important way, becomes
socializer as much as socializee.

While sharing some of the basic definitions
of socialization as put forward by Mead (1963);
(1964); and Clausen (1968), Goslin (1971) recognised
the process as involving the unconscious assimilation
and internalization of beliefs, values and patterns
of behaviour. He stressed the unintended outcome
of the socialization process. The socializee
subliminally imbibes ideas, beliefs, values and
attitudes that are unplanned for in the process of
acquiring the intended norms (Elkin and Hendel (1960).

2.2.5   Socialization as a Life-Long Process

Most of the cited sources are concerned with
childhood socialization; others like Brim (1966);
(1968); Mayer, (1970); Elkin and Handel (1960) are
more particular about adult socialization and therefore
stress anticipatory socialization because they view the
socialization experience in childhood as inadequate to
meet the demands of the occupations, the family and

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the community. Therefore, in relation to his
area of emphasis, Brim defined socialization as
the process by which one learns to perform various
social roles from two angles; the role prescription
or expectation that someone else has for the person
in question, and the self-initiated ideas and
prescriptions for one's own personality and behaviour
change.

From this definition, Brim seems to suggest
that socialization is a continuous process, and that
every change in social roles calls for the acquisition
of new skills and competences; for example, a change
in marital status resulting in being single, married,
parenting or divorced. The individual needs to imbibe
new values and dispositions to fulfil these changing
social roles effectively.

Stretching Brim's definition further, Elkin and
Handel (1960) presented a unified analysis of
socialization through the entire life cycle, from
birth to death, and as a cumulative experience in
which the resolution of the central issue at one
stage affects the determination of those presented in
succeeding stages. The child's socialization in any
stage generates certain expectations which s/he
brings with her or him into new socialization settings.

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Elkin and Handel pointed out that socialization involves developmental changes through communication, symbols, language and interaction and the influence of significant others; all are shaping forces in the development of self (Mead, 1934; Rose, 1962). Like Mead, Goslin, Clausen, Elkin and Handel have highlighted the contribution of language, social interaction, significant others and role-raking in the socialization process.

2.2.6   Socialization as Sex Differentiation

The above definitions of socialization do not distinguish between the socialization of females and males. However, this distinction was made by Weinreich (1978) apart from defining the concept as the transmission of culture from one generation to the other. The transmission of culture includes notices about appropriate sex-roles. In principle, children of both sexes are brought up as people, in practice, gender is a highly significant factor in their upbringing. There are also differences in the socialization of girls and boys, especially in the areas of self-conception which will have implications for all other aspects of their lives. Generally, society has criteria for distinguishing among children and in the procedures

for directing different groups of children into
different sequences of experience which eventuate
in different socialization outcomes.

More relevant to our interest in the self-
conception are the researches of Barry et al. (1957)
in which they considered the differences in sociali-
zation affecting girls and boys. After studying a
large number of cultures, they concluded that boys are
in general trained to attain quite different objectives
than girls are. Boys are more firmly taught to strive
for achievement, to be self-reliant and independent.
Girls, in turn, are socialized more for obedience.

2.2.7. Summary of Definitions of Socialization

In sum, the cited sources are quite definite
about the meaning of socialization as the process of
integrating the individual into her or his community
by teaching her or him the disciplines, aspirations,
social roles and skills necessary for group membership.
Different writers have laid emphasis on different
aspects of socialization which include socialization as
enculturation or intergenerational transmission of
culture as well as sex-roles; the acquisition of
impulse control; and training for role-taking as

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prerequisite for social participation. Some authors

have viewed the concept as a two-way process while

others have defined it from the input-output perspective.

The social interationist theory has also been employed

to explain the emergence of the self as the end-product

of the socialization process, and in this process, language,

symbols, communication, interaction, the role of

significant others and role taking have been emphasized

as crucial.

A few writers viewed socialization as a continuous

life-long process because new roles call for new skills

and attitudes that have to be learnt for an effective

occupation of the new social roles. Other authors

have stressed that some of these learnings are overt

and visible, while others are covert and invisible,

and must therefore be inferred;

For the purpose of the present study, the

definitions of Inkeles, Goslin, Mead and Rose are crucial.

Those aspects of their definitions that are vital for

the study include the social interation as

an explanation for the kind of self that emerges

at the end of the socialization process, and the

fact that interaction may be differential for

girls and boys especially with significant others

in the schooling setting, whether they are imaginary

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significant others in the pages of instructional
materials or real ones as teachers. The present study also
rests on the assumptions of Goslin that most of the
learning that takes place during socialization process
is incidental and unintended, but nevertheless, is
very vital to the self-conception of the socializee,
as the self evaluation of a child is likely to influence
what . s/he thinks s/he can do and cannot do when
s/he becomes as adult.

2.3.0   Theories of Sex-Role Learning

Of all the roles individuals fulfil in their
life-time, the role prescribed on the basis of one's sex,
is perhaps acquired earliest and endures longest (Jacklin et al
1974). According to the authors, gender identity rather
than biological sex determines many components of the
roles one learns.

In the past, three main theoretical approaches
have attempted to explain the process underlying the
socialization of sex-role behaviours. Recently, a
fourth one has been introduced. The four models are:

1.   Identification theory (Freud, 1949).

2.   Social learning model (Bandura, 1969);
      Bandura and Walters, 1963;Mischel, 1966;
      1970).

3.   The Cognitive-developmental approach
      (Kagan, 1964; Kohlberg, 1966); and recently

4.   Gender Schematic theory (Bem, 1983).

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2.3.1 Identification Theory of Sex-Role Acquisition

Freud (1949) was the first psychologist
to investigate how girls and boys acquire feminine
and masculine characteristics; Freud used the identi-
fication theory to explain the process. The theory
emphasises the child's indentification with same
sex parent as the primary mechanism whereby children
become sex-typed. Before the child is aware of any
distinction between the sexes, the child tries to do
whatever the loved or loving adult does; to be like her
or him without regard to the sex of the adult. To the
infant, the mother is the first object of identification.
Later, he responds to other members of the family.

The above model as proposed by Freud, refers to a
unique learning process through which children unconsciously
mould their ego-ideal after that of the parent model.
Through identification, the child literarily
incorporates or takes the personality of the model,
as a goal. Psychoanalytical theorists assume that there
are two motivational bases for identification -
the child's discovery of genital differences, from
the penis envy and castration anxiety that this discovery

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produces in females and males respectively; to the

successful resolution of the oedipus conflict. The

resolution follows the child's awareness that there

are two kinds of people in the world, women and.men, girls

and boys, and s/he applies the difference to her/himself.

Other psychologists such as Bronfebrenner (1958) have

elaborated on the Freudian model. According to Bronfenbrenner's

analysis, identification refers to the process whereby

one person patterns her behaviours after those of a

model. It also refers to a motive in the form of a

generalized disposition to act or to be like that model.

The author viewed identification as the tendency to

emulate idealized standards and behaviours of the parent-

model. In more recent formulations, this motive is

invoked to deal with the child's desire to have the

attributes of a category such as feminity and masculinity

(Kagan, 1964; Kohlberg, 1966).

Kagan introduces a new dimension into the process

of identification by emphasising the child's belief

that some of the attributes of a model belong to self.

If a child identifies with father, s/he shares

vicariously in the latter's positive and negative

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attributes. Kagan argued that the establishment
of an optimally strong identification requires that
three conditions be met:

a)   The model must be perceived as
     nurturant to the child;

b)   The model must be perceived as being
     in command of desired goals-power, love
     from others and task competence in areas
     the child regards as important; and

c)   The child must perceive some objective
     bases of similarity in external
     attributes or psychological properties
     between herself/himself and the model.

Finally, identification refers to a process or a
mechanism, through which the child comes to emulate a
model. A variety of such mechanisms has been posited
(Freud, 1949). In these formulations, Freud distinguished
two types of identification mechanisms - the analitic,
which is based on intense dependency of a child on the
mother beginning early in the development; and the oral.

For girls, identification is based mainly on the
love or dependency relation with the mother. In
contrast, boys' dependency is supplemented later by
identification with the 'aggressor' in the form
of the potentially castrating father, during which the

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resolution of the oedipus complex takes place.
As a result of this additional process of identification
with the aggressor, boys are believed by Freud to
develop a harsher super ego than girls. Both forms
of identification presuppose. a strong relationship
with each parent as the precursor of identification.

The identification syndrome includes sex-typing,
adult role formation, self-control, self-recrimination,
guilt feelings and other forms of expression of the
conscience (Sears, Bau, Alpert, 1965); According to
the view of identification as a unitary process, all
these seemingly diverse components of socialization,
tend to cluster together as the highly correlated
products of identification with the same-sex parents.

Freud (1933); (1949) postulated that identification
is a prerequisite in the process of sex-role learning,
self-concept and the whole question of socialization.

Identification theorists assume that the acquisition
of sex-role behaviour is governed by internal motives
and they tend to de-emphasise the role of the environment
in sex-role learning. Instead, they argue that
children are stimulated by some internal drive or need

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to model themselves after parents of the same sex. For instance, Sigimund Freud suggested that sex-role learning is motivated by the oedipal conflict - fear of castration, and Anna Freud posited that sex-role learning is motivated by the fear or loss of love from one's parents.

2.3.2 Social Learning Theory of Sex-Role development

The social learning theorists attempt to explain sex-role learning process in terms of behavioural laws. They emphasise the principles of observation, imitation, reinforcement and also those of direct and vicarious conditioning as crucial in the process of sex-role learning (Bandura and Walters; 1963; Mischel 1966; 1970).

Whilst identification theorists assume that sex-role learning involves the acquisition of complete patterns of behaviour which emerge at one time without a gradual learning process and without re-inforcement, social learning theorists have argued that global learning concepts like identification confuse the learning process and that imitation really describes the same process in simpler terms. They also argue that no special emotional attachment is needed for learning to take place.

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However, this does not prove that identification does
not take place, but only that imitation, that is, the a
ability to reproduce the actions, attitudes and
behaviours of a model, is more crucial to the process
of sex-role acquisition than is identification.

Like the identification theorists, social learning
theorists assume that much of sex-role learning occurs
when the child is relatively young: However, they
believe that early sex-role learning is not permanent
or irreversible. Instead, the growing child always adopts
new behaviours, eliminates or alters old ones from his
or her 'store' as society changes its expectations and
reward system. Children imitate parents, other
adults, peers and heroes in the media according to the
particular needs of their age, and the amount of exposure
to these models. Social learning thus locates the
source of sex-typing in the sex-differentiated practice
of the socializing community.

Whilst identification theorists emphasise identifying
with same sex parent as the mechanism of sex-role learning,
the social learning theorists posit that through the
provision of sex-typed clothes, toys and ganres (Delucia,
1963), and the promotion of same-sex friendships, names

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and hair-styles, parents also teach appropriate
sex-role behaviours. It has also been suggested
that children perform sex-appropriate responses because
they receive direct or physical rewards for these
behaviours and avoid sex-inappropriate behaviours
because they are punished for them. Reinforcement has
been suggested as one important mechanism to explain
sex-role learning in view of the tendency of
rewarded behaviour to increase.

Important as reinforcement is to general sex-role
behaviours, social learning theory treats the child as the
relatively passive recipient of environmental forces
rather than an active agent striving to organise
and thereby, to comprehend the world. However, social
learning theorists have emphasised additional mechanisms
in explaining the acquisition of sex-role behaviours.
These are observation and imitation (modelling).

2.3.3   Observation as a Medium of Sex-Role Learning

In suggesting that observational learning
accounts for sex-role acquisition, the social learning
theorists assume that girls are more likely to observe
and imitate female models while boys are more likely
to observe and imitate male models; and that girls
and boys are exposed to different models, or where
they are exposed to the same models, girls and boys

perceive differential cues that result in

differential sex-role behaviours. The perception

of differential cues by girls and boys may be true

to some extent, as demonstrated by Maccoby and Wilson

(1957), that there is tendency for seventh grade

children to recall behaviours exhibited by a same-sex

film character than those of a cross-sex character.

2.3.4   Imitation (Modelling) and Sex-Role Learning

Social learning theory also advocates that sex

differences emerge from differential imitation. To

give an example, boys under normal conditions are

more likely to imitate an aggressive model than are

girls in view of the fact that aggressive behaviour

is more congruent for their sex-role identity than

for the sex-role identity for girls. The hypothesis

that   sex-role development depends, in part, upon children's

tendency to imitate same sex individuals more than opposite

sex models is central to most theories of sex-typing

(Freud, 1949; Bandura and Walters, 1963; Mischel, 1966;

1970).

A modified social learning theory account of the

contribution of imitation to sex-role acquisition was

presented by Perry and Bussey (1979). They suggested that

children learn the behaviours that are appropriate to each

sex by observing differences in the frequencies with

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which female and male models, as groups, perform various responses in given situations. Furthermore, they intimated that children employ these abstractions of what constitutes female and male appropriate behaviours as models for their imitative performance. This hypothesis suggests that a child's imitation of individual adults is strongly influenced by the degree to which the child believes that the adult usually displays behaviours that are appropriate to the child's sex. The work of Perry and Bussey reinforces same-sex imitation as a viable mechanism in sex-role development.

A series of studies have clinched the issues of the importance of observational and imitative learning in sex-role acquisition by demonstrating that when one parent, usually, the father, is absent boys have difficulties in developing appropriate sex-role identity and tend to develop feminine behaviours and characteristics (Neubauer, 1960). Burton and Whiting (1961), in reviewing cross-cultural data, present evidence that boys reared in societies in which the father is absent during infancy, and in which no male figures are available as identification models will have conflicts in sex-role identity (Lynn and Sawrey, 1959; Bach, 1946; Sears et al. 1946; Stolz et al. (1954).

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In the African setting, the importance of same-sex model and observation as mechanisms for learning, not only sex-roles, but also other adult roles, has been emphasised by Fafunwa (1974) and Occitti (1973). In his treatment of traditional African education, Fafunwa indicated that emphasis was on learning by doing rather than on teaching. Thus, the little Yoruba boy was expected to observe, and later, imitate his father's skills at the blacksmith's workshop, and his roles as father and husband within the family. Likewise, the little girl was required to observe and role-play her mother's activities at the loom, and as mother and wife. Similarly, Occitti noted that the Baganda of Uganda mandated their boys to observe and imitate their fathers in order to acquire most of the ingredients of a grown-up male - herding the cattle, tethering domestic animals and milking cows; whilst the girls were to observe and imitate their mothers' activities in order to reach female adulthood.

The various authorities (Fafunwa, 1974; Occitti, 1973; Burton and Whiting, 1961; Sears et al. 1964), have all demonstrated the crucial position of parents in observational and imitational aspects of sex-role learning, because, parents are the first set of models for children.

In addition, when children move out of the family
unit, they are bound to observe and imitate more
models, peers, other adults, heroes and other actors
in the media especially in their school's
instructional materials, which they are mandated to
read. According to the social learning theorists,
observation and imitation are two processes underlying
the acquisition of sex-roles. If the observation and
imitation are reinforced (reward and punishment),
the appropriate sex-roles are adopted and the inappropriate
ones are rejected.

2.3.5 Cognitive-Developmental Approach to Sex-Role Learning

Unlike social learning theory, cognitive-
developmental model focuses almost exclusively on
the child as the primary agent of her or his own
sex-role socialization, a focus reflecting the
theory's basic assumption that sex-typing follows naturally
and inevitably from universal principles of cognitive
development. According to cognitive developmental theory,
as children work actively to comprehend their
social world, they inevitably label themselves.
They come to realise their gender and what behaviours
they should engage in.

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The theory postulates that because of the child's need for cognitive consistency, self categorisation as female or male motivates her or him to value that which is seen as similar to the self in terms of gender. This gender-based value system, in turn, motivates the child to engage in gender congruent activities, to strive for gender-congruent attributes, and to prefer gender congruent peers (Kagan, 1964; Kohlberg, 1966).

. Piaget's (1950) work on cognition in children is central to the theories of Kagan (1964) and Kohlberg (1966) on cognitive-development especially as it relates to sex-role learning. Piaget suggested that people create schemata, that is, mental categories or operations, through their interactions with the world. Once formed, these schemata influence subsequent interpretations of reality. New information is also assimilated into the schemata.

Thus the cognitive-developmental approach would suggest that gender will emerge as an early classificatory cue. It will form the basis for stable and persistent stereotypes in the early years. In addition, change in these stereotypes will depend on exposure of the child to egalitarian models and information.

The cognitive developmental theorists base their assumptions on two premises:

a) That children play a very active role in their development. Motivated by a desire for competence and mastery over their world, they seek any information that will improve their interaction with both their physical and social world.

b) They assume that children's interaction with and interpretation of their world are limited by their cognitive maturity, which in turn, is limited to their present scope of development.

In contrast to both identification and social learning theories, cognitive-developmentalists assume that the initial emergence of gender as an important social category is the result of the child's cognitive system rather than the result of either psychosexual dynamics or the impact of external models and rewards. The cognitive-developmentalists assume that children's stereotypic categories will change as they grow and are exposed to new information. Their schemata regarding appropriate sex-role practice will change as they are exposed to more and new information and environment (Kagan, 1964, Kohlberg, 1966).

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Kagan (1964); Kohlberg (1966) explain in
detail, the process of the acquisition of sex-roles.
The first step in the process is the discovery by
the child that there are two sexes. This awareness
results in gender identity and categorisation of
behaviours and objects on the basis of sex. Gender
is now used as an organiser for much of the information
the child obtains. The second begins when the child
develops a system of values for various behaviours
and attitudes associated with her or his own sex
and s/he comes to value these behaviours and
attitudes more than those associated with the other
sex. This differential valuing naturally leads to
imitation of sex-appropriate behaviours and finally,
as a result of differential valuing and modelling,
each child develops identification with the same-sex
model. The child's sex-role identity is also
influenced by a variety of outside forces, apart from
his imitating and identifying with a significant other.
Kohlberg emphasises that for sex-role acquisition to
be complete, a child must develop a preference for,
as well as, an awareness of, the role associated with
her or his gender.

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2.3.6   Gender-Schema Theory of Sex-Role Acquisition

This model (Bem, 1983) incorporates certain features of both the cognitive-developmental and the social learning accounts of sex-typing.

Gender schema theory proposes that sex-typing derives largely from a generalized readiness on the part of the child to encode and organise information, including information about self, according to the culture's definitions of femaleness and maleness. Like cognitive-developmental theory, gender schema model posits that sex-typing is mediated by the child's own cognitive processing. It further proposes that gender schematic processing itself, is derived from the sex differentiated practices of the social community. Thus, like social learning theory, gender schema model assumes that sex-typing is a learned phenomenon and hence, that, it is neither inevitable nor unmodifiable.

In sum, it is clear that the identification theory of Freud (1949); Social learning postulations of Bandura and Walters (1963); Bandura (1969); Mischel (1966); (1970); the cognitive-developmental model of Kagan (1964) and Kohlberg (1966); and Bem's (1983) gender schema approach are relevant in

explaining the process of sex-typing. From these
models, a few factors seem quite crucial in the
acquisition of sex-roles. These are:

1. The behaviours of individuals in the
child's immediate social world.

2. The child's interpretation of these
behaviours; and

3. The reactions of people to the child's
responses.

It is also clear that the cognitive-developmental
model represents the most thorough attempt at
integrating the role of cognition, identification,
reinforcement, observation and imitation in sex-role
learning, because it incorporates the major elements
in the other theories. Moreover, by elaborating and
extending Kagan (1964); Piaget (1950) and Kohlberg
(1966), the cognitive-developmental model provides
a basis for the discussion of the development of
stereotypes and differential valuing of female and
male roles in the schooling process. In addition, it
seems relevant in explaining the influence of the
hidden curriculum on the self evaluation, vocational

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and occupational aspiration and expectations of
primary school children in the United States of
America and Nigeria.

2.4.0 Mechanisms of Sex-Role Learning in the School

This section elaborates on the different aspects
of the hidden curriculum through which children learn
sex-appropriate behaviours and attitudes in the
school system. Those aspects under consideration
include instructional materials in English Language,
Mathematics and Social Studies, and teacher-classroom
behaviour. An attempt will be made to define the
hidden curriculum.

2.4.1 Definition of the Hidden Curriculum

In order to determine the content of socialization
in elementary school, one may consult the official
curriculum - the syllabus, class schedule, the lesson plans, what
Bloom and Selznik (1972) referred to as the "manifest
curriculum". However, this official "manifest"
curriculum tells but a small part of what happens to
pupils in the classroom. In order to get a full picture
of life in the classroom, one will need to examine
other aspects of the curriculum such as teacher-
classroom behaviour, the textbooks, and other
incredible variety of contacts with the environment.

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These other aspects have been labelled the hidden
curriculum. Bloom and Co. indicated that the latent
curriculum is likely to be more effective in many
respects than the manifest one. This may be so
because the lessons it teaches are long remembered
because of its pervasiveness and consistency over
the years in which children attend school. Hence,
it is likely to have a powerful impact on the young
pupils.

The various manifestations of the hidden
curriculum have been studied and analysed by prominent
scholars. Dewey (1963) included collateral learning.
According to Dewey,

> "..... the greatest of all
> pedagogical fallacies is that person
> learns only the particular thing she/
> he is studying at the time.
> Collateral learning in the way of
> formation of enduring attitudes,
> of likes and dislikes, may be, and
> often, is more important. For these
> attitudes are more fundamentally what
> counts in the future (p;48)."

Dewey seems to indicate that the medium and the
environment in which learning takes place are as
important in the formation of enduring norms

as the official curriculum.

, Frazier and Sadker (1973); Meighan (1981); Jackson (1968)'s definitions of the concept are similar to that of Dewey. They referred to it as incidental learning, the unintended goals transmitted along with those that are intended. Even though these incidental learnings are not listed in the teacher's lesson notes, they are embedded, according 'to Bloom and Co... (1972), in the answers pupils give, the products they produce and in the behaviour of pupils and adults in the school. The definition offered by the above authors indicate that the teaching and learning of the hidden curriculum are unintentional, and that both the teachers and the learners may not be aware of it.

Moreover, some studies have elaborated on the inseparable nature of both the latent and manifest curricula, and have examined them from the nature and sequence of the structural arrangements of teaching and learning (Davies and Meighan, 1975; Dreeben, 1967). The cited authors suggest that from the structural constraints and opportunities provided by the school, pupils infer other lessons which would enable them to

function in the short and long term. Dreeben
particularly maintains that schools, irrespective
of their ideology and structure, foster the
inculcation of independence, achievement,
universalism and specificity which are prerequisites
in functioning in modern nation-states.

Synder's (1971) definition of the hidden
curriculum is similar to Dreeben's. Synder views
the concept as the tacit values and attitudes which
pupils absorb through the form and structure of
teacher-pupil dialogue, instructional materials,
interaction patterns and general classroom organisation.
Thus Dewey's definition of the concept as earlier
stated, seems to reinforce the importance of the
study of the hidden curriculum by recognising that
critical examinations of principles must include a
study of the tacit messages conveyed by the
organisation and expression of these principles.

Other authors explained the hidden curriculum
as the invisible manner in which learning is organised
and shaped (Vallace, 1974; Henry, 1965; and Goldhammer
1969). They all used the term to refer to those

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non-academic but educationally significant conse-
quences of schooling which occur systematically
but are not made explicit at any level to the
public. The educational significant consequences
may be some of the norms which Dreeben (1967) indicated.
But Vallace extended the norms to include political
socialization, training in obedience and docility
(Vallace, 1974).

In addition, Lobban (1978) identified the staff
hierarchy as another aspect of the hidden curriculum
and asserted that this aspect may have important
ramifications for the children. Usually, the staff
hierarchy is male dominated (Bryne, 1975; Plowden,
1967). The implicit message from the male-dominated
staff hierarchy is that pupils are being told that
power and maleness are associated; while femaleness
is associated with subservient roles. This also
provides female pupils with a few powerful role models.
The lessons taught by the hidden curriculum vary from
those of division of labour, social class, ethnic,
racial and religious differences to sex differences
(Illich, 1971). The literature describing the hidden

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curriculum of the American schools draws our attention
to the above overtones, especially those about sex
differences (Henry, 1963).

The contents of the textbooks is yet another
medium through which the hidden curriculum is portrayed.
In developed societies, especially those of the United
States and Britain, textbooks have been analysed with
respect to sex differences in the number and quality
of character presentation (Zimet, 1970; Lobban, 1978;
Britton, 1973; Brody, 1973; Chase, 1972). The findings
of these studies indicate that textbooks are male-
dominated. Male characters are always in the majority;
they lead as heroes; boys and men are portrayed as active,
creative, courageous and adventurous; whilst girls and
women are depicted as being nurturant, passive, timid
and docile.

Teacher's attitude to girls and boys is another
aspect of the hidden curriculum that has been investigated.
It has been observed that teachers value female and male
pupils equally but describe their typical behaviour
differently (Maccoby and Jacklin, 1974). Teachers see
the typical girl as dependent and introverted; whilst
the typical boy is independent and extroverted (Levitin and
Chananie, 1972). As far as this writer is aware, no data

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is available on any aspects of the hidden curriculum
of the Nigerian school, in general and on the sexist,
bias of the hidden curriculum, in particular.
However, one can speculate about the hidden curriculum
of the Nigerian school in view of the fact that school
structures are similar in most societies, and
that they are likely to contain the same kinds of hidden
curriculum especially with regard to sex differences.

There are many aspects of the school and school
day in Nigeria which are likely to incorporate some
elements of sexism. There are also a variety of means
by which girls may be made to feel inferior to, or
different from, boys. Boys' names may be placed first
on the class register with blue ink, followed by girls' names
in red, as if the latter are on probation, or
likely to withdraw anytime. Most heads of sciences and
mathematics departments are more likely to be male than female;
whilst there are more likely female heads in arts department
than males. Clerical and typing staff are almost certainly
female in our schools, as are cleaners, cooks, while
caretakers are likely to be male.

It is also to be expected that the instructional materials used in Nigerian schools will be sexist in view of the fact that males enjoy dominant and recognised positions in society. In a content analysis of selected Nigerian elementary readers undertaken by Abe (1985), it was discovered that there are more males than females generally and in leading roles; differential roles and occupations are assigned to males and females, with those of the males being more valued and desirable; females are often depicted as home-oriented, whilst males are shown as outgoing.

All the cited sources agree on the definition of the hidden curriculum as unstated, unintended and incidental but powerful and influential aspects of the planned curriculum. Some of the unintended outcomes are the inculcation of values, political socialization, the perpetuation of class and ethnic structure and indeed, differential socialization of females and males which may result in differential self-perception, job aspiration, the development and utilization of potentials

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for girls and boys. It has also been stated before
that the hidden curriculum is more influential in
shaping pupils' attitudes than the official curriculum.

Therefore, both the official and the hidden
curricula in schools should be investigaged for
evidence of sex-typing. The need for such investigation
has long been recognised by organisational theorists
because sex-typing is not ordinarily intended by the
official subjects.

2.5.0   Studies Relating to Sex-Typing in Schools'
         Instructional Materials

The most obvious components of the school curriculum
are the instructional materials of which textbooks are
the most important. Other instructional materials such
as films, radio and television programmes are not much
in use in the school context in Nigeria. Therefore,
in addition to other relevant variables, this section
focuses on the presentation of female and male characters
in English Language, Mathematics and Social Studies, all
of which we have earlier accepted as forming an
important aspect of the school's hidden curriculum.

2.5.1   Quantitative Analysis of Female-Male Characters

Several studies of school's instructional materials
especially in Britain and the United States, have

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documented the sex-biased information given to

young learners. Many previous studies have investigated

differential sex-role presentation in children's

literature and other textbooks as they relate to the

number of female and male characters portrayed.

The analysis of elementary school readers revealed

that more male than female characters were depicted in

the ratio of 7:3 (Child et al. 1946). The findings of

other studies, Smith (1977); Weitzman et al. (1970);

Zimet (1970) indicated that women were greatly under-

represented in the titles, central roles and illustrations

of school readers. The analysis of 2,760 stories in 134

readers undertaken by NOW (1973) showed similar findings.

Boys were in the majority as heroes. There were six

times as many male as female biographies and four times

as many male folk or fantasy stories as females'.

The analysis of some social studies textbooks,

the purpose of which was to investigate the presentation

of women indicated that women were almost virtually

absent from the accounts of history in these books

(Thum 1977; Chapman, 1978). Typically, it was observed

that current United States history textbooks devoted

one of several pages to the text on women's lives and

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contributions. One of the most widely used college
texts of modern European history, listed 9 women among the
entries of its 17 page index, none of whom was given
more than a paragraph in the 545 pages of text (Trecker, 1973).

Similar conclusions about the preponderance of male over
female characters in school's instructional materials were
made by other researchers in civics and economics text-
books (Mcleod, 1973; Blankenship and Hahn, 1982). The
findings of a study of four publishers' social studies for
grades two, four and six indicated that only one quarter of
the six materials were decidedly feminine (Jay, 1975;
Schminke, 1975). Their results were also supported
by high rates of agreement among parents and children
who also classified the materials. Among the specific
results were that 46 out of 49 famous people portrayed
in over 400 pages of instructional materials were male.

The above trend was observed in the mathematics
textbooks. Perhaps one important factor that appears
to be affecting females' study of mathematics is social
stereotyping of the learning and usage of the subject
as masculine. It should be pointed out however, that
sex-bias in books is almost certainly committed
unintentionally, and without malice by authors,
publishers and teachers who use them. But it is

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frequently so subtle and so ordinarily looking that educators are unaware of their damaging effects, especially as far as the learning and use of mathematics are concerned.

Almost all the studies reviewed in relation to the number of female and male doers in Mathematics in textbooks reported that males were predominant over females. As part of a larger study, Burstyn and Corrigan (1975) analysed Mathematics texts for the period 1880-1920. They found that the books gave women scanty attention. Only 27 problems in them referred specifically to women while as many as 1,155 specifically referred to men.

A female maths teacher was reported as saying that maths books were probably the worst example of sex-bias, that in her entire book, she found exactly one picture of a girl, and she was holding a pie, and that whenever two, a female and a male persons were used in presenting a word-problem, the male has twice as much as the female (Pirsig, 1973). The author also quoted another maths teacher who said that after she had checked word problems in the first five chapters of her algebra book, she found 118 that referred to boys,

most of them doing interesting things, and 27 that

refered to girls, "most of them watching their weights".

The above cited sources indicated that more male

than female characters were presented in the instruc-

tional materials in English Language, Social Studies

and Mathematics. More male than female actors were

presented both in leading and subsidiary roles.

Thus, there was the impression that male themes and

actors were considered important to merit attention in

these books. The skewed characterisation of actors

in favour of males indicated that most textbooks were

sex-biased. In addition, female characters were

neglected in some of the stories in the readers or

omitted by the very selection of mathematics problems

and social studies topics.

2.5.2   Qualitative Analysis of Female-Male Character

For the purpose of this section, qualitative

analysis of character presentation includes the following:

- The roles/occupations ascribed to female
  and male characters.

- The activities and by implication the
  environment of female and male characters.

- The personality traits attributed to female
  and male protagonists.

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2.5.3 Rôles/Occupations of Female and Male Actors

Many studies have been undertaken to investigate the roles and occupations assigned to female and male characters. They all indicated that the assignment of roles and occupations to characters is sex-stereotypical.

In the world of work presented in these books, female characters were depicted more often as mothers, teachers and nurses. Out of a total of 3,094 career roles for female and male characters, males were found in 86 per cent of the relevant situations, and females in only 14 per cent (Britton, 1973).

The findings of an investigation into the status of women as workers in the basic reading texts of American books revealed a distorted view of reality (Steffle, 1969; Potter, 1973). The authors indicated that all of the adult male characters but very few of the adult females, were employed. Therefore, the argument that children's readers reflect the norms of a given society is not necessarily true, because mothers of most school children do work outside the home, at least in recent times. It has also been pointed out that the few female characters who work

in these readers were employed in the sex-typed
professions of nursing, teaching, librarianship;
while the males did exciting jobs with career
possibilities as astronauts, explorers, inventors,
scientists and writers.

The differential career possibilities for female
and male characters may be explained in terms of
the kind of personality traits each sex was suppossed to
possess. This is the subject of a later section of
this chapter. However, in most school readers, female
characters were depicted as having less mental
perseverance and moral strength than males.

Moreover, other studies conducted on the roles
and occupations of female and male characters indicated
that these were sex-biased. Oliver (1972) randomly
selected a book from a reading series for analysis.
His findings included the fact that men were portrayed
in a variety of occupations and women in almost none
other than that of housewife. Girls and women were
portrayed as performing domestic functions and pursuing
limited interests. No mothers were portrayed as heads
of households. The wealth of occupational roles for
males contrasts with the paucity of occupations and
roles filled by females. The fact that women professionals
were scarcely portrayed in school texts might not

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accurately reflect the reality in the labour
force where women are increasingly breaking new
grounds especially in those areas believed to be
the exclusive preserve of men.

Similar findings were reported by other authors.
The findings of a study undertaken by O'Donnell (1973)
to investigate occupational preparation, information
on jobs, career guidance for girls and boys revealed
that there was much stereotyping and frequent omission
of women from the social studies books.

The findings of analysis of mathematics textbooks
which dealt with such problems as banking, life policy,
profit and loss in business transactions suggested
that the world of work was barely open to women.
Several problems described transactions in which women
were the losers. Boys were presented as solving problems
in astronomy, buying stock, managing businesses and
making profit. Girls, as housewives and mothers, were
usually presented as measuring curtains for windows
or dresses, or flour for cakes (HAEP, 1975a).

This study also highlighted the new maths variety,
where the use of sets gets into stereotyping, when it
separates pupils. Sets of men were doctors, lawyers,

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pilots, astronauts, mailmen, while sets of women were pre-
sented as stewardesses and funny hat wearers, but not
much more (Stacey et al. 1974).

In addition, almost all the cited authors indicated
that children's literature and texts can limit a child's
aspiration to develop and pursue her or his talents
in those areas considered to be outside the child's sex-
role expectations. Most of the findings indicated that
while fathers were expected to combine some form
of occupation with fatherhood, mothers were expected to
be content with motherhood. While male characters
were rulers, kings, principals, emperors, pilots and
heroes, their female counterparts were presented in
their relationship with important figures such as
daughters, wives, queens, empresses and mothers of
these men (Wiik, 1973). In all, the findings of the
investigations indicated that the portrayal of individual
work roles was largely biased in favour of males.
Particularly, for Social Studies whose objectives include
the preparation of pupils for citizenship and effective
participation in their communities not only as voters
and followers but also as leaders, the contents of the
books used to promote this objective are sexist.

One is under the impression that the socialization

is directed to only the male pupils because the materials

and the models weigh heavily in their favour.

The main concern of critics of sexism in education

is that texts may provide norms for how girls and boys,

women and men should behave and what they can be. They

can also impose severe limitations and unnecessary,

constraints on the goals and aspirations of both girls

and boys. This is so because as powerful socialization

tools, books are used at a time in the lives of

children when they are especially impressionable and

learning much in the way of facts as well as attitudes.

Story characters become models after which they pattern

themselves. Such models present them with future images

of themselves as well as influencing the formation of

their own values and aspirations.

From the books we read, the stories we hear and

the models we observe, we develop an awareness of

expected categorical distinctions within our society.

Gradually by a process of continual reinforcement, we

adopt existing norms in such a way that they become

capable of exerting psychological pressures on us.

These norms are internalized and they become criteria

against which we then judge our aspirations, feelings

and behaviours, and those of others. As a consequence,

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especially for the female readers, some of us are
constrained from being or even aspiring to be, all that
we are capable of becoming. Therefore, one of the
objectives of the present study is to demonstrate how
the school's instructional materials influence the
sex-role socialization of primary school children in
the United States and Nigeria, particularly in the
latter for which no previous studies exist.

2.5.4   Personality Attributes of Female and Male Characters

Several studies undertaken to investigate the
personality traits attributed to female and male
characters have indicated that these are polarised
and stereotypical. A study of elementary school
readers carried out by Child et al. (1946) to investigate
what motives children in the readers developed, how they
learned to satisfy these motives and what expectations
they develop about the consequences of trying to satisfy
these motives in various ways yielded the following
results. The authors found striking differences in sex-
roles in their sample of readers. Female characters more
often showed affiliation, nurturance and harm-avoidance.
Males. more often provided information, manifested
aggression, achievement and behaviour directed at gaining
recognition.

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The researchers suggested that if girls identified with female characters and boys with male characters, the school readers must have profound effects on the development of personality in the two sexes. Their results showed that while males were portrayed as the bearers of wisdom and knowledge, the females were portrayed as sociable, kind, timid but inactive, unambitious and uncreative. Evidence of sex-stereotyping was apparent in these stories. Boys were consistently stereotyped as daring, intelligent and ingenious problem-solvers. They were portrayed as the doers, achievers, builders and sportspeople. They were also heroic and persevering. In contrast, girls were depicted as spectators of life, docile, pleasing and incompetent. They were also portrayed as admiring boys while they stand by passively holding dolls or other play objects.

School's instructional materials were also found to manifest sex bias in the extent to which they encouraged social growth and the development of skills in self-direction (Clyse, 1959). According to this investigation, whereas with respect to boys, school readers fostered the development of wholesome attitude towards self, towards various kinds of work, girls were portrayed as

second class humans. Male characters were presented
as having positive qualities such as independence,
bravery and leadership, whereas female ones were shown
as dependent, subordinate and needing help more often.

A similar study undertaken by Doulan (1972) to
investigate the personality behaviour traits and roles
assigned to female and male characters indicated
that female characters were presented somewhat negatively,
either as ineffectual creatures who needed to be dominated
by men or as aggressive monsters who must be destroyed
by men. In contrast, males were portrayed as emotionally
stable, and venturesome; they experimented more often
than females who were depicted as shy, conservative and
easily controlled by feelings.

The above findings seemed reaffirmed by the result
of a survey of reading materials to determine whether
they showed girls as being inferior to boys (Tibbetts 1978).
Tibbetts noted that more desirable traits we.e attributed
to male and less desirable ones to female characters.
Girls were tearful, whilst boys were active and brave.
In addition, the results indicated that the content of
female-male portrayal seemed quite restrictive.

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Females were admiring and well-meaning, while
males were always big, strong and wonderful.
(Lorimer and Long, 1980). With regard to contingent
traits, the authors found that females regularly took
on the traits of males in the absence of males; while
males remained much the same in the absence of females.

Similarly, the results of Lobban's (1975) analysis
of British reading schemes showed that female and male
roles were depicted as clearly demarcated. Females
were shown entirely in domestic roles; males were active,
instrumental and related to the outside world. In these
readers, boys led and rescued others, while girls followed
and served others. Similarly, Decrow's (1972) findings showed
women as helpmates, mothers and observers of male activities.

The result of an analysis of a series of social
studies books indicated that boys were presented as showing
initiative and being creative, while girls were portrayed
as passive, watching others doing things (Trecker, 1973).

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The findings of the cited investigations all
point to one fact: instructional materials teach far
more than they are-intended to do. Children who read
them are learning, sometimes, subliminally, how society
regards certain groups of people; and therefore, these
materials are likely to have a powerful influence on
pupils' formation of values, attitudes and self concept.
These, in turn, are likely to affect their life
expectations, achievement and aspirations. Our assumption
seemed to have been confirmed by the findings of the
studies reviewed. Perhaps as a result of female and
male characters having different personality traits,
the findings indicated that different roles and occupations
which seemed to match their supposedly natural inclinations
and characteristics, were assigned to each category of
characters. In most of the books, female characters
were depicted as having less mental perseverance and
moral strength than males and therefore were assigned
different roles and occupations based on their assumed
degrees of capabilities. It seems authors believe that men
possess those characteristics needed for success in the
professions, whereas women are not cut out
constitutionally for them.

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2.5.5   Activities óf Female and Male Character

Research reports have indicated that not only do
school's instructional materials portray more male than female
characters; assign different roles to each category and
attribute different personality traits to each sex, female
and male characters were also found to engage in different
activities.

The analysis of selected problems in mathematics
textbooks indicated that while men were banking, shareholding,
taking life insurance, their female counterparts measured
curtains and flour for a cake (Burstyn and Corrigan, 1975).
If it is only men who take part in problems in maths books,
it is likely that the female pupils may feel that maths
as a masculine affair, has no relevance to their lives.
Boys in maths texts solved problems in astronomy,
bought stock and life policy, while girls watched their
weight or as mothers, that of their babies.

The National Organisation for WOMEN (NOW) (1973)
analysed maths textbooks. It was found that some of
the problems were presented in social contexts which
discriminated heavily against girls. For instance:

- Brownies were cooking and sewing to raise
  money,

- Boys were building with father, thus stressing
  active work as relating to males,

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- In problems dealing with activities, girls
  were shown making sandwiches and boys
  building-dividers.

- Father took boys on camping trips, mother
  stayed at home and baked.

In addition, sets of boys were doing things, while
sets of girls were sorting things.

The findings of a study on most school subjects,
maths inclusive, indicated that most pictures in the
texts showed girls as passive and boys as active. Girls
were presented in word problem as sewing, baking, mopping,
making beds and washing dishes; whereas boys were portrayed
in more stimulating tasks such as climbing mountains,
running races and speculating in business transactions
(Stacey et al. 1974).

The analyses of school readers indicated that while boys
went on adventure, went to the moon, explored, made
discoveries, the girls took care of the sick, cooked,
married, looked after their families, and at best, trimmed
the garden and bought family supplies (Filippo, 1976;
Nilsen, 1971; Weitzman et al. 1975; Jacklin et al. 1972).

Investigations into social studies and history
texts revealed that female and male characters engaged
in different activities. Men were often depicted as

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making decisions, ruling, waging wars of conquest,

being voted for and as dictating the pace and tempo

of development and modernisation (O'Donnell, 1973; Kraft,

1973; Trecker, 1973; Mcleod, 1973; Jay, 1970;

Zimmerman, 1975).

In sum, almost all the sources cited indicated

that school's instructional materials were sex-biased,

both in terms of the number and quality of presentation

of female and male characters. The widespread concern

about the sexist ˙˙ reading materials stems from a belief

that what we read can affect what we believe about the

world and ourselves because fundamental cultural values,

as well as beliefs and attitudes are transmitted

through reading materials. Therefore, the study of

texts, especially at the primary school level, when

school children are in the process of forming identity,

values and attitudes, will go a long way in generating

an awareness of the subtle but powerful messages

inherent in these texts.

2.5.5   Cross-Cultural Studies of Sexism in Instructional Materials

It seems that sexism is a global phenomenon. This

is not surprising because most societies are male oriented

and therefore promote the dominant culture, in this case, that

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of males. A number of studies of school's instructional

materials from other societies other than Britain and

the United States have been undertaken and they all

seem to indicate that females are at a disadvantage

as are those in the two societies already examined.

The dominance of sexism in Indian school materials

has been pointed out by Kalia (1979). He analysed 42

English and Hindi literature textbooks and found that

authors and editors of Indian texts, as if catering

to a male readership alone, used nouns and pronouns

that excluded females in generalization about human

society. Not only were female characters in the majority

in fiction, but also about 75 per cent of the dominant

figures in the plots were similarly male.

There was another dimension to the Indian case

apart from the general view of the world as belonging

to man. Traditionally, Indian conception of womanhood

was similar to attitudes towards property generally.

As a daughter, the girl was expected to bask in her

father's glory; as a wife, in that of her husband. She

is regarded as being inferior and second-class citizen.

Therefore, Kalia's findings were not surprising.

The findings of a similar study in Israel were similar to those of Kalia. Selected Israeli school textbooks were subjected to analysis for evidence of sexual stereotyping (Zak and Kaufman, 1977). The authors developed an instrument containing sixteen personality traits. The results indicated that there were significant differences between the descriptions of females and males for thirteen of the sixteen measured traits. These traits were later compared to differences found in Israeli population. Only nine traits were significantly different in the Israeli sample, supporting the hypothesis of a stereotyped approach. Females were described as more warm-hearted than males, they were less intelligent, but more humble, accommodating, conforming, capricious, shy, timid and sensitive.

Sex-role stereotyping in children's text-books in America (U.S.) was contrasted to those of the German Democratic Republic (GDR) (Grund-Slepack and Berlowitz (1977). The researchers assigned the main character of each story to the categories of female, male, or other. In addition, each career role depicted for female and male was tabulated. A percentage analysis was used to compare the major character and career role

assignments in the books from the two countries.
Overall results depicted the image of women in GDR
texts as generally more positive than in the U.S. texts.
Females in GDR texts appeared more often in career roles,
and males were less dominant, whereas the US textbooks
were full of stereotypes. The difference in the
presentation of females in the two societies may be due to
the fact that the GDR people are more toughened as
a result of their landscape than the more leisurely US
citizens. Thus, the GDR people perceive their females
as close behind their male counterparts in a bid to
eke a living.

Another extensive cross-cultural study to
investigate differences in the portrayal of sex-roles
in basic readers included France, Rumania, Russia, Spain
and Sweden (Denmark and Waters, 1977). The researcher
analysed first grade texts from these countries for
females and males as central or peripheral characters,
the age-group, whether the female and male characters
were portrayed in traditional or non-traditional sex
roles by the standard of each country. The results
showed that the readers of all countries, except Sweden,
had more male than female characters. Taken all

over the group, the difference was significant.
Throughout Spanish books, no females exhibited problem-
solving behaviour, not even as mothers. The final results
showed that despite some differences in the status of women
and men in society, all five countries subscribed to
traditional sex-role stereotypes through basal readers.
It is surprising that Russia was as stereotypic as the
other countries under consideration. Judging from the
amount of opportunities given to women in Russia, one would
expect her instructional materials to reflect the status and
opportunities allowed them in society (UNESCO, 1982).

In contrast to Denmark and Waters' study, Howe (1970),
in her study of four children's books from the People's Republic
of China discovered that the books offered some helpful models
for textbook writers elsewhere. Chinese women were shown as
doctors, lawyers and factory workers; and in one book, there
were actually more pictures of girls than boys.

The result of a study which examined selected Mexican
reading primers published in 1960 with those of 1972
to determine whether there has been any significant
changes in stereotyping within the period, indicated
that no appreciable progress was made. In

both 1960 and 1972 primers, more than two-thirds of all characters were males and less than one-third were females. Hence, the authors concluded that both editions presented a distorted view of reality to the Mexican children who read them. Positive change was noted only in the area of major characters; in other areas, there was no change in the degree of stereotvpe.

The above studies and their findings indicated that almost all societies are stereotypic and communicate what they believe about females and males to their children via school's instructional materials, even in those countries where women have made some progress over their traditional status and roles. The implication of this finding is that studies should be initiated in all countries in order to draw attention to the presence of sexism in the socialization process generally and that within the school, in particular..

2.5.7   Sexism in Instructional Materials Spanning
         Historical Periods

Some studies of sexism in school's textbooks have adopted a comparative analysis within historical periods. The purpose of such studies was to determine among other aims, if women have always been denigrated, omitted and presented as subordinate characters; to assess whether there have been changes within specific historical

times or whether school's texts reflect changes that have been taking place in women's lives, especially in their roles and status in the larger society. Most of these studies reported little or no change in all the areas investigated (Hillman, 1974; 1976; Cadogan and Craig, 1976); Heinkkinen, 1978; Thum, 1977; Johnson, 1979).

Children's books for the period 1930 and 1960 were analysed for the purpose of investigating occupational stereotypes (Hillman, 1974). The findings indicated that women were still presented in the traditional roles of mother and wife in both earlier and later books, whereas men were depicted in a diversity of roles and professions within both periods. The author concluded that these books did not accurately reflect the reality of life in the 1960s, because by then, women were engaged in more varied roles and occupations than earlier on.

A similar study of play themes in children's picture books between 1945 and 1974 yielded much of the same results (Johnson 1979; Filippo, 1976). The researchers found no significant difference in the way later picture books portrayed female and male characters when compared to earlier ones. On one hand , females were still shown as being inferior, dependent and timid, on the other, male did not only outnumber female characters, but were also dominant and leaders in the books.

The findings of investigations into samples of winners
and runners-up of the Caldecott Award for twenty years indicated
that there were sex differences in the titles of the stories.
More males than females were the subject of stories, in the ratio
of 7:2. There were 579 male as against 386 female characters.
All had at least a male character, whereas women were absent from
six of the stories. A later analysis of similar honours book .
published for the period 1976-80 revealed the same results.

The findings of Nilsen's study were surprising because the
Caldecott publishers are reputable for the publication of school
textbooks. Therefore, one assumes that they must have taken part in
the publishers' guidelines of 1975. Perhaps, this trend suggests
that most publishers did not adhere to the guidelines, may be as a
result of time lag between policy and publication, or the cost of
producing new textbooks.

A study of textbooks published between 1911 and 1971 revealed
that males were nearly three-times more likely than females to be main
characters in a story. In addition, more recent books showed no
substantial improvement over the old (Graebner, 1972). The conclusions
of other studies of sexism in books spanning historical periods were
very similar to those cited above. Thum (1977) analysed five basic
references on American educational history published between 1940 and
1970. The findings were that there was bias, through the omission
of women and the choice of words.

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In a study of seventeen high school chemistry textbooks published between 1940 and 1975, it was discovered that male figures dominated all textbooks reviewed regardless of the time of publication or identification. Males were portrayed in a much broader range of activities than females (Heinkkinen, 1978). On one hand, one may conclude that the findings are rather strange as the outcome of a study on subjects that lay emphasis on objectivity, because it is clear that women took part in science activities of this period. On the other, the explanation for this situation may be an assumption by authors of a male universe in science and elsewhere, and an emphasis on the description of the male species and on "maleness" characteristics with a concomitant denigration of females and "femaleness".

The above studies seem to maintain that female and male characters have always been presented in stereotypical ways in books, whatever the period under consideration. But a study of a century of girls' fiction indicated that there was a tradition in which females were presented as autonomous, independent, active and often overtly feminine. However, these traits tended to be confined to adolescent school girls; when the heroine reached adulthood, or when women, apart from teachers were presented, there was a tendency for an earth-mother image to predominate (Cadogan and Craig, 1976).

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Even though one may see this trend as a slight improvement for women characters in children's books, it seems perhaps, the authors of these books were not fully convinced that women should assume those traits yet. In all periods, the researchers seem to suggest that sex-bias permeated school's textbooks, women were in the minority both as leading and supporting characters; undesirable traits were attributed to them, while men predominated as heroes and secondary characters, and were attributed desirable personality traits.

2.5.8   Sex-Typing in Non-School Materials

The literature review went beyond the official textbooks which children were mandated to read. Studies on pleasure reading materials and reference books were reviewed. The findings in these studies were quite similar to those obtained from studies which analysed textbooks.

The findings of an analysis of children's book review from three independent and reputable sources showed that women were depicted as housewives, whereas the wealth of occupational roles filled by males contrasted with the paucity of those filled by females. The dearth of women portrayed in the labour force does not accurately reflect reality.

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The findings of an investigation into children's
books to find out if any reading materials would portray
females and males in non-stereotyped manner indicated
that no such book existed. (Jacobs and Eaton, 1972).
The ratio of boy-centred to girl-centred stories was 5:2.

Adolescent reading materials were also found to be
sex-biased (Ketty, 1975). Ketty noted that while girls
were subjected to a dearth of desirable role-models, boys
might be harmed by the many examples of heroes whose
initiation into manhood involved pitting themselves against
nature and overcoming it by violence and killing.

A study of books for children available in stores
and libraries indicated that in the quantity and quality
of portrayal, girls were at a disadvantage (Fisher, 1969).
Female characters appeared in only 20-30 per cent of the
illustrations, girls were outnumbered by boys as leading
actors. Girls were depicted as passive, subordinate,
their roles were confused and limited. The researchers
noted that in spite of the fact that some studies showed
girls as superior to boys in the elementary school years,
these reading materials presented girls as incompetent.
In the area of vocation, it was observed that working
mothers did not exist in the world of children's books,
whereas fathers were expected to combine some professions
with fatherhood.

An examination of five sets of encyclopaedia recommended
for children's home use by the Reference Subscription Books
Committee of the American Library Association was undertaken
(Kraft, 1973). The purpose of the study was to answer the
question whether history materials intended to be used by
children provide adequate and accurate information on the roles
and problems of women, past and present. In addition to
general essays on women, articles dealing with various phases of
American history, such as the colonial period, the revolutionary
war, were analysed, as were cultural articles on dance, art,
theatre, music and science.

Kraft's findings indicated that there was a lot of omission
of women from important historical events, even the variety of
methods used by the 19th century women to press for reforms was
rarely presented. Only one set referred to the 1876 Declaration of
Rights of Women. The references omitted women of importance,
while simultaneously minimizing the legal, social and cultural
disabilities women faced. The findings included the fact
that there was little or no information on the lives and
problems of women during the last few decades. Also, the
achievements of individual women in commercial art and
illustrations were ignored. Articles on science rarely
included more than one individual mention of a woman scientist.

The findings of the above studies seem to suggest
that most of the sex-bias in books involves sins of
omission rather than commission. The references to
women which were offensive were often quite subtle.
Sometimes, the text dwelt upon superficial rather than
fundamental issues surrounding changes in woman's
position. Children are exposed to sex-stereotyped materials
at every turn in their lives. Sex stereotyping is
injurious not only to the female but also to the male
pupils as well, because, he too, is absorbing distorted
view of reality. The lack of role variation for
women creates in all pupils' minds a false impression
of the worth of the female in society.

2.5.9   Sex-Bias in Picture Books

In the early primary school years, most of the
contents of the books used are pictorial representations.
These picture books are usually introduced to children
even before they are of school age particularly in the
United States and elsewhere. Research findings have
indicated that the picture books were not spared of
sexism. They were replete with sex-stereotyping.

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Two factors make the picture books more crucial
than printed works. Firstly, children are exposed to
them even before they begin to talk and obtain most of
their impression about their environment from what they
can deduce from the picture books. Secondly, children
are more attracted to them because they come in bright
colours and also because of the fact that a single picture
can tell a whole story. They may, therefore, be more
powerful and more influential than are printed words.
A number of investigations have been conducted in this
vital aspect of instructional materials.

The findings of a content analysis of 64 picture books
based on play themes, indicated that the contents of the
picture books discriminated between the sexes (McVaugh. and
Johnson, 1979). The researchers were interested in who
played and why; in learning what the illustrations and the
authors seemed to suggest about the reason for play and
the purpose which they served in the stories. Some of the
findings indicated that when fun was being emphasized in
play and game stories, authors and illustrators were more likely
to depict boys and men than girls and women. In stories featuring
girl characters only, girls were shown as playing for fun, too.
But when girls and boys played together, other outcomes were
evident; 18:8 per cent of all 64 books analysed focused on
play for self-enhancement and invariably, .

boys were illustrated in such games and plays.
About 14.3 per cent of the total pictures in the
books were on girls only; 18.2 per cent for girls and
boys combined, while as many as 40.0 per cent of
illustrations depicted boys playing alone. The rest
7.3 per cent illustrated animals. In addition, boys
were portrayed as dominant in these stories; they
outnumbered girls in group plays and were most often
leaders of the groups.

The findings of another study are similar to those of
investigations previously reviewed. Of the 55 picture books
analysed, 25 have pictures of at least a woman, and of all
these, all but 4 have a picture of a woman wearing an apron
(Nilsen, 1971).

Similar analysis of 154 picture books representing
the work of 78 authors revealed that the content of
picture books was sex-stereotyped (Stewig and Higgs, 1973).
The analysis was based on representations of roles assigned
to women. The findings indicated that women indeed played
subordinate and home-related roles. Only 65 per cent of
the books included women in some roles. Of these, 83 per
cent of them showed women in home-making roles and only 17
per cent portrayed them in more professional roles, but
most of the time, in the traditional female roles.

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In sum, the findings of these studies seem to suggest that the women were under-represented in picture books. They were invariably depicted in traditional female roles. If children are exposed to these books which have been documented to be sex-typed, they are bound to have profound influence on the formation of values, personality and world view of children. This is because, children's interaction with these materials usually begins very early in their lives when they are impressionable and beginning to make some sense out of their environment. In addition, the messages of picture books are more likely to be easily recalled by children than are those of printed words. Therefore, in addition to other forms of reading materials, attention should be directed to picture works, because they come into the child's life much earlier than any other.

2.5.10 Sexism In Instructional Materials After The Issuance of Guidelines

The general awareness about sex stereotyping in school's instructional materials resulted in policy statements by governments (1972); National Committees on Women (1972); Women on Words Images (1972) and publishers. Guidelines aimed at minimizing sexism in published works were issued. However, after these

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guidelines, a number of studies have been conducted
which revealed little or no change in the way female
and male characters were presented in these materials.

In order to determine if the newer series reflects
a change in the roles, activities and the relative
importance of female and male characters, a content
analysis of Houghton Mifflin reading books was undertaken.
The findings showed that stories featuring girls
decreased by 23 per cent. There were more boy-centred
stories, while girl-centred ones decreased by 53 per
cent from 1966 to 1971. Ten male biographies were
listed compared to two for females in 1971. Long varied
list of male occupations in 1966 was increased in the
1971 edition, while the small number for women remained
the same. Mostly, traditional jobs such as nurse, librarian,
teacher, waitress were assigned to women, although such
non-traditional ones such as astronaut, council-women were
added in the 1971 edition. The themes   of stories
featuring boys were adventure, heroism, achievement and
problem-solving while those of girls' stories were school
and family, and lately, adventure and   rescue in
the 1971 edition. The   researchers   concluded that
the 1971 Houghton Mifflin series did not reflect a

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significant departure from the 1966 series in
the manner females and males were presented.

Still focusing on the publishers' role and efforts
at minimizing sex-typing in instructional materials,
maths textbooks from eight publishers, chosen on
the basis of recent publication dates and wide use
of the series in schools, Kepner and Koehn (1977),
analysed first, fourth and seventh grade texts to
determine whether stereo-typing had persisted in activities,
occupations, illustrations and written problems.
The findings indicated that only one book out of a total
of twenty-four depicted equal number of female and male
characters; while two books showed more females, 51 per
cent, than males. In two others, over 90 per cent were
males. Equal representation occured in only one book.
Two included more females than males, 49 and 51 per cent
respectively in the problems. Males were portrayed in
a greater diversity of occupations than females. For
men, there were those of bankers, lawyers, doctors, builders,
football players, salesmen and astronauts.

It seems that changes have been minimal after the
publishers' guidelines; the new products seemed to be
teaching more or less the same "hidden curriculum" as the
preceding series. It may therefore be argued that the
publishers and authors of these books were simply mirroring
the real world and that they should not be expected to

provide a false picture of equality. But reality belies such as assertion. Children encounter women far more frequently and in more occupations, roles and activities than the average textbook would suggest.

In another study whose purpose was to assess how much publishers have adhered to the guidelines, 120 books representing two temporal periods, 1930s to the middle of 1970s were analysed (Hillman, 1974). A comparison between the decades indicated that males were more numerous than females in both the early period and the recent one. The range of occupations for males was much broader than for females. Males were shown to be physically aggressive and competent in both periods, and females retained the characteristics of affiliation and dependence. However, aspects of masculinity and feminity that conform to stereotypic traits were more prevalent in the early period than in the recent time, thus denoting some latitude of sex-role standards over the decades.

The findings of another study which compared the treatment of females in American history textbooks available in 1971-76 to their earlier treatment between the period showed that there has been little substantive change over the period as history was still "he-story." (Smith, 1977).

However, contrary to the findings of the above studies on the issue of presentation of balanced information on females and males, Zimet (1970) in the study of primers

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spanning 1900-1966, indicated that modern primers
presented girls and boys in undifferentiated activities.
However, he noticed more diffusion or ambiguity of
sex-roles in the recent books.

Several guidelines were issued on Social Studies'
instructional materials by different groups (American
Education Association, 1972; Women's Committee, 1972; Scott,
Foresman and Company, 1973). An analysis of new editions
of social studies textbooks published by six companies
was compared with a 1965 analysis of books published
by the same companies (Zimmermann, 1975). The purpose
of both analyses was to determine what people were mentioned,
their race and sex. The findings were that in the new
textbooks, the most frequently mentioned people were
George Washington and Christopher Columbus. The study
also aimed at examining racial discrimination especially
against American Blacks and Indians. The new books,
included names of more black people than the older ones;
but the frequency was not high. The American Indians
received even less attention. In relation to sex
discrimination, in the older books, only 2.3 per cent
of all sentences about individuals concerned women;
in the new books, that percentage was 3.4.

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Zimmermann's findings in relation to sex-stereotyping
were similar to those of Lindbeck (1975). Lindbeck reported
the results of a content analysis of one elementary reading
textbook, four American history and four biology textbooks.
The purpose of the study was to determine if there had
been a change in sex stereotyping in elementary books
since 1971, and if the current books contained sex-
stereotyping. His findings was that males were still
predominant; girls continued to be portrayed in passive
roles and boys in active ones (Britton and Lumpkin, 1977).

Textbooks mirror society. They may distort; they may
present only a segment of the whole picture. Nevertheless
they provide one means of judging what a society wishes
to pass on to its children. When the attitudes of a
society are changing, its textbooks may not reflect the
changes for some years both because of the time it takes
to write and publish new books; and authors may hesitate
to adopt new attitudes before they become part of the
way of life of the majority. This may be one explanation
for the state of affairs after the issuance of guidelines.

2.5.11 A Summary of the Findings of the Studies Reviewed

In sum, the findings of the studies reviewed
indicate that school's instructional materials were
permeated with sexism. The authors of these research

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works seemed to be definite in their description of
sexist content, as that which:

- presents more males than females.

- portrays males in more and wider variety of
  occupations and roles than females.

- depicts a majority of female characters
  in passive, subordinate and incompetent
  roles; and a majority of males in active,
  dominant and capable roles.

- attributes desirable personality traits
  to males, and undesirable ones to females.

- presents females as people to be belittled
  and denigrated.

- uses male pronouns, male hypothetical
  persons and male generic terms to refer
  to all humankind, and as a means of
  precluding women.

- through the acts of omission or commission,
  presents a "he-story" as if women are non-
  contributors to the course of social,
  economic, historical and aesthetic life
  and, finally.

- plays down the struggles, problems, achievements
  and changes taking place in women's lives.

In the textbooks presented to children as bearers of truth
and facts, boys are told that they must be dominant, ingenious,
confident, that they must have an occupation; while girls are
told to be submissive, dependent, docile and incompetent.

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There is no doubt that reading materials are a powerful socialization tool which transmits messages to children concerning sex-role behaviours, social attitudes, values and expectations.

Several of the authors cited emphasised the far reaching effects of sexist educational materials on the emerging personality of children and on the attitudes they carry into adult life. Through a process of observation and modelling (Bandura and Walters 1963); and that of cognitive-development (Kagan, 1964; Kohlberg, 1966), sex-typed behaviours are incorporated into a child's repertoire, particularly if such behaviours are continually reinforced. Thus both real and vicarious models in instructional materials produce imitative behaviours in children. Their attitudes, beliefs, aspirations and roles are formed by the kinds of reading materials they are exposed to. The way females and males are treated in instructional materials, may teach children the status and expectations society accords the two categories of people; and it is clear that these are different. Children are likely to imbibe these differential expectations and roles of women and men through subliminal repetitious implanting of the bias presented in school books.

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Adult models in school's instructional materials
are likely to reinforce sex-stereotypes. The men in
the texts do a variety of exciting and financially
rewarding jobs, and have a wide range of career
possibilities. Occasionally, women in these texts work,
but only in the sex-typed jobs. The likely result is
that a girl in search of inspiring models, reading
these books, is offered a meagre diet. In addition,
there is far too much that is degrading and humiliating
as well, that teaches a girl not to strive, not
to achieve and to be unobtrusive , even when the realities
of life around her are more positive.

Many of the sources cited have shown that
instructional materials are sex-biased and therefore
are likely to have far reaching effects on the
personality traits developed by girls and boys who
are compelled to read these materials. The present
study will attempt to investigate the specific influence
of the school's hidden curriculum - instructional materials
inclusive - on the self-concept, educational and
occupational aspirations and expectations of school
girls and boys. In addition, an attempt will be
made to compare the American school children with
their Nigerian counterparts on these variables.

Even though a lot of research work has been done in America on the issue of sexism in the schooling process, as far as this writer is aware, not much research attention has been focused on this problem in Nigeria. Nevertheless, one can conclude with some confidence that most of the findings of the studies reviewed are relevant to the Nigerian situation, in view of the fact that the organisation, structure and artefacts of schools are universal, and also because the Nigerian school system has borrowed heavily from occidental societies. This claim is supported by the findings of a pilot study conducted by Abe (1985). Selected Nigerian elementary school readers were subjected to content analysis, and the findings were similar to those of other researchers cited. Men predominated as both central and supportive characters in these texts; a wider range of occupations and roles were open to male and more restrictive options to female characters. Of all the occupations listed, 85 per cent were filled by males, while 15 per cent were occupied by females. The relatively higher number of occupations assigned to male signified the choices unavailable to female characters.

In all of the female occupations, except that of a fairy, none involves the exercise of leadership or power over

others; while male characters were assigned the
roles of master, chairman and king in some of
the stories analysed. The occupations assigned
to female were essentially of low prestige, neither
requiring extensive training nor substantial
reward in the labour market. Apart from a strong
evidence of occupational stereotyping, female
and male characters were found in different
environments doing different activities. Abe
concluded that the roles and images assigned to female
and male characters were typically stereotyped and
unrealistic of the recent development and
contribution of woman, especially, the Nigerian
woman, who is making a great impact on all aspects
of the Nigerian society.

The present study is a larger effort in
investigating sexism in the school' hidden
curriculum and its likely influence on the self-
concept, educational aspiration, career preferences,
and expectations for women and   men, of America
and Nigerian primary school children.

2.6.0   Studies Relating to Selected Aspects of
          Teacher-Classroom Behaviour

Teacher-classroom behaviour, especially
interaction patterns as an integral aspect of
the school environment, has been a subject of

several studies (Jackson, 1968; Jackson and Lahademe, 1967; Brophy and Good, 1969; 1971; 1974; Good et al. 1973 and Slobodian 1967). In the present study, it deserves a special attention because it has been included as one of the operational definitions of the hidden curriculum, and therefore a crucial medium of sex-role socialization. Interation patterns as part of teacher-classroom behaviour, include who talks with whom, in relation to which situation, how much of a lesson is teacher taught, who initiates interaction, who is criticized, and who is praised? Is there sex difference in these operations? One finding of most studies is that a different pattern of interaction emerges for girls and boys.

Recent research workers on the problem of sex-stereotyping in the schooling process have focused on course materials. There is the need to study teacher-classroom behaviour which include interaction patterns because instructional materials may only be one medium of sex-typing in schools.

2.6.1 Studies relating to Teacher-Pupil Interaction

The result of an investigation into how teachers dispense reward and approval in three sixth grade classrooms

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in the United States indicated that both classroom observers and children noted that teachers expressed greater approval of girls and greater disapproval of boys (Mayer and Thompson, 1963). It has been observed that boys received more prohibitory control messages than girls (Jackson and Silberman, 1971.'.

The findings of the above studies can be explained in terms of the values and sub-culture of the classroom. The school expects its subjects to be quiet, docile, conforming and obedient. Researchers such as Jackson (1968) suggested that these values more or less coincide with those which girls have been trained for at home. Thus, when they get to school, they fit perfectly well with its norms and therefore, the teacher only needs to approve of these behaviours. On the other hand, boys have been socialized to be dominant, active and venturesome. Such tendencies as these often lead to disruptive behaviours which are usually the opposite of what the school expects. Consequently, these disruptive behaviours elicit disapproval from the teacher.

Not only are boys disapproved of more often than girls, research evidence seems to suggest that teachers interact more with them in four major categories of teacher-classroom behaviour which comprised of approval,

instruction, listening to the child and disapproval inclusive (Sears and Feldman, 1966). The researchers found that boys received more than their fair share of teacher attention. They discovered that teachers not only reprimanded boys more often than girls, but also talked with them about subject matter more frequently, and listened to what they have to say.

Although it is difficult to assess the impact of this attention, including negative attention on boys, Jacklin (1966) has suggested that one consequence of it might be a cumulative increase in independent and autonomous behaviour of boys as they are disapproved of, praised, listened to and taught more actively than were girls by the teacher.

The findings of the study by Sears and Feldman included the fact that girls were more often criticised in class for wrong answers and boys for misbehaving. Based on Jacklin's suggestion, it is possible that after years of getting less attention of all sorts from teachers and getting criticised for incorrect answers, girls may withdraw in certain ways from classroom activities and learn to think of themselves as less important in the learning process. This kind of attitude on the part of girls may result in the lowering of self-esteem.

Similar to the findings of other studies, Gates
(1961) observed that sexism operates unconsciously
in the classroom by virtue of the greater degree of
attention which teachers pay to male than female
pupils. Gates (1961) and Jacklin (1966) argued that
in a mixed class, boys may claim more of a teacher's
attention than girls because their behaviour is
noisier and potentially disruptive than that of girls,
and also because they usually rebel against the docility
and conformity doctrine of the classroom (Davis and
Slobodian, 1967; Brophy and Good, 1970; Good et al. 1973).

The observation of four grade six classrooms which
involved counting teacher-pupil interactions, noting
who initiated them and coding each according to whether
this was primarily instructional, managerial, and
prohibitory, indicated that in each classroom, there
were on the average, a total of 109 interactions every
hour. Out of these, 80 were instructional; 14 managerial
and 15 prohibitory. Almost all of these disciplinary
messages were directed to boys. In one particular class,
108 out of the 120 reprimands were directed to one or
another of the 17 boys in the class. Of particular
interest was the researcher's observation that in
each of the classrooms, there were great inequalities
in the distribution of teacher-pupil contacts (Jackson
and Lahademe, 1967).

Unequal distribution of teacher-pupil contacts
in favour of boys might have arisen because boys
usually have a greater tendency to rebel, which is
met by teachers' reprimands, leading to greater
teacher attention. Hence, in several school contexts,
differential treatment of, and expectation from the
sexes are unconsciously considered as normal.

In another study of four first grade classrooms
in a small Texas school district, even when equal
treatments were extended to both sexes, Good and Brophy
(1974) noted that boys received more criticisms from
their teachers because they exhibited more disruptive
behaviours than girls.

The findings of an earlier study carried out by
the cited investigators (Good and Brophy, 1969)
indicated that although there was no sex difference,
boys were found to perpetuate more disruptive
behaviours than girls. Similarly their (1974) study
showed that teachers not only interacced more with
males than with females, but also that males were
asked more abstract questions while females were asked
mostly low-level factual questions. Furthermore, when

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unsure of answers, girls remained quiet, while males took a risk and guessed. These patterns have been found equally with female and male teachers.

However, in their study of secondary classroom, Good and Brophy (1973) did make a distinction between boys with respect to their ,reception of teacher attention. They found that even though teachers of both sexes. interacted more with female and male pupils, they directed more of their efforts at high-achieving rather than to low-achieving boys. High-achieving boys far surpassed all other pupils in the amount of positive contacts. they had with their teachers, whilst low-achieving boys received more behaviour related reprimands than any other group of pupils. 'Bright' girls received less encouragement than 'bright' boys, whilst low-achieving girls received as much teacher criticism for academic failure as their male counterparts.

Another study which investigated the social-emotional structure of children in 39 elementary classrooms yielded similar findings as most of the cited investigations (Lippitt and Gold, 1959). Lippitt and Gold also studied teacher-student interaction of a sub-sample comprised of high and low status girls and boys. They noted that teachers paid more attention to the social behaviour of low status, than to that of high

status students. Whilst low status girls received
more support than high status girls, low status boys
received more criticism than high status boys. Low
status girls were found to be more passive and withdrawn
than high-status girls, whereas, low status boys were
more aggressive and troublesome than high-status boys.
Low status girls who may also be poor academically tend
to receive scanty attention compared to other categories
of children in the classroom.

2.6.2   Studies Related to Teacher-Feedback in the Classroom

A major aspect of teacher classroom behaviour is
teacher-feedback; and most studies on differential
treatment of girls and boys focus on the frequency and
the quality of the feedback which teachers provide
pupils. Somewhat surprisingly, most studies report that
teachers seem to discriminate between girls and boys.
Vroegh (1976) observed that boys are scolded more often
and are corrected more frequently than girls for minor
classroom misbehaviour. However, although girls were
said to receive more instructional contacts and more
praise than boys (Biber et al. 1972); Serbin et al. (1973),
indicated that girls receive less teacher praise and
instructional assistance than boys.

Some studies on task relevant feedback have demonstrated that fewer of the negative statements directed at boys concerned the intellectual ability of their work (Dweck et al. 1978). In contrast, negative feedback to girls usually focused on the quality of task performance. With regard to positive feedback, Dweck and associates noted that boys were praised more than was contingent on academic performance. Girls received positive feedback on the form of their work and on its neatness. The findings of Dweck and associates point to the subtle interaction among teachers and pupils that may have implication for sex-role socialization of girls and boys.

In a subsequent experimental study, Dweck et al. (1978) found that this differential feedback pattern increased the probability that boys would attribute their failures to lack of effort whereas girls tended to attribute theirs to lack of ability. Dweck argued that this decreased girls self-confidence and subsequent achievement.

Consequently the fact that girls usually receive feedback only on the procedure and form of academic work, may lead to the problem of not being able to identify areas of academic incompetence for improvement. Thus, they come to feel that they are not as capable as the

boys whose feedback are more often than not on academic work. Such negative self-concept is likely to affect their academic performance.

Similar studies of differential feedback have suggested that boys received more overall attention, more explanatory and attributional remarks irrespective of the academic or procedural concern of the moment (Blumenfeld et al. 1977).

Dweck's findings have been corroborated by those of another study of sex-role socialization in nine first grade and fifth grade classrooms (Blumenfeld et al. 1979). The outcome of the research was that positive information about academic performance focused on girls' mastery of procedure. It was also discovered that 80 per cent of positive information to boys are content-related than format-related; whereas 96 per cent of positive information to girls was format-related. However, a higher proportion of negative information to girls was content-related (79 per cent as against 65 per cent to boys).

The cited authors have shown that there are striking differences in teachers' handling of girls and boys. They also seem to agree in one major area that is of critical importance to the present study and that is, that a high proportion of teachers'

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socializing effort is directed at boys as opposed
to girls. Despite the clear evidence of differential
treatment of girls and boys, the effect of this feedback
on students is debatable. To give an example, Weinstein
and Middlestadt (1979) found few sex differences in their
study of children's perceptions of differential treatment,
while Blumenfeld et al. (1979) discovered that girls were
more receptive to the socialization messages of teachers
than boys.

Recently, findings of some studies have shown that
teacher behaviour is quite varied across aspects of the
curriculum (Soltz, 1979), and across types of
instructional activities (Doyle, 1977); Westbury, 1978;
Bossert, 1979). Hence, it seems likely that the
consequences of variable teacher behaviour across subjects
and activity may be that girls and boys experience
quantitative and qualitative differential treatment in
different subjects and aspects of the curriculum.

The above generalization is substantitated by several
findings. To give an example, different interaction
patterns for female and male students were identified
in social studies classrooms (Hedrick and Chance, 1977).
The average ability females were found to raise their
hands less often in response to questions; they initiated
fewer questions and statements than·males of equal ability.

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They never engaged in 'call-outs'. Furthermore,
teachers gave more opportunities to average ability
males than to their female counterparts. There was
no significant difference between the grades of average
ability females and males. Therefore, the researchers
concluded that the females' lack of assertive participation
was unlikely to be due to less knowledge of the subject
matter. It was suggested that average ability females
responded to the influence of sex-role norms pertaining
to assertive achievement sooner than high ability females,
since they do not experience the rewards of academic success
to offset sex-role counter pressures.

In the same vein, Spaulding (1963) found that American
teachers accorded boys' efforts in the class more approval
than they accorded to the girls' work in American classroom.
If there is differential feedback to the work of girls
and boys, usually to the disadvantage of girls, their
motivational level may be lower than that of their male
counterparts (Lavach and Lanier 1974-75; Dweck et al. 1978).

Research evidence seems to confirm the earlier findings
on teacher's differential treatment of girls and boys.
Martins (1972) found that teachers gave significantly more
response opportunities, reading and citation turns,

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work contact, procedural contact and non-academic behavioural contacts to boys than they gave to girls. Further analysis of data indicated that a particular group of boys, those whom the teacher classified as behaviour problems (Sears and Feldman, 1966; Gates 1961; Jacklin, 1966; Jackson and Lahadern, 1967; Good and Brophy 1969), accounted for the bulk of teachers' contacts with boys. Girls whom the teachers classified as having problems that were equally severe received significantly less attention than the "problem boys".

Martins suggested that it is the "problem boys" rather than boys in general who are favoured by the teacher because these boys express their problems via acting-out behaviours which are salient to the teacher because they disrupt the class. He also suggested that primary school girls with problems may be neglected by the teacher to an even greater extent than the rest of the girls. If these "problems girls" happen to be academically poor, then they are triply doomed (Good and Brophy, 1973; Lippitt and Gold, 1959).

Almost all the cited sources agree that teachers' classroom behaviour is sex-differentiated, and that boys receive more of teacher contacts than girls. Boys are criticised, reprimanded and disapproved of more often

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than are girls. In terms of qualitative interaction, more academic contacts and leadership assignments are directed to boys than to girls. Teachers were more directive with boys than girls regardless of the type of classroom grouping or subject matter. Teacher-feedback was also found to be different for girls and boys. The consequences of differential teacher-feedback for school girls and boys is the subject of the next section of this review.

2.6.3 Consequences of Differential Teacher-Feedback

It is evident that the interaction experience of the child in the classroom may reinforce the already partially formed sex-role stereotypes girls and boys bring to it. For instance, at home an independent life style has been fostered expecially for boys. But in the classroom where many pupils are packed, individual activity is frowned upon. There, docility, conformity and quiet are the requirements. More often than not, boys will rebel against these expectations. Each rebellion brings about not only increased teacher disapproval but also increased attention in general (Johnson and Greenbaum, 1980; Fisher and Waetjen, 1968). As boys refuse to buy these messages of docility and conformity, as they interact more directly and actively with the teacher, their approach to learning becomes increasingly autonomous.

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Similarly, if the young girl has experienced sex-typing at home, it is likely that she will enter school already somewhat compliant and passive. These characteristics are well in line with the norms of the elementary school (Biber et al. 1972; Brophy and Good, 1973; Smith, 1973). She therefore spends a greater part of her time competing for teacher's reward by engaging in those activities which ensure she does not get the teacher's disapproval but her or his praise. This situation probably explains why elementary school children felt that girls are more favoured by their teachers than are boys (Davidson and Lang, 1960; Mcneil, 1964; Mayer and Thomson, 1956; Spaulding, 1963). However, on the long run, the little girl develops such personality traits as dependence, conformity and passivity; traits that are likely to make her have low self-concept which may affect her motivational level, expectations, job aspirations and achievement in general.

The foregoing is not likely to be the only consequence of differential interaction. Rosenthal and Jackson, (1968) have shown that teacher's expectations concerning pupils' ability affect the amount of attention that they pay to particular students and hence pupils' attainment. If these teacher expectations have an impact on the students,

then it is likely that teacher's sex-role expectations inherent in his interactions with girls and boys, will have an influence on the sex-role socialization of primary school children (Silberman, 1968). More explicitly, it has been demonstrated that differential teacher behaviour can also have a positive or negative effect on child's self-concept.

Another crucial aspect of teacher-classroom behaviour is role-opportunity structure which includes such activities as placing pupils in reading and maths groups; placing them near or far from the teacher's table, calling on certain pupils to respond or explain class work; appointing children to class and school jobs and to leadership roles. Sex-role messages may be convey.ed through the differential assignment of girls and boys to academic and non-academic roles in the classroom. This aspect of teacher-classroom behaviour is considered in the section that follows.

2.6.4 Studies relating to Sex Differences in Classroom Role-Opportunity Structure

Research evidence suggests that the wheel of opportunity does not operate randomly in the classroom. Teachers treat pupils differently; and pupils do not get

equal classroom opportunities nor do they get equal amounts of praise from their teachers (Good, 1970).

Role opportunities have been studied in relation to children's social class, race and ethnic background (Rist, 1970). Differences in sex-role opportunities are suggested in Lockheed and Harris' (1977)work on leadership, and Guttentag and Bray's (1970) observation of girls and boys' sport participation. In addition, opportunity structure has been extensively described in classroom studies of differential treatment of children.

Analyses of the relationship between the role-opportunities in academic tasks and the socio-economic and racial composition of the class indicate that majority children dominate the top positions in the achievement hierarchy. Their status is consolidated by the fact that they are given more opportunities to demonstrate competence than minority children. Although an analysis of sex status has not been undertaken, one may infer that the arguments in respect of ethnic and socio-economic variables also pertain to the achievement, self-concept and job aspiration differences that girls and boys may display as a result of schooling.

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For instance, because girls tend to have a higher
achievement level in reading (Anderson et al. 1956;
Dykstra and Tinney, 1969; Gates, 1961); they are more
likely to be given opportunity to display and improve
upon their skills than are boys. Girls' position in reading
is hereby bolstered and the sex differentiation in that
subject matter is reinforced. A similar effect may occur
for boys in science and mathematics. This argument points
to subtle interactional patterns that may emphasise
differences in girls and boys' performance and self-
conception. Thus, a teacher's interactional style may
reinforce sex-role socialization by providing different
opportunities for girls and boys to perform academic and
non-academic tasks.

2.6.5   Conclusion

In concluding this section, Byrne's (1978) assertion
that teachers' attitudes, which are acted out in their
interaction, feedback and role assignment inclusive, may
well be more accountable than we realize for the
persistence of different interests, activities, self-
concept and vocational aspirations of girls and boys in
the primary school. It is not unwarranted to suppose that
such differential training received from the interactions
in the classroom will lead to different expectations and

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self-concept for girls and boys. Good and Brophy (1970) have shown that differentiatial teacher treatment and expectations are communicated to pupils in ways which would tend to cause them to produce reciprocal expectation.

It seems, therefore, that the effect of sex-differentiated teacher-classroom behaviour and attitudes to pupils is not in doubt. Whilst it is unclear why teachers behave the way they do, the implication of their behaviour to sex-stereotyping can be rationalized. As the boys are disciplined, praised, disapproved of, listened to and taught more actively than girls, there is a cumulative increase in independence and autonomous behaviour in boys. By comparison, there is lowering of self-esteem generally for girls as they receive less attention and are criticised more for lack of knowledge and skills. The situation may explain why girls lack confidence in their abilities to undertake subjects perceived as difficult, such as mathematics and science, whereas, boys tend to find difficult subjects challenging (Kepner and Koehn, 1977).

If at the primary level, girls conforming tendencies, passivity and docility are reinforced and therefore cope better in terms of teachers' reinforcing these tendencies;

and boys are indirectly reinforced for independence,
autonomy and critical thinking as teachers disapprove
of their behaviours because they are regarded as
disruptive to classroom life, it is likely that there
would be differential school outcomes for female and
male pupils. They are therefore likely to develop
different personality, characteristics, aspirations and
preferences. The process of this differential school
outcome for girls and boys is central to the present
study. It is being postulated that differential teacher-
classroom behaviour to girls and boys may account for a
significant part of the process.

The studies reviewed relate to the developed societies,
to the United States of America, in particular.
Differential teacher interaction with girls and boys
has not been documented for Nigeria and other African
countries. Few exceptions exist. Biraimah (1980)
reported the findings of a study on differential treatment
of female and male pupils with regard to student
responsibilities and leadership role from a neighbouring
country - Togo. These findings may have some relevance
for the Nigerian situation. Biraimah observed that of
all 20 class and school prefects, who had much responsibility
and power, only one was female; girls did all the sweeping

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before class and were called upon three times as often
as their male counterparts to do in-class maintenance
tasks such as cleaning the boards and returning papers.
Biraimah concluded that students internalize teachers'
attitudes and expectations, classroom interaction messages
and those implicit in the school's authority structure.

CHAPTER   THREE

P R O C E D U R E

3.0   Introduction

The study reported in this thesis occurred in four phases:

A. Selection of the location of the
   research and the sample of the study.

B. The development of the research
   instruments.

C. The administration of research
   instruments.

D. Procedure for the statistical
   analysis.

3.1   Location of the Research:

Two primary schools in the Lagos metropolis were chosen

for the research.   These were the American International

School, Victoria Island (AIS), and Maryland Convent Private

School (MCPS).   The choice of schools, especially the American

one was crucial to the present study because its major

objective was to compare the influence of the hidden

curriculum on the sex-role socialization of American and

Nigerian primary school children.

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Ideally, there should have been two locations
for the study, namely Nigeria and America, but because
of constraints of money and time, the study had to be
limited to one, Lagos, where a replica of the American
model was available. The choice of Lagos was particularly
suitable in view of the fact that as a cosmopolitan town,
it attracts people from all over the world generally, and
from all parts of Nigeria in particular. It would have
been difficult to find outside of Lagos large population
of American citizens whose children attend a common school.
But the cosmopolitan nature of Lagos also presented some
problems for the research design of the study, in that
it turned out that a large proportion of the student
population of the American school were non-Americans,
namely Europeans, Australians, and Africans, thus leading
to a difficulty in making generalization about the home
background of the American school children. However,
the above limitations of the research design was not
grave in view of the fact that the administration,
the staff, the syllabi and the instructional materials
of AIS, which constituted important components of
any school system, were all American.

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3.2   Criteria for the Selection of Schools;

        As was previously stated, the AIS was chosen because

it was the only American school available in the Lagos area.

MCPS was selected because the comparative nature of the

study necessitated the choice of a Nigerian school that would

match AIS on such criteria as school climate, organisation and

student composition, while at the same time, ensuring that

the distinctive characteristics of both systems of schooling

were preserved. Other high status schools in the environment

could not be chosen because they have foreign curriculum and

orientation. MCPS seems to be indigenous and at the same

time matching AIS on some criteria. For example, they were

founded in the same year.

3.3.1   Sampling Procedure - The Classes

        Classes one, three and six of AIS and MCPS were chosen

purposely for some reasons.   To investigate several

components of the hidden curriculum on the sex-role

conception of children, the research design called for

the inclusion in the sample children at entry, middle

and exit points.

        Class one, as the entry into formal education system,

constitutes the beginning point of formal socialization

in general, and school-related sex-role training in

particular.

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Class three is equally important because it occupies an intermediate position in primary education, and therefore, represents a suitable point at which one can measure the pupils' sex-role attitudes and concepts, especially with respect to the contribution of the school towards the development of these sex-role concepts.

Class six is critical because it is the final year of primary education. It was assumed that by this point, children's values and conceptions, and expectations about being female and male would have somewhat crystallized, not only as a result of the informal familial socialization process but particularly as a product of their encounter with instructional materials, teacher-classroom behaviour and evaluation, which most often, are assumed to convey unintended gender-related messages to them. The rationale for the choice of classes one, three and six was that if the gender-related hidden curriculum of the school was operating as we expect, there would be a progressive manifestation of the sex-role perception as children moved up from class one to three to six.

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3.3.2 Subjects of the Study: Children Sample

Initially, the researcher intended to have each arm of the three classes represented among the subjects to facilitate an increase in the numbers of teachers who would participate in the study. However, that original intention was hampered at various level. First, there was an initial difficulty encountered at AIS with respect to obtaining co-operation with the research design because of the amount of school time the research would consume. Second, ultimately, permission was granted for the use of only one of the two arms of each class at AIS. Since only one arm of the three relevant classes was offered in AIS, that automatically placed a limit on the arms that could be used in MCPS.

Simple random sampling technique was employed to select from the schools one arm from classes one, three and six. From each of the selected arms, 20 subjects, made up of 10 females and 10 males, were finally selected, also by applying the random sampling technique. The number of subjects from each class was limited to only 20 as a result of the fact that AIS operated small classes of between 20 -25 students. Only 20 could be chosen for each class in order to obtain a comparative number from the two schools.

In all, 120 pupil subjects, 60 girls and 60 boys from both schools were involved in the study. Their age

ranged between five and twelve years with a mean of 7.8. Table 3:1 below illustrates the age distribution of pupil subjects.

Table 3:1 Showing Age Distribution of Pupil Subjects:

School	Age	in			Years				Total
	5	6	7	8	9	10	11	12	
*AIS	0 (0.0%)	19 (31.7%)	15 (25.0%)	6 (10.o%)	0 (0.0%)	16 (26.7%)	3 (5.0%)	1 (1.7%)	60 Approx. (100.0%)
**MCPS	13 (21.7%)	5 (8.3%)	18 (30.0%)	4 (5.7%)	1 (1.7%)	13 (21.7%)	3 (5.0%)	3 (5.0%)	60 Approx. (100.0%)
Total	13 (10.8%)	24 (20.0%)	33 (27.5%)	10 (8.3%)	1 (0.8%)	29 (24.2%)	6 (5.0%)	4 (3.3%)	120 Approx. (100.0%)

* Mean Age = 7.9 years

** Mean Age = 7.7 years

The nationality of our sample is as shown in the table below.

Table 3:2 Showing the Nationality of Pupil Subjects:

School	American	Nigerian	Others	Others
AIS	29 (48.3%)	17 (28.3%)	14 (23.3%)	60 Approx. (100.0%)
MCPS	0 (0.0%)	60 (100.0%)	0 (0.0%)	50 (100.0%)
Total	29 (24.2%)	77 (64.2%)	14 (11.6%)	120 (100.0%)

One limitation of the study with respect to the ethnic background of the Nigerian pupils deserves special mention. In view of the fact that MCPS was composed´ mostly of Yoruba and Ibo children, the findings of the study cannot be strictly generalized to other groups such as the Hausa, who were not represented in the sample.

3.3.3   Subjects of the Study: Adult Subjects

As previously mentioned, the researcher intended to have a fairly large number of teachers to participate in the study because it was felt that since the central thesis of the study stipulated that teacher-classroom behaviour, among other school factors influence sex-role development, teachers should be adequately represented. As mentioned earlier, the reasons why we could not have a larger teacher sample were the same as those which restricted the selection of our pupil subjects. The teacher sample size was further limited by a school practice in which specialist teachers handle special subject areas across junior and senior classes. Hence, Mathematics and Social Studies' teachers were the same for classes three and six.

Our adult subjects, therefore, included the six class teachers in charge of the selected arms of classes one, three and six in both schools; 6 subjects

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teachers of Mathematics and Social Studies; 120 mothers of our pupil subjects who were automatically selected.

In all, 252 subjects made up of 60 female and male pupil subjects, 120 mothers of pupil sample, 12 teachers who were all female, were involved in the present study. We had expected that our teacher sample would include both female and male teachers, but the reality of the situation in both schools was that classroom teachers were mostly female. This seems to confirm Sexton's (1970) thesis about the feminisation of the primary school.

3.3.4   Sampling Procedure: School Subjects

The subjects chosen for this study were English Language, Mathematics and Social Studies. These subjects were chosen because they represent important and different aspects of the school curriculum through which attitudes, values and potentials are developed and manifested. Instructional materials in these subjects were randomly selected and studied by subjecting them to content analysis.

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In all, 30 books, 15 from each school, which were the main textbooks in the various subjects, were analysed. The table below shows the distribution of books across school, class and subject.

Table 3:3 Showing the Distribution of Books

School	Class	Eng. Lang.	Maths.	Social Studies	Total
AIS	I	1	1	1	3
	III	2	2	2	6
	VI	2	2	2	6
MCPS	I	1	1	1	3
	III	2	2	2	6
	VI	2	2	2	6
Total		10	10	10	30

3.4.0 <u>Description of the Research Instruments:</u>

The major instruments used in this study were:

1. Content-Analysis (CA) - Checklist for Analysing and Coding Sex bias in Instructional Materials (CACSIM).

2. Teacher-Initiated Interaction Analysis Categories - (TIAC) Adapted from Flanders, (1970).

3. Sex-Role Perception and Attitudes Questionnaire (SPAQ).

4. Mothers Responsibility Training and Activity Exposure Questionnaire (MORAQ).

5. Teachers' Rating Scale (TRS) and

6. Sex-Role Adoption tests (SRATS).

3.4.1 Content Analysis:

A checklist for Coding Sex-bias in Instructional Materials (CACSIM) was employed in content analysing selected instructional materials in English Language, Mathematics and Social Studies. The categories contained in CACSIM was a synthesis of the various ones used by earlier researchers who have investigated sexism in instructional materials (Lorimer and Co. 1972; Weitzman et al. 1972; Oliver, 1973; Saario et al. 1970).

When using content analysis, social scientists have generally viewed frequency as a good index of the intensity and importance of an item in a text (Pool, 1959; Baldwin, 1942, Sax, 1968). Selected instructional materials were analysed by indexing the frequency and distribution of characters based on the following five categories

1. The ratio of female and male persons who were leading characters.

2. The ratio of female and male persons who were subsidiary characters.

3. The range and quality of roles and occupations assigned to female and male characters.

4. The types of activities which female and male characters engaged in.

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5. Finally, the types of environment in which female and male characters are found. Environment refers to the locality and the setting in which the characters are found. For example, are they presented as being in the home, school, in place of business or outdoors?

In its early days, content analysis was heavily quantitative. In its later day application, however, quantitative and qualitative techniques have been combined (Carney, 1972). In the present study, the two approaches have been treated as complementary. In analysing the texts, each character was counted only once. In instances in which a theme ran into two or more chapters, it was still regarded as a single theme, and each of the characters was counted only one.

The coding of the texts was done by the researcher. All textbooks were read twice. The data collected during the first reading were verified during the second reading. Less than 10 per cent of entries made at the first reading needed to be changed during the second reading. Most alterations involved erroneous repetitions or entries under wrong categories.

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The first attempt to validate the content analysis
schedule (CACSIM) as used in this study was at a
national conference of the Reading Association of
Nigeria, where a report of a pilot study using
the first draft of the instrument was presented
(Abe, 1983). Many issues raised at the conference
led to a refinement of the instrument in its present
form.

3.4.2   Teacher-Initiated Interaction Analysis
         Categories (TIAC)

The teacher-initiated interaction observational
analysis instrument which was used in this study
and is subsequently described, was adapted from the
Flander's Interaction Analysis Category (FIAC)(1970.)

A review of other observational methods such as
Bales' Interaction Analysis Categories (1957);
Ober's Reciprocal Category System (RCS) (1967);
Borgatta's Interaction Process Scores (IPS) (1962);
Bellack's Categories (1966); and Amidon and Hunter's
Verbal Interaction Category System (VICS) (1967),
has revealed that each of the above schedules
was inadequate for the present study for one reason
or the other. To give a few examples, while Bales'
categories seem to blur over some distinctions and

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lump together several modalities into a single category, Bellack's system focuses only on the cognitive dimensions of the verbal interaction between teacher and pupils. Moreover, even though RCS is a modification of FIAC, it does not seem to describe the totality of classroom interaction. It seems that RCS overlooks the quality of verbal information inherent in classroom interactions.

Compared to the other methods cited above, FIAC seems more adaptable to accommodate sex differences in classroom interaction. Therefore, an adapted version which discriminates between teacher interaction with female and male pupils was developed for the purpose of this study. FIAC, which was originally developed for the investigation of teacher influence on pupil attitudes and achievement, seems relevant as an observation method in the present study which focuses on the influence of the hidden curriculum of which teacher-classroom behaviour is an aspect - on pupils' sex-role perception, expectation and vocational preference.

The original FIAC contains ten categories, seven of which are teacher-initiated, two are pupil initiated and the last category is for periods of silence, confusion or pauses. The adapted version retained six of the teacher-initiated

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categories, replaced the two pupil-initiated ones
with two new teacher-initiated categories. The last
category of FIAC was disregarded because it was not
considered relevant to the present study. The emphasis
in this study was on those teacher-initiated behaviours
that might have an influence on pupils' self-concept,
sex-role perception, vocational expectations for
females and males and vocational preferences of girls
and boys. Hence, we substituted teacher-initiated
interactions for those that are pupil-initiated in
the original FIAC.

Undoubtedly, interaction is not a one-way process,
but a two-way one (Clausen, 1968). Pupil-initiated
interactions influence teacher behaviour, but that
aspect is not concluded in the present study for reasons
of economy of scale.

The two new categories of behaviour substituted
were classified as assignment of academic tasks which included
whom does the teacher call upon to read a passage in an
English lesson, to work a mathematics problem on the
board, or to tell a peer the correct answer to a
question. The assignment of non-academic tasks category
included which pupil does the teacher ask to perform
such tasks as sweeping the classroom, cleaning the
blackboard, opening or shutting windows, arranging or
distributing materials or assisting in class management,

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The core of the adapted FIAC, for the purpose
of the present study, includes whether the teacher
directs her or his interaction to a female or a male
pupil. Moreover, attention is focused on the
quantity and quality of teacher-initiated interactions
with female and male pupils. These elements of
classroom life have been included in the observation
instrument because of our earlier assumption
that the frequency and the quality of teacher-
interaction with female and male pupils might
influence the self-concept, sex-role
perception of female and male pupils and also their
vocational expectation for females and males.

The present study focused on teacher-pupil
interaction because it has been reported
in the review of literature in an earlier chapter
as being a powerful determinant of pupil
self-concept, which is crucial to pupil achieve-
ment, career expectations, including vocational
preferences (Jackson and Lahademe, 1967).
Moreover, in view of the fact that the
process of differential school outcome for

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girls and boys was the concern of the study, it was

postulated that differential teacher behaviour to girls

and boys might account for a significant part of that

process.   It was therefore assumed that the adaptation

of FIAC into teacher-initiated categories would be useful

for this purpose.

Category 1:   Teacher accepts the feelings, clarifies

the attitudes or the feeling tone of female and male

pupils in a non-threatening way.

Category 2:   Teacher praises or encourages female

or male pupils.

Category 3:   Teacher accepts and uses the ideas of

female or male pupils, clarifies, builds or develops

ideas suggested by female or male pupils.

Category 4a:- Teacher asks female or male pupils questions about content of lesson.

Category 4b:- Teacher asks female or male pupils procedural questions.

Category 5:- Teacher gives directions, commands or orders to female or male pupils.

Category 6:- Teacher criticises female or male pupils with the intention of changing pupil behaviour including prohibitory or disciplinary statements.

Category 7:- Teacher assigns academic tasks to female or male pupils; asks female or male pupil to read, work on the blackboard, and to solve academic problem.

Category 8:- Teacher assigns non-academic tasks - asking female or male pupils to sweep, fetch materials, tidy up, clean the blackboard, distribute and arrange materials, lift objects or assist in class management.

Although FIAC instrument has been used by many scholars and its reliability established, it was necessary to test the modified version of the instrument for reliability and validity. For this purpose, two schools which were not involved in the present study were used. Two separate teams of observers, one of which included this thesis

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supervisor tested the instrument in English Language, Mathematics and Social Studies lessons in the selected schools. Results of the observations were later compared and the degree of agreement was found to be between 0.80 and 0.90 respectively for each of the categories contained in the instrument. The above finding indicates a consistently high degree of reliability within and between the two coding teams.

3.4.3   Sex-Role Perception and Attitude Questionnaire (SPAQ)

SPAQ was an instrument which was designed to obtain information on the pupils sex-role attitude and perception. It was a combination of five scales. The first was the pupils' background information scale; the second, pupils' self-concept scale; third, pupils' perception of teacher's rating on selected school subjects; fourth, sex-role description of self, woman and man, and lastly, a projective test in which subjects were presented with an 18 item incomplete sentences, and were required to complete each item by prefixing the sentence with either female or male if they felt that the sentence was more often true of one sex than the other.

This instrument was first validated, using the pilot schools. During this trial administration, it was observed that certain words, expressions and concepts were beyond

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the grasp of the age-group which the instrument was designed

for. This led to the elimination, rewording and simplification .

of the instrument to its present form. The present form was

considered simple enough and comprehensible to the subjects

of the study.

3.4.4. Mothers Responsibility Training and Activity
Exposure Questionnaire (MORAQ)

MORAQ, which was developed by the researcher was utilized

to obtain information from mothers concerning gender-related

child-rearing practices. This instrument was based on Whiting

and Whiting (1975) model of interaction in the family setting

which included the nature of tasks assigned to children,

the work and activities they were expected to perform by

delegating domestic chores and care-giving tasks. Whiting

and Whiting (1975) used the unstructured observational method

in obtaining data on children. But as a result of the constraints

of time and finances, the present study used the questionnaire

method to obtain the necessary information about children from

mothers.

The first section of the questionnaire was mother's back

ground information scale. Part two was on domestic chores

assigned to female and male children. Part three was about

mother's expectations for female and male children and the

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last section included items on father's participation in
house work. ·

To test the reliability and validity of the instrument,
selected mothers of pupils from the pilot schools responded
to the questionnaire. The pilot testing led to the elimination
of items on religion, marital status and other sensitive
items on the questionnaire since a large number of respondents
either left such items unattended to or commented on them
as being sectarian or too probing.

3.4.5.   Teacher's Rating Scale (TRS)

TRS was designed to systematize teacher's judgements
and perceptions of their pupils. Even though rating scales
are highly subjective (Youngman, 1970), the present study
assumed that teacher's perception of pupils on selected areas
.of behaviour was crucial, not only to teacher-classroom
behaviour, but also, for the development of pupils' perceptions,
future decisions and expectations for women and men.

The instrument was in three parts. Part one concerned
teachers background information; part two required teachers to rate each
sample on selected adjectives ˙ which had been used to describe
females and males in some of the literature on sex differences
(Maccoby, 1975; Frasher and Walker, 1972; Looft, 1971; Mischel,
1970; Sadker and Sadker, 1973). Part three of the instrument
required teachers to rate each child sample on ability in
selected school subjects·

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3.4.6   Sex-Role Adoption Test (SRAT)

SRAT was a modification of Kagan's test of the child' sex-role classification of school objects (1964) and Browns's It-test (1956). In developing SRAT, the psychological assumption which was basic to both Kagan and Brown's studies that a child "with the symbolic system usually behaves towards a new situation in a manner that is congruent with symbolic label applied to that situation", was also assumed. However, instead of asking the child to label his parents (Emmerich, 1959 ; Kagan and Co, 1960; Kagan et al. 1961) or say what It was doing (Brown, 1956), the researcher presented flashcards containing some selected occupations which appeared in the pupils' instructional materials for English Language, Mathematics and Social Studies, to the pupils who were required to write whether female or male persons occupy such roles more often than the other gender. These occupations were randomly selected from the array of occupations presented in relevant school textbooks.

Draw-A-Man text was initially proposed to be administered

for the purpose of testing the subjects' sex-role adoption
and perception. However, in the course of administering
the SPAQ which contained a section which used the projective
technique in testing for sex-role adoption and the SRAT,
the researcher considered the two tests adequate for the same
purpose which Goodenough's test would have served.

3.5.0 <u>Administration of the Research Instruments</u>

The collection of data for the study took place in four
phases. The first phase involved the introduction and
familiarisation of the researcher with the participating
schools. A letter from the researcher's head of department
introduced her to the heads of the participating schools
and permission to use their schools for the study was obtained.
Neither the topic nor the purpose of the study was discussed
with the participating heads. This was intentional. Because
of the nature of the research topic, it was necessary to
minimise bias by not revealing the topic and purpose of the
study.

While the head of the Nigerian school willingly agreed
that her school be used for the study, some difficulties
were encountered in the American school. These were

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later resolved. However, the resolution of the problem led to a modification of the initial research design. Instead of selecting subjects from all the arms of the classes under study, as previously mentioned, only one arm of each class was used. Hereafter, the researcher enjoyed the co-operation of both heads and they were assured that the study would not interfere unnecessarily with the school's normal schedules and that observation would be carried out as normal lessons were being taught. The heads of both schools introduced the researcher to the participating teachers and classes. In the case of AIS, the researcher was attached to the head of curriculum and supervision for the duration of data collection in the school. The head of curriculum and supervision time-tabled the research activities to be carried out in order to minimise loss of instructional time, whereas in MCPS, the researcher was guided by each participating teacher.

Phase two of the study involved the completion of TRS by the participating teachers. TRS was given to teachers before the beginning of classroom observation in order to eliminate any possible bias that might result from the teachers' conscious or unconscious linking of the two instruments. A week was allowed for the completion of the

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instrument and they were requested to rate only the 20

pupils in their different classes who were involved in

the study. The researcher did not in any way influence

teacher's rating of their pupils. However, it was

observed after they had completed the instrument, that in

classes in which more than one teacher taught as a result

of the use of subject-teacher, their ratings were identical.

The explanation for this situation, as we have mentioned

earlier, was that such teachers had access to the same

school records in rating their pupils. In such cases,

only one teacher-rating score, usually, that of the class

teacher, was used for the study.

Phase three of data collection concerned the observation

of teacher-classroom behaviour using TIAC.

The researcher made pre-observation visits to the

two schools for the purpose of familiarisation.

Observation time-tables were made in advance. Some teachers

showed anxiety to audio-recording of their lessons. Such

teachers were reassured and by the time the actual

observation started, they had become quite relaxed. Observers

were trained for two weeks after which the instrument was

tested in the pilot schools randomly selected for this

purpose. After many trials in selected classrooms, the

researcher was satisfied with the level of inter-coder

reliability and consistency. The Inter-coder reliability was as high as .95.

The classroom and the schools' surroundings were inspected to ensure that problems that might arise during classroom observation could be dealt with effectively. One such problem was the level of background noise at MCPS because construction work was going on at the school. To deal with the problems, special tapes with low sensitivity but effective enough to pick up classroom utterances were made available. This provision stepped up the cost of field work.

The researcher and observers who had been trained for the study carried out the observation. The two trained observers were final year students. A tape recorder and an observation form (Appendix IIa) which had been specially developed to discriminate between teacher interaction with female or male pupils were used. The observers recorded a tally under the appropriate categories each time the teacher initiated interaction with a female or male subject. At the end of the lesson, the tape was labelled to indicate the school, class, subject and date. The researcher later transcribed the recording verbatim, using these notations;

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T.   - teacher

M.P. - male pupil

F.P. - female pupil, whenever it was easy for the researcher to decipher that the interaction was directed at a particular sex. Decoding was also facilitated by the notes taken by observers. It is necessary to point out that transcribing of the tapes was only an additional source of information to the tallies that had been made on the observation forms, which was the main focus of the classroom exercise.

Summation of interaction in each category was obtained by averaging the number of tallies recorded by the researcher and her two observers. After the interactive session, some participants requested to listen to the play-back of their recorded lessons. The researcher acquiesced. However, the play-back generated some curiosity about the purpose of the study. Participants asked to know how well they had performed. All teachers were informed that they had done well, but the issue of the purpose of the study was dodged.

The fourth phase of data collection included the administration of SPAQ, MORAQ and SRAT II. Because of the varying levels of mental development of the subjects used in the present study, and in order to conserve time and prevent improper completion of the SAPQ, the researcher personally administered the instrument using English Language periods which lasted between 35 and 40 minutes. Each item was taken

one after the other, explanations were given by the researcher

as they became necessary, until all the subjects completed the

instrument. This approach was found valuable, particularly

for the subjects in class one of both schools. The non-partici-

pating pupils were kept busy at an English Language exercise

in order to minimise interference from them.

The MORAQ was distributed to the subjects. A covering

letter requesting their mothers to complete the items

accompanied the questionnaires. A week was allowed for the

completion of the instrument by mothers. To ensure that

the subjects would put enough pressure on their mothers to

complete the instrument, the researcher informed the subjects that

their mothers' questionnaire was critical to their own. This

method worked because all the subjects returned the questionnaire

duely completed by their mothers.

For the administration of SRAT II, sheets of paper which had

been numbered 1 to 34 and on which the subjects' identification

numbers had been written, were distributed to them. The

researcher explained to them that they were required to

indicate by writing F for female and M for male, if they

thought that the occupation written on each flash-card

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was more often a woman's or a man's job. The researcher
then went ahead to hold up one flash-card after another
until the 34 flash-cards had been treated. In some cases,
the researcher had to explain the nature of the job of many
professionals especially at the MCPS. Explanations were
provided for jobs like those of the housing agent, astronaut,
poet, publisher, writer and surgeon. The explanations given to
such professions made the completion of the instrument
particularly easy for the subjects in class one.

This particular exercise generated much excitement to
the extent that the non-participating pupils expressed their
disappointment at not being allowed to take part. This
instrument was quantified by assigning the value of 1 to
all F responses and 2 to all M responses.

3.6.0   Data Analysis

This study involves a comparison of two models to verify
a theoretical perspective. We have used non-content analysis
data to verify the result of content analysis findings.
The data obtained by frequency counts have been processed
through SPSS (Statistical Package for Social Scientists).
The data not amenable to statistical analysis have been
presented in form of non-quantitative observations. Both

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kinds of data were used to test the hypotheses stated
earlier.

Mostly, cross-tabulations which included simple
proportions, ratio, percentage, mean and chi-square tests
were employed in analysing our data. In addition, the
t-test was used to study the difference in the mean
scores of our different groups of samples.

In all , we have used non-parametric statistics
because they are distribution-free and therefore do not
assume that the data under analysis were drawn from a
normally distributed population. Also, non-parametric
statistics were found to be more suitable for the analysis
of data generated in this study. In addition, our samples
were relatively small in number to warrant appeal to the
central limit theorem.

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CHAPTER FOUR

The Settings of the Study

4.1   The School in the United States of America(U.S.A)

The open ifrontier of the New World invited the oppressed
and the underprivileged of the earth to seek anew their fortunes,
first at agricultural pursuits, followed by opportunities in
an industrial economy. The growth in economic activities,
particularly in the industrial sector, led to a demand for
general, professional and technical education. Thus, from
the beginning the value and the transforming power of
education in the exploration and utilization of the opportu-
nities available in the New World, were recognised. And
ever since, the school has been perceived as an institution
where talents would be developed for the full exploitation of
the frontier. The concept of education as a liberalizer
was not only materially based (Horace Mann, 1935), but also
has implications for the nation's social and political
well-being. The social and political concepts of education
included:

(a) The betterment of one's status

(b) Value formation

(c) The forming of the minds of the young
     in order to safeguard established
     institutions, by instilling proper
     political as well as social and moral
     concepts.

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Thus, education was regarded as the equalizer of women and men, and the balance of the social machinery. Not only was education with its agency, the school, regarded as an instrument of social justice, it was also the medium designed to serve the children of all classes, including those of immigrants of different races, colours and religious beliefs. The school has been described as the melting-pot of cultures, where children of immigrants coming from diverse cultural backgrounds were to be immersed in order to be acculturated into the American way of life (Handlin, 1959).

Out of the intrinsic faith the pioneers had in education, emerged the decision by all states to provide schooling free for all. Later on, as a result of the steady progress in industrialization and the general transformation of a predominantly rural and agricultural economy into an urban and industrial economy, schooling which was once optional became compulsory, beginning with Massachussetts in 1852, and completed by Mississipi in 1918. The faith of the founding fathers in the potentialities of each individual compelled them to provide equal opportunities for all young people through education. Moreover, the concept of egalitarianism was enshrined in the American constitution and the school

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was perceived as an instrument to achieve this national goal.

The role of the school as an agency for achieving the American ideals included inspiring people to uphold the principles of democracy, nationalism, Americanism and egalitarianism. It was also the belief that through education which was to be provided in the school, the state would avail itself the use of those talents which nature has sown liberally among all classes of people, including females and males, but which would perish if not sought and cultivated.

Consequently, the issue of equality of educational opportunity has featured prominently in the American educational scene for a long time.

The interpretations of the concept of equality of educational opportunities have changed over the years. Traditionally, it was felt that equality of educational opportunities existed if free schools and exposure to a uniform curriculum were provided; that, if children, regardless of creed, race, colour, class and gender, had equal access to educational facilities and resources. But recently, equality of educational opportunity has been defined in terms of other criteria such as -

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(1) The community's inputs to the school such as per-pupil expenditure, school plants, libraries, quality of teachers and other similar qualities (Madaus et al. 1980).

(2) Racial composition of the school following the Supreme Court's decision of 1954 that segregated schooling was inherently un-equal (Coleman, 1976).

(3) The results of schooling (Coleman, 1968).

(4) And most recently, in terms of overt and covert discrimination based on gender (Department of Education and Health, 1972).

The multiphasic nature of the new challenges to the concept of equality of educational opportunity called for a variety of measures aimed at guaranteeing equality. Some of the measures consisted of:

(1) Compulsory attendance laws

(2) Scholarship grants

(3) Free schools

(4) Free instructions, free materials of instruction, free lunch and free transportation, all designed to offset limitations beyond the control of many classes of citizens (Lineberry, 1967)

(5) Gradual enrichment and diversification of the curriculum.

(6) Compensatory education - Project Headstart - which endeavoured to overcome the educational deficiencies which minority and poor pupils manifested when beginning school by providing pre-school experience for these children (Lineberry, 1967; Todd, 1964).

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(7) Desegregation and integration policies.
(Hall and Leonard, 1966).

(8) Federal laws prohibiting discrimination
based on gender from any educational
institutions receiving federal funds (Title
IX of the Educational Amendments of 1972).

(9) Federal Commission on the Status of Women
including their education (1981).

The gender issue, as one of the latest challenges to
the concept of educational opportunity has been brought into
the limelight by many organisations, particularly those of
women - Women on Words and Images,(1972; 1973) and the National
Committee on Women (1972; 1973). The issue of inequality
of educational opportunity for the female gender has been
examined from different perspectives. These included unequal
representation of female and male characters in school texts,
differential teacher-classroom behaviour and general
differential schooling experiences for female and male pupils,
cumulating in unequal school outcomes for female students
when compared to their male counterparts.

Despite the measures taken to achieve equal educational
opportunity for all regardless of race, colour, creed, class
and gender, it is obvious that there is a discrepancy
between the ideal and its practice. Education illustrated the
discrepancy between ideal and practice. Research reports have
shown that even though equality of access is guaranteed,

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schooling experience is not the same for white and black

children, female and male pupils.   That in a subtle manner,

girls and boys receive differential messages from the contents

of instructional materials and teacher-classroom behaviour,

resulting in differential school effects for them (Jackson,

1968; Saario et al. 1972; Weitzman et al. 1972; Kalia, 1979;

Jackson and Lahaderne, 1967).

4.2.   <u>The School in Nigeria</u>

Just as education and the school became crucial to the

Americans in their frontier policy and in achieving the

national goals of Americanism, democracy and egalitarianism,

it was equally essential and played a major role in the

emergence of Nigeria as a nation, and later as an instrument

for national development.

British imperialism and missionary activities brought

in their trail, western education.   Initially the aim of

education was to enable Nigerians read, interprete and later

on, translate the bible into local languages; and also to

facilitate trade between the colonials and the indigenes.

Much later, as a result of the problems of recruiting

British civil servants, education was conceived of as a

means of creating local reserves of clerks and other classes

of workers in the colonial administration (Taiwo, 1980).

Much as the colonials tried to control the pace of educational growth through their lukewarm attitude to educational matters, particularly its finance, the power of education was fully realized because many of its early recipients led the nationalist movement which later resulted in the emergence of Nigeria as a nation. Hereafter, the value of education as a liberalizer and a tool for social and economic mobility was generally realized by the people (Weiler, 1964; Abernethy, 1969; Fafunwa, 1971).

Even though there were many reports, government laws and plans such as the Phelps-stokes Report of 1922, Education Ordinance of 1926, 1925 memorandum, the Ten-Year Education plan of 1942, the Ashby Report of 1960 and many others, the colonial government did not make any policy statements about the course of education. The first and the most outstanding of such government commitment to education was the National Policy on Education of 1977 and revised in 1981. This was the first time that the aims and objectives of education will be stated in the context of over-all national philosophy.

Not only has the National Policy on Education spelt out in details the aims and objectives of education but has also

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stated the objectives at each level of schooling. Above all,
the National Policy on Education guaranteed equal educational
opportunity in terms of access for all children in order .
to build an egalitarian society, an ideal very similar to
the American civic culture. Parallel to the role of the
school in the U.S.A, Nigeria has adopted education as an
instrument for achieving national goals which include.

(a) A united, strong and self-reliant nation

(b) A great and dynamic economy and

(c) The development of a land, of bright and full
    opportunities for all citizens.
    (Federal Government of Nigeria: National
    Policy on Education, 1977; 1981).

Moreover, the Federal Government has expressed much faith in
the power of education as an instrument for achieving national
integration and development. That is, just as the school
has served as a melting-pot of cultures in the United States,
its role in the Nigerian context is similarly conceived as
a melting-pot for people of different ethnic backgrounds.
Therefore, primary education has been singled out as a pre-
requisite for ensuring equality of opportunity, national
unity and development.

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Accordingly, the Federal Government has taken a number of measures aimed at providing opportunity for all. These included:

(a) The introduction and implementation of Universal Primary Education (UPE) in 1976.

(b) Financial assistance to state schools.

(c) Specifically, the National Policy of Education noted the need to promote women education and to encourage parents to send their daughters to school.

(d) Re-emphasizing the role of education in the social, political and economic development of the society, the Federal Government in the 1986 Budget, provided for the revitalization of education by making available special funds for this. In that year, education was allowed 10.8% of the total budget of ₦10.9 billion. In the 1986 and 1987 budgets, the Federal Government identified women education as the first in the list of eight priority areas of government policy.

(e) Also, in the two budgets under discussion, provision was made for government assistance to educationally disadvantaged areas in order to promote equality of educational opportunities (Federal Government Budgets, 1986, 1987).

(f) More recently, in promoting equality of educational opportunity for women, the federal and state governments have embarked on the campaign for women education which has been described as a pre-requisite for national development because women formed more than 50% of the total population of the country (Federal Ministry of Education; Workshop to prepare a Blueprint on women Education, 1986).

From the above measures taken by government, it is obvious that equality of educational opportunity has gone beyond equality of access to education.

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It has assumed ethnic and gender dimensions, meanings very much similar to some of the new interpretations given to the concept in the United States of America.

The government policy of revitalizing education and ensuring that hitherto disadvantaged groups, especially women, are given equal opportunity, underscore the faith Nigeria has in education as a means of achieving national goals of self-reliance, national integration and development. However, it seems emphasis has always been on equal access to the neglect of the quality of access in terms of schooling experience for all classes of pupils, particularly, females. Therefore, even when equal access to education and exposure to the same curriculum are guaranteed, there is the need to ensure equal schooling experience for girls and boys in order to ensure full equality of educational opportunity in the process of the development of their potentials.

From the above discussion, it is clear that both America and Nigeria have great faith and hope in education and in its agent - the school - for achieving national goals of democracy, social justice, nationalism, egalitarianism, national integration and development. In order to promote equal educational opportunity so that all talents and potentials could be harnessed towards the realization of national objectives, both countries

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have taken a number of steps enumerated earlier in this chapter.

However, it is obvious that there is a discrepancy between the ideal and the practice with regard to the issue of equality of educational opportunity. It also seems that this disparity is greater in Nigeria than in the United States of America. The discrepancy is not only in terms of the number of girls and boys attending school, but also in the quality of their experience in the school. Even in the United States where education is free and compulsory for all regardless of race, colour, creed and gender up to secondary school age, it has been reported that schooling experience is not the same for different groups of children; specifically, it is not the same for girls and boys because boys have better advantages over their female counterparts as a result of the way the learning process is organised (Jackson, 1968; Jackson and Lahaderne, 1967, Sadker and Sadker, 1973; Mischel, 1970; Oakley, 1972; Silberman, 1969; West, 1971; Fehl, 1969; Lee, 1974; O'Hara, 1973; Saario et al. 1973; Brophy and Good, 1969; 1971; 1974; Good et al. Slobodian, 1967; Jacklin, 1966; Sears and Feldman, 1966; Gates, 1961; Vroegh 1976; Biber, et al. 1972; Serbin et al, 1973; Dunkin and Biddle, 1974; Dweck et al; 1978; Blumenfeld et al; 1979; Spaulding, 1963; Mayer and Thompson, 1956;).

In the Nigerian context, even when we reduce the concept of equal educational opportunity to mere access to education, the statistics of enrolment shown below indicate that equality of access to education is not equal for girls and boys at every level of schooling.

Table 4:I: Statistics of Enrolment at Primary Level

Year	Female	Male	Total	% of Female
I980/8I	5,970,244	7,789,786	I3,760,030	43.3
I98I/82	6,I50,8I0	8,I60,979	I4,3II,608	43.0
I982/83	6,32I,7I5	8,354,893	I4,676,608	43.I
I983/84	6,33I,658	8,05I,829	I4,383,487	44.0

Table 4:2: Enrolment Percentage of Female and Male Pupils at Secondary School Level, I979/80-I982/83

Year	Female	Male	Total
I979/80	35.0	65.0	I00.0
I980/8I	35.5	64.5	I00.0
I98I/82	29.3	70.7	I00.0
I982/83	27.5	72.5	I00.0

Source: Federal Ministry of Education. Statistics of of Education in Nigeria, I980 - I984. I985 Edition

Comparing enrolments at the primary and secondary levels, the above figures show a decrease in the enrolment figure for girls at the secondary level; that is, even though girls' enrolment at primary level is low, the situation becomes more critical at the secondary level with an enrolment percentage of 35 in I979/80 and only 27.5 per cent in 1982/83 for girls.

The problem of the inequality of educational opportunity suffered by girls assumes a major dimension at the tertiary level as demonstrated by Table 4:3.

Table 4:3: University Enrolment by Sex, 1975-1984

Year	Female	Male	Total	%Female
1975	5,133	27,248	32,389	15.9
1976	5,359	26,642	31,981	16.7
1977	6,556	31,284	37,840	17.3
1978	7,207	34,576	41,783	17.3
1979	7,896	39,034	46,930	16.8
1980	17,099	60,692	77,791	21.9
1981	20,386	20,363	90,749	22.5
1982	25,219	79,555	104,774	24.1
1983	26,587	90,235	116,822	22.8
1984	28,739	97,546	126,285	27.8

Source: Sunday Times, June 21, 1987.

The enrolment figures have shown a steady growth, especially if recent enrolment figures were compared to those of 1966/67 session when only 12.7% of the total enrolment in Nigeria Universities were female. Despite this, the disparity in educational opportunity for females and males at all levels is quite obvious.

The fact that enrolment figures are skewed meant that
University outputs will be skewed in favour of males, as
Table 4:4 illustrates.

Table 4:4 Number of Female and Male University Graduates: 1982-84

Year	Female	Male	Total	%Female
1982/83	4,364	17,083	21,447	20.4
1983/84	3,708	20,815	24,523	15.1

Source: National Universities Commission: Annual Report, 1983-84

The most recent statistics on the inequality of
educational opportunity for girls was those on female and male
applicants for the 1986 and 1987 Joint Matriculation Examina-
tion (J.M.E) into Nigerian Universities.

Table 4:5: J.M.E Application Statistics by Sex; 1986 and 1987

Year	Female	Male	Total	%Female
1986	50,295	111,112	161,407	31.2
1987	52,414	120,331	172,745	30.3

The above tables illustrate the disparity, not only in
enrolment output, but also in the number of female and male
candidates applying to our Universities.

However, the imbalance in the enrolment and output
figures is not the only issue in the concept of equality of
educational opportunity. Another major source of concern
is the quality of the courses which female and male students
study, especially in terms of their national relevance and
emphasis. Now that the national emphasis is on industrial

and technological expertise, the Annual Report of the National
Universities Commission for 1983-84 revealed that 83 females
were awarded degrees in agriculture, 30 in engineering
technology, 29 in environmental design and 359 in science.
These figures represent a pautry figure of 13.8% of all
female graduates for that year.

From the enrolment and output figures displayed above,
we infer that the issue of gender in Nigerianeducation is a
major one. We also deduce that there are two dimensions to
the problem, those of quantity and quality; and that even
if we are able to achieve full equality of access to
education, it is obvious that equality of educational oppor-
tunity is not synonymous with equality of access because certain
groups of people have better advantage than others as a result
of the way learning is organised in the school. Therefore,
other interpretations of the concept of equality of educational
opportunity which includes the quality of schooling experience
for girls and boys, need to be taken into consideration in order
to bridge the educational gap, and by implication, other
gaps between the female and male population.

A consideration of the schooling experience of girls and
boys in the United States and Nigeria has become necessary
because the school in the two countries have been given so

much national responsibility which has remained unchallenged. Also, the two countries have expressed so much faith in it as an institution through which their children would be assured of equal opportunities in order to develop their talents and personalities, potentials which are needed in the two countries in order to achieve national objectives. We should ideally therefore, be interested in the schooling process through which these capabilities are sought and developed.

Investigations of the schooling process is necessary because research reports, particularly from the United States indicated that schooling experience is not the same, as we have documented in the chapter on the review of the literature, for girls and boys and that differential schooling experience of girls and boys leads to differential school outcomes (Jackson, 1968; Rosenthal and Jackson, 1968; Jackson and Lahademe 1967; Coleman, 1968). Sadker (1975) and Jackson (1968) have attributed the differential schooling experience of girls and boys to the hidden curriculum, which for the purpose of the present study, includes the instructional materials and teacher-classroom behaviour.

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The present study makes a modest contribution to comaprative education by investigating the effects of textbooks and other aspects of the school's hidden curriculum on the sex-role expectation of children.

4.3.0   American International School Background Information

The AIS was founded in 1964 as a member of the "American International", which is usually parent-owned but subsidized by the United States Department of State. Like its counterparts elsewhere, AIS is a demonstration centre of American education, devoted to preparing their pupils, mostly Americans, for the rapid integration into the life of the nation origin at whatever point their clientele goes home (Leach, 1969).

As mentioned above, through the auspicies of the United States Department of State, a special relationship has been established between AIS and Tacoma, Washington. This relationship assists AIS with administration, consultation, purchase of educational materials and the recruitment of administrators and teachers.

AIS is operated by the Association of the American International School of Lagos, a private non-profit corporation. Its membership is composed of all parents of the children attending AIS. A nine-member board of directors

is responsible for governing the school.

The main objectives of AIS is to provide qualitative educational services for the children of American personnel serving American companies and institutions in Lagos and a small proportion of Nigerians as well as children of other nationalities living in Lagos areas. AIS recognises that its students are individually unique and the education of these students should take into consideraton their uniqueness and individuality. Therefore, the American school is committed to a programme that will ensure the fullest development of each child's intellectual, physical, social, moral, creative and emotional potential. The school also recognises that every child has some individual needs and capabilities which affect her or his learning. Each staff member attempts to meet the needs and capabilities of all children through adaptation and innovation in programmes.

4.3.1 Location

AIS was formerly located in Ikoyi, a low density area of Lagos metropolis. It was moved to its present site at Victoria Island in 1981. The present site, another low-density area, is populated by relatively affluent people civil servants, diplomats and business executives. The school actually faces the Federal Government Housing Estate,

popularly referred to as "IOO4".

The school is housed in four adjoining two-storey buildings, all forming an incomplete rectangle, facing a quadrangular playground. The ground floor of the buildings is occupied by the kindergarten and grades one through three, the administrative staff and special classrooms for Social Studies, Spanish and maintenance workshop. The upper level houses grades four to nine, the library, Art room, resource and reading rooms, special classrooms for Health and Computer Science, Mathematics, English, French, Photography, and Audio-Visuals.

The quandrangle is used as eating place and playground during break. Adjacent to the quandrangle is the playing ground which is well-equipped with many facilities for different games such as football, basket-ball, lawn-tennis and others.

4.3.2   Population

AIS has the advantage of a wide diversity in its student population. At the time of this study, it has a student body of 435 students, made up of 232 girls and 203 boys. Approximately 60% were Americans, while Nigerians comprised about 20% of the student body. The balance consisted of students from all over the world. As many as 35 different countries such

Canada, Ireland, Nigeria, Lebanon, Switzerland, Sweden, Kenya, Israel, Britain, Pakistan, Argentina, India, Zimbabwe and many others, were represented in the school population.

The relatively small population of the school meant that limitations were placed on class size which, as mentioned earlier, ranged between 20 and 25 pupils per class. The small population also implied that there was as few as two arms for each grade level. The small class size was intentional and was designed to facilitate teacher's ability, to cater for and cope with the individual needs of the children.

4.3.3   Admission

Even though education is theoretically free in the United States, AIS charges one of the highest fees in Nigeria. With the introduction of the foreign exchange market (Fem), the school charges as much as N10,000.00 per annum. This might explain the need for small classes in order to ensure that the clients obtain value for their money.

However, it is important to add that even though school fees are charged, in most cases, the multinational companies and corporations which employed some of the fathers of the children paid substantial part of the fees, as part of their total employment package.

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4.3.4   <u>Curriculum</u>

The academic programme of AIS was designed for children from kindergarten through grade nine and was patterned on the American curriculum mentioned earlier. It was expected that students transferring to American schools would have no difficulty adjusting to their grade levels. Standard American textbooks were used in AIS.

An integral part of the AIS programme was the school library, staffed by a professional librarian and containing about 7,500 volumes in addition to resource room and audio-visual teaching aids.

The elementary curriculum was comprised of various areas of study. These included language art, reading, mathematics, natural sciences and social sciences. The curriculum also provided for exploration in art, general music, foreign languages, library science and physical education. While the curriculum was essentially traditional, allowances were made in the instructional programme for individual differences.

Extra-curricular activities were a vital part of the total school programme. They allowed for student involvement in a wide range of areas. Parent-teacher volunteers provided leadership for the various activities including soccer,

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basket-ball, soft-ball, dance, tumbling, art, choir, sewing, swimming, crafts, photography, chess, weight training, girls' scouts and instrumental music. Even though the school administered the Comprehensive Test of Basic Skills (CTBS) each year, it did not provide special classes for educationally deficient students such as those with learning disabilities.

4.3.5   The Staff

The administrative officer, including the superintendent, an assistant superintendent and the co-ordinator of admissions and instruction, were recruited from Tacoma, Washington. The core of the teaching staff was also recruited from Tacoma public schools. In all, there were twenty-six teachers, twenty-two females and four males. All the teachers were university graduates and were professionally trained as teachers. The elementary classes were taught by female teachers, while the male ones were in charge of the junior high school where specialist teachers teach such subjects as social studies, mathematics and physical education.

In conclusion, the AIS was an offshoot of the American school system, from its philosophy, aims and objectives to the day-to-day running of the school, including the time-tabling arrangements.

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The teachers' conditions of service and salaries were like those of the public schools in the home country. The tone of the school, including the informal dress code of the pupils, academic and extra-curricular activities were all modelled after the American System.

4.4.0   Maryland Convent Private School:
         Background Information

MCPS, as its name connotes, was a private fee-paying school, founded by the Roman Catholic Church in 1964 with IIO pupils, under the leadership of its present headmistress. The school was administered by a governing board composed of the Catholic Bishop of Lagos, the headmistress and the school's supervisors who were mostly reverend sisters.

The foundation of the school almost coincided with the creation of Lagos State which has its capital at Ikeja, the same area as the location of the school. The creation of Lagos State had important consequences for the new school. Firstly, it led to a rapid growth of the school's population because the workers in many sectors of the state's economy, found it more convenient to enrol their children in the school more than in any other. Moreover, since the school has established

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and continues to maintain a reputation for high academic and
moral standards, civil servants preferred to send their
children to it.

Secondly, the creation of Lagos State gave rise to a
situation in which the government soon proposed and implemented
take-over of all schools, including MCPS. The new policy
of government take-over of schools led to a protracted argument
between the proprietor of MCPS and the state government,
culminating into litigation. Eventually, a compromise was
reached between the government and the proprietor of all
Catholic Schools, including MCPS. The school, desirous of
remaining private and religious, and concerned about the
future of its pupils in a school system which was increasingly
being controlled by government, decided to model some aspects
of its life after the public system. In order to ensure that
its pupils would not suffer any disadvantages when seeking
admission into secondary schools, which have been taken over
by government, the school decided to adopt the instructional
materials and the syllabi of the public school system.
Consequently, a school which originally began as private
and parochial, ended up as a private school which incorporated
aspects of the public system in order to survive.

The objectives of MCPS are identical to the general aims
of primary education in Nigeria. These include the provision
of a high standard of education and the inculcation of high
religious and moral discipline in its pupils. Like the public
school system, MCPS aimed at laying a solid foundation for
the academic, psychological, social, physical and moral
development of the pupils. To achieve its moral objectives,
MCPS laid a strong emphasis on catholic religious doctrine.

4.4.1   Location

MCPS is situated in the Maryland/Ikeja area of Lagos
metropolis. This is a low density area, founded and named by
the Roman Catholic Mission which had occupied the area for a
long time before other residents moved in. In the past,
Maryland had a Catholic Teachers' College which later gave way to
a secondary school. Most graduates of MCPS had their secondary
education in this school before the state take-over of schools.
The site also housed a catholic church and a convent. Apart
from these buildings, there are one public secondary school, one
primary school and the administrative building of the Lagos
State Schools' Management Committee.

Behind the walled-up compound is the residential part
of the area, occupied mostly by Lagos State civil servants,
business executives and professionals. The Maryland precint

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is similar to the Victoria Island neighbourhood where AIS is located. Both are exclusive, quiet, peaceful and planned divisions, protected from the bustling life of the metropolis by their very locations.

The MCPS' buildings include a long storey-building and five bungalows. The ground floor of the storey-building houses classes two and three, the school library, science laboratory, music and art rooms. The upper level is occupied by classes five and six. One of the bungalows is used for administrative purposes, and the other four are occupied by class one and kindergarten children. In front of the buildings is a concrete playing ground used for assembly and playing at breaktime. To the far east of the school is a playing ground used for physical education and other sporting activities.

4.4.2   Population

MCPS was a large school, especially when compared to AIS. It has a student population of 2,476 including kindergarten children. In all, the female-male ratio was 52.79% (1307) to 47.21% (1169). The majority of the children attending the school at the time of the study were Nigerians with only 4% foreigners.

Different parts of the metropolis such as Ikeja, Surulere, Ilupeju, Ketu, Yaba, Somolu, Oshodi, Ikoyi, Ebute-Meta and Lagos Island, are represented in the student population of the school.

MCPS operated large classes ranging between 45 and 55 pupils per class; and there are five arms for each class. To make up for the disadvantages of large classes, two auxillary teachers were assigned to assist the regular class teacher up to primary two. For the upper classes, specialist teachers were used for social studies, mathematics, physical education and art. The functions of the auxillary teachers were limited to class management, distribution of school supplies and general supervision of the pupils in view of the fact that they were neither well-educated nor professionally trained.

From all available evidence the large class size of MCPS is attributed to high demand pressure. Payment of fees does not affect enrolment in view of the school's high reputation and the socio-economic status of parents who were mostly from the lower middle class.

It is necessary to state that we are aware of the disparity in the size of the two schools used for the study. The

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situation seems inevitable because most schools in
the Lagos metropolis are large, and therefore it was
difficult to find a school of comparable size with
AIS. Barker and Gump (1964) investigated the effects
of institutional size upon the behaviour and experience
of children and concluded that school size has a
significant effect upon children's behaviour. However
as far as the researcher is aware of, no-one has
examined the effect of school size on sex-role develop-
ment. It is therefore assumed that the size of the
school will not confound the findings of the present
study.

4.4.3   Admission

Admission into MCPS was open to all children
resident in the Lagos metropolis. However, priorities
were given to Catholic, children whose parents attended
the Church which directly administered the school.
Parishoners and others were encouraged to register
their children in time because priorities were always
given to those who registered early.

4.4.4   Curriculum

The academic programme of the school has always
been patterned after the public system, even at the
beginning when the school used foreign textbooks because
MCPS even though a private school, cannot isolate
itself from the Nigerian public school system. Its
children have to take public examinations into state
and federal government secondary schools. MCPS
academic package was planned for children from
kindergarten through primary six.

An important aspect of MCPS programmes was the school library which has a total collection of 2,563 books. This collection may not be impressive when pitched against the 7,500 volumes available at AIS. But if we compared MCPS' library with that of a typical public primary school which has been described by Odetoyinbo (1982) as

> "where school library exists, the
> cupboard containing library books,
> i.e. ancient, tattered magazine
> books, is locked and the key kept
> with the headmaster",

we would then appreciate the library facilities at MCPS. In addition to the library, each class has a reading corner, where on the average, about 50 books covering all school subjects and other topics were kept.

The curriculum at MCPS covered such subjects as the language arts, mathematics, science, social studies, religious studies, health and physical education. Other subjects taught in the school include music, home economics, french and library science. With the exception of home economics and religious instruction, MCPS, curriculum was similar to that available at AIS. One explanation for the difference could be that while MCPS was conceived as a religious institution, AIS was established as a secular school.

Similar to the situation in AIS, there was a number of
extra-curricular activities at MCPS; such as the cultural
group, cub scouts, girls' guide, literary and debating society,
through which identical objectives as those of AIS were achieved.
However, they were integrated within the official school hours
at MCPS. Also, MCPS did not administer special intelligence
tests as were available at AIS. But MCPS presented its pupils
for the national and state entrance examinations for admission
into federal and state secondary schools.

4.4.5   <u>Staff</u>

The staff of MCPS composed of one headmistress who has
headed the school since its inception, 55 female and 13 male
regular teachers. In addition, the reverend sisters, as many
as were available at any particular time, taight in the school
At the time of this study, there were four of them. Apart
from their supervisory role in the school, they taught
French, music, religious studies and home economics.

Generally, MCPS recruited its staff from the pool of teachers
available in Nigeria, but the school usually upgraded the
teachers' qualifications through in-service training and
refreshers' courses. Nevertheless, the teachers have varying
levels of educational and professional qualifications.

Fifty of them have secondary education plus one or two years of teacher education; fifteen others held the associateship diploma in education, while the rest were grade two teachers. The four reverend sisters held the National Certificate of Education, while the auxillary teachers have mostly S.75 certificate.

The class-teacher system was the practice in the school. However, specialist teachers taught Social Studies, Mathematics, Science, Physical Education in primaries three to six, while in the lower classes the class-teacher system was augumented by the use of auxillary teachers in order to cope with the problem of large classes.

The administrative staff consisted of two clerical officers, an account officer, two female cleaners and male maintenance officers. In addition, MCPS has the advantage of the service of the reverend sisters for some of its administrative work.

It is pertinent to point out one important aspect of this study, which is the sex composition of the teachers who participated in the study. Ideally, we had expected to have our sample made up of female and male teachers, but the reality of the school situation was that the population of

teachers were in the ratio 82% to 18% female-male, and none of the few male teachers participated in the study since they were mostly specialist teachers or taught at the levels which were not relevant to the present study. The skewed nature of the gender distribution was not surprising in view of the universal trend in the preponderance of female teachers at the primary level (Sexton, 1970). This meant that the processors at the primary school level are usually female and this situation was found to be so in our own study.. However, a cursory look at the authors of the school texts used by the processors revealed that they were mostly male. The implication for the present study was that even though there were no male processors, men's views, attitudes and perceptions about being female and male as expressed in the instructional materials, were crucial to the female processors since they used these materials in their classroom. The factor should be borne in mind when interpreting the findings of the study.

4.5.0   The Climate of AIS and MCPS

INTRODUCTION

The concept of school climate has been used in many different ways. The composition of the student body as

measured by socio-economic status, race, or other composition variables has frequently been used as a measure for school climate. Others have used measures of student personality or characteristics of school organisation as proxies for school climate (Anderson, 1970;).

Brookover (1973) and Brookover et al. (1978 included a composite of variables as defined and perceived by the members of the group. These factors were the norms of the social system and expectations held out for various members as perceived by the members of the group.

However, in this section, the criteria used by Anderson (1970) and Brookover (1973); Brookover et al. (1978) to measure school climate are adopted in discussing the climate of AIS and MCPS. These variables are the student composition as measured by race and socio-economic status, the school organisation and the norms and expectations held out for members of the school system, and which are communciated to them.

4.5.1   The Climate of AIS

In this section, we have adopted the composition of the student body as measured by race, sex and socio-economic status (SES), the norms of the school, and the expectations held out

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for, and communicated to members, as our criteria in
discussing the climate of the two schools which participated
in the present study.

As mentioned earlier, AIS was a relatively small school.
Its student population was about 435, composed of females and
males. As mentioned earlier, as many as 35 countries were
represented in the school at the time of this study. Some
of the countries included America, Britain, Ireland, Canada, India,
Lebanon, South Korea, Pakistan, Sweden, Nigeria, Argentina,
Zimbabwe, Cameroons, France, Kenya, Isreal, Ghana, Egypt,
Japan, and Gabon, among others. A breakdown of the student
population by nationality was necessary in a discussion of the
school climate that used student composition as one of its
measurements. But unfortunately, this information was not
available to this writer because some difficulties were
encountered in the process of data collection.

In determining the socio-economic status of the students,
we : used the fees of about ₦10,000 per pupil, charged by
the school as an index, and we concluded that the majority
of the students were from either middle or upper class
families. Our assumption was further confirmed when we
applied other indices such as father's occupations, income

and residence. The data for these variables were obtained from the responses of our pupil samples to questionnaire items relating to these variables. All our respondents (60) indicated that their fathers were either professionals, business executives, industrialists or diplomats, and that they lived in the exclusive, low-density areas of the city. Therefore, it was deduced that all students of AIS were from the middle or upper classes.

So far, we have established the composition of the student population, using race, sex and SES as our criteria. These are the human aspects of the school climate. An essential pre-requisite for the proper functioning of the social system were the norms of behaviour in form of school rules, the expectations held out for each of its members and how these expectations were communicated.

Most of the school rules were largely unwritten, but there was every indication that these rules were well-known and understood by all. Such norms included the use of the dustbin, instead of littering the compound. The researcher observed that each time any child came across waste papers, these were promptly picked up and disposed of irrespective of whoever dropped the wastes in the first instance. It was

also observed that each time a child wanted to sharpen pencils, the "Pencil Corner" where a dustbin was placed to receive the wastes, was made us of. It was also discovered that lunch and break times were inviolable. This was confirmed when the researcher requested that she be allowed to administer some of the instruments for this study at those times. The request was politely turned down with an explanation that those periods were always observed, no matter the pressure on other school periods.

There were other unwritten rules guiding a variety of non-class settings. These included queing up while leaving the classroom for such subjects as music, art and library science, taking turn in all group activities especially outside the classroom. The norms seemed quite explicit to the students because there were few occasions of teachers' interventions to uphold norms during the period of the research.

Some of AIS's norms were written and these could be regarded as the expectations the school held out for each child. To leave no-one in doubt of what was expected of her

or him, guidelines were issued about such areas of performance as academic, being loyal to the school, personal cleanliness, general behaviour and the promotion of international understanding. An example of such guidelines is given below:

All-Round Commitment

I. Exhibits outstanding school spirit.

2. Is proud of and is a pride to the school.

3. Is a positive example of the school

Source: AIS Noticeboard.

These guidelines were conspicuously displayed on a large noticeboard in the school. Not only were the guidelines displayed, a handsome prize was attached to each area of performance. For example, at the end of each week, the photographs of the children who have excelled in each area was taken and displayed on the noticeboard, with citation on each child.

A striking feature of the social system of AIS was its informality, liberalism and individualism. This characteristics were particularly articulated in the dress code. The school has no formal dress code, but only insited on neat appearance. Therefore, the children came to school in whatever caught their fancy. It is suspected that the lack of formal dress

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code might be another means of pursuing a policy of non-differentiation, especially of the sex because it was observed that most of the children usually wore unisex clothes. An example of the liberal attitude of the school was that certain days of the week were designated either as pyjamas or swim-suit days, when the children came to school in such clothings. The first day the researcher visited the school was a pyjamas day, and all the pupils wore different shapes and colours of sleeping wears.

Another major aspect of school life was the observance of the national days of all the countries represented in the school. For example, the American Thanksgiving which was celebrated on the first day of November during the study had a flavour of similar celebrations in the United States with all the children from different cultural backgrounds partici-pating.

To an observer, AIS, with its own norms and expectations, which were well-communitated to its pupils, seemed like a haven. The school was a small world of its own, where the members carried on their day-to-day activities, oblivious of what was going on outside of their school environment. The

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apparent exclusiveness enjoyed by the school was further .enhanced by its fence and the two gates manned by security guards, and by the air-conditioners working in each class-room whose windows were covered by venetian blinds, thus shutting off noise, and indeed, the entire world outside.

4.5.2   The Climate of MCPS

In contrast to AIS, MCPS was a big school with a student body of 2,476 made up of 1169 girls and 1307 boys. The table below illustrated the student population of the school by sex.

Table 4:6: Showing Population by Level and Sex

Level	Female	Male	% Female
Nursery	303	343	47.12
Primary	866	964	47.3
Total	1169	1307	47.21

The majority of the pupils were Nigerians, with only 4% foreigners as previously mentioned. The few foreigners came mostly from West African countries with a handful of Indians. As previously mentioned, many parts of Lagos metropolis were represented among the Nigerian pupils.

The same indices which were applied to determine the
SES of AIS children were employed in the case of MCPS.
These were school fees, father's occupation, income and
residence. An analysis of the data provided by the MCPS
subjects indicated that the children were of divers, SES, with
the bulk of them in the middle class category.

Apart from the student composition, other aspects of
school and climate which were relevant to our study were the norms
and expectations held out for members of MCPS. Similar to
the situation at AIS, most of the norms of MCPS were unwritten.
However, it seemed that the children have internalized these
rules in the process of their interaction with all the aspects of
school life. Some of these norms included the observance of
silence and the recitation of the Angelus at exactly twelve
noon; praying at the beginning and the end of each lesson;
keeping the school clean by picking up litters and keeping the
corridors clear especially at break times. The norms relating
to religious observance were hardly surprising because MCPS
was conceived as a religious institution, one of whose
objectives was the inculcation of Catholic religious doctrines.
Indeed, a crucifix was hung on top of the blackboards in each
of the classrooms.

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The best Class of the Week ? ? ?

Is the class with the highest academic

performance as measured by scores in

class work and end-of-week tests.

Is the neatest in terms of classroom

and personal cleanliness.

Thus it was clear that the children were knowledgeable
about the rules of the competition. What was needed was for them
to work together as a collective to win the competition.
The explanation for why AIS emphasised individual responsibility
and MCPS, collective responsibility through their policies
of individual and inter-class competition respectively, is
rather obvious. Perceiving Nigeria and America as both
historical and cultural entities, the two countries emphasised
different cultural values. While theoretically, Nigeria tended
towards collectivism or what was sometimes referred to as
African Socialism (Nyerere, 1966) whereby the whole group, be
it, the family or the community, was encouraged to get along
together (Fadipe, 1970; Forde, 1950);   America valued
individualism which centred upon the dramatization of the
individual (Kluckholm, 1961), and the emphasis on the

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individual to achieve in spite of others.

Similar to AIS, MCPS attached a reward to the competition. But instead of exhibiting the photographs of the winning individuals MCPS placed the name of the winning class on the noticeboard with some citations on the class. This noticeboard was conspicuously displayed where all visitors to the school could see it. Another incentive of the competition was a shield which was awarded to the winning class.

In contrast to the informal and liberal tone of AIS, MCPS seemed conservative and formal. These characteristics of the school were manifested in the formal code on dressing adopted by the school. To ensure absolute uniformity, the uniforms including the sports tunics, were made by a single tailoring company and sold through the school.

Besides these aspects of the school climate which were discussed above, MCPS enjoyed a serene atmosphere, facilitated in part by the beautiful trees, shrubs and flowers planted all over the premises, and by its high walled fences which appeared to have shielded it from the bustling life of the city.

Even though the classrooms were not air-conditioned as they were at AIS, MCPS' classrooms were well-ventilated with two big windows spanning the whole length of two sides of the classrooms. Also, the children seemed quite happy at the school. The writer came to this conclusion during an informal discussion with some of the pupils. Such statements as 'MCPS is the best school around; we are proud of the school; the teachers are fantastic. I hate to miss school,' were often made.

In conclusion, AIS and MCPS represented two different school systems. In terms of the composition of the student body, AIS was a relatively small school which drew its clients from the middle and upper classes, whereas, MCPS was a large school, drawing the majority of its pupils from the professional and business classes. AIS was truely international with as many as 35 countries represented, while MCPS was authentically Nigerian with only a few foreigners, and with most of the Nigerian population belonging to two of the three major ethnic groups of the country. They were mostly Ibo and Yoruba children in the school.

Comparing the norms of the two school systems, AIS was informal, liberal and non-sectarian while MCPS was formal, conservative and parochial. Both schools adequately communicated the norms and expectations held out for the children. Also, both encouraged competition whose rules and rewards were made quite explicit. As mentioned earlier, AIS encouraged individual responsibility, while MCPS emphasised collective responsibility. Even though the value orientations inherent in the competition are different for each of the two schools, the consciousness of socialization demonstrated by tacit and explicit means, was another similarity shared by the two schools. Lastly, both schools enjoyed some degree of exclusiveness, mostly because of their locations and architectural designs.

4.5.3 Representational Attributes of MCPS

The description of AIS and MCPS in the preceeding paragraphs raises the issue of the representativeness of MCPS especially in view of the fact that the American school was portrayed as representative of the American public school system. MCPS is both similar and dissimilar to the average

school in Lagos in several ways.

MCPS differs from the typical public primary school in the metropolis in that it is a private and religious institution. While the public system is administered by the State Schools' Committee, MCPS enjoys a close administrative supervision by its governing board. Also, located in a serene, congenial and quiet area, it is different from most primary schools in Lagos which are in most cases sandwiched between crowded residential areas. Even though most primary school buildings in Lagos are currently being improved, MCPS has long enjoyed beautiful buildings whose classrooms are large, well-ventilated and relatively well-equipped.

Another area of dissimilarity between MCPS and the typical primary school is that while MCPS charges fees, which among other factors, restricts its clientele to the middle class. The public school is non-fee paying and therefore attracts pupils mostly from the lower class.

In terms of school plants, equipment, land space, furniture and resource facilities, MCPS is better-off than the average public primary school where these facilities are most of the time in short supply. Most of the above attributes which make

MCPS dissimilar to the typical public school in the Lagos metropolis, are incidentally the very features that qualify it to be compared to AIS, more than any other.

At the same time, MCPS is typical of the Nigerian primary school system in some essential respects. It runs the same school year, the same syllabi, uses similar instructional materials, operates large classes and draws its pupils and teachers from the same pool as are available to other Lagos primary schools, including the non-fee paying ones in the metropolis. On these accounts, the results of this study could be generalized to the Nigerian primary school to some extent. In summary, it seems MCPS stands between AIS and the Nigerian public primary school system, and therefore could be compared to AIS on some distinctive characteristics, while at the same time, it is representative of the Nigerian public primary school system in some other essential aspects.

4.6. Summary

In this chapter, an attempt has been made to discuss the role of the school in America and Nigeria from historical and developmental perspectives. The role of the school as an instrument for achieving national goals is also discussed. Of the national goals and objectives of both countries, the concept of equality of educational opportunity is the most

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pertinent to this study and is accordingly given due emphasis in subsequent discussion. Some of the attempts made to achieve the goal of equality of educational opportunity in both countries are enumerated. We also conclude that despite these measures, there is a disparity between the ideal and the practice, as evidenced in the gender question. Particularly in Nigeria, the gender issue manifests in imbalance in the school enrolment and output of females and males throughout all levels of schooling, and the imbalance in the quality and relevance of the courses which females and males study. We hypothesise that the disparity might be attributed to the differential schooling experience and familial socialization of girls and boys, among other factors. The schooling experience includes interaction with the hidden curriculum which comprises the instructional materials and teacher-classroom behaviour.

Also, in this chpater, an attempt is made to discuss the settings of the research. For this purpose, we adopt the concept of school climate as our frame of reference. In discussing the school climate, we employ such measures as the composition of the student body, school norms and

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expectations held out for, and communicated to the pupils (Anderson, 1970; Brookover et al. 1975).

In this process, we discover that both schools, AIS and MCPS are similar with regard to their student population composition, norms and the expectations they have for their pupils. We also find that the two schools are dissimilar in some respects. While one, AIS, is informal, liberal and emphasised individual responsibility, the other, MCPS, is formal, conservative and encourages collective responsibility.

We also observe that while MCPS represents a unique institution when compared to the Nigerian public primary system, at the same time, it reflects some essential characteristics of the public system. We then conclude that more than any other school, MCPS was more suitable for the purpose of this study which investigates and compares the influence of the hidden curriculum on the sex-role socialiation of Nigerian and American primary school children. Other criteria for selecting MCPS have been mentioned in the previous chapter.

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CHAPTER FIVE

RESULTS OF THE INVESTIGATION

5.0 Sex Bias in Schools' Instructional Materials

The basic problem that was investigated was the comparison of the influence of the hidden curriculum on the sex-role socialization of American and Nigerian primary school children. The hidden curriculum was operationalized to include instructional materials in English Language, Mathematics and Social Studies. Selected textbooks in the above subjects were analysed, using the CACSIM in the content analysis in order to investigate probable differential presentation and treatment of female and male characters.

30 textbooks, 15 from each of the two schools, were analysed. A table showing the distribution of the textbooks according to school, class and subject was presented in chapter three. For the purpose of quantifying our data, each chapter of the textbooks was regarded as a theme. Where a story or topic ran into two or more chapters, this was still regarded as a theme, and each character, role/occupation or activity was counted only

once. When unisex names were used, the use of pronouns clarified to which sex the name referred. Some American names presented some problems of classification into the appropriate gender category. In such situations, two American colleagues were consulted in order to resolve the problem. Only comprehension passages were analysed in the case of English Language texts. Grammar exercises, poems and drills were not included in the analysis. The same rule was applied to the analysis of social studies texts. As for the instructional materials in Mathematics, only problem-sentences which had human subjects or doers, were analysed.

In all, a total of 333 themes was analysed, 137 from AIS textbooks and 196 from those of MCPS. The table below shows the distribution of the themes.

Table 5:1 Showing a Breakdown of Themes

School	Class	Eng. Lang.	Maths.	Social Studies	Total
AIS	I	6	10	5	21
AIS	III	15	10	20	45
AIS	VI	36	15	20	71
MCPS	I	8	6	18	32
MCPS	III	25	12	36	72
MCPS	VI	43	15	34	92
Total		133	68	132	333

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Our mathematics themes were few because we discovered that in the classes where two textbooks were prescribed, the same topics were treated in both texts. In such cases, the second set of topics was subsumed under the first.

Even though we have stated earlier that the characteristics of secondary actors was one of our measures of the quality of character presentation, data generated on this criterion was not analysed in order to avoid repetition. The analysis of the data on characters in general and in leading roles would include those on secondary characters.

The results of the analysis of the textbooks are presented in this section. Our findings are reported at 0.05 and 0.01 levels of significance.

5.1.0   Hypothesis I
         Our first hypothesis states that more
         male than female characters will tend
         to be portrayed in school's
         instructional materials.

A total of 3980 characters were portrayed in the instructional materials analysed. 66.8 per cent were male while 33.2 per cent were female. 2625 characters were depicted in AIS textbooks. 65.3 per cent of these were male, while 34.7 per cent were female. A total of 1321 characters were recorded for MCPS texts, out of which 72.5 per cent were males and 27.5 per cent, females. We therefore concluded

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that there was a predominance of male over female

characters in the instructional materials of both schools.

However, those of MCPS were more discriminatory against

females than AIS texts. The table below summarises our

findings.

Table 5:2: Sex Differentiation in the
Portrayal of Characters

School	Female	Male	Total	χ^2
AIS and MCPS	1321 (32.2%)	2659 (66.8%)	3980 (100.0%)	
AIS	924 (34.7%)	1735 (65.3%)	2659 (100.0%)	** 21.34
MCPS	363 (27.5%)	958 (72.5%)	1321 (100.0%)	

Df = 1

** Level of significance = .01.

Combining data across all textbooks, schools and classes

(Classes one, three and six), Table 5:2 indicates that fewer

female than male characters were presented. Thus, our finding

was as expected; More male than female characters were

presented in the instructional materials of both American

and Nigerian schools. The calculated chi-square was 21.34

which was significant at the 0.01 level of significance. Thus

our hypothesis that more male than female characters will tend to be

presented in school's instructional materials, was upheld.

Therefore, we concluded that sex was a significant factor in

the characterisation of actors in schools' instructional
materials and that female characters were discriminated
against because fewer of them than males were portrayed.
We also concluded that the instructional materials used
in Nigerian schools were more discriminatory against
female characters than those of the American school.

Further testing of the first hypothesis by comparing
the number of female-male characters depicted by school
and subject yielded the results presented in Table 5:3.

Table 5:3   Sex Variation in Character Presentation
by Subject

School	Subject	Female	Male	Total	x^2
AIS	Eng. Lang.	329 (37.1%	557 (62.9%)	886 (100.0%)	0.43
MCPS	Eng. Lang.	137 (35.2%)	252 (64.8%)	389 (100.0%)	
AIS	Maths	407 (46.1%)	476 (53.9%)	883 (199.0%)	** 38.1
MCPS	Maths	69 (25.1%)	206 (74.9%)	275 (100.0%)	
AIS	Soc. Studies	188 (22.0%)	668 (78.0%)	856 (100.0%)	
MCPS	Soc. Studies	191 (27.6%)	500 (72.4%)	691 (100.0%)	* 6.66

Df   = I
*   = Significant at .05 level
**   = Significant at .01 level

Table 5:3 represent our findings when each subject was
considered.

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5.1.1 English Language Textbooks

Even though the computed chi-square for the number of female and male characters in English Language texts was not significant, our finding indicated that there was sex disparity in the presentation of female and male characters. There was a preponderance of male over female characters in English language textbooks. From AIS instructional materials 62.9 per cent were males while females were 35.2 per cent. It seems both schools were close in the number of female and male characters portrayed in English Language texts.

The implication of our finding is that most of the time, school children, particularly, girls are reading and learning more about male characters and therefore, male activities, occupations and interests than those of females. Research reports have suggested that children learn much more than reading and spelling from their readers (Blom et al. 1972, Lobban, 1975; Frazier and Sadker, 1974). In addition, they learn sex-role identification and sex-role expectations for different categories of people in the society. They learn about the outside world, about cultural norms and about how society regards certain groups of people, especially those of females and males. Children's books are, therefore critical in the formation of a child's identity, self-concept and refining a sense of personhood. Also, the characters

presented in these texts are an important source of models
after whom children might pattern their own lives. This
proposition is made more valid by the introduction to the
American English language readers which expected the children
to "ask yourself what turning" you would have chosen if you
had been faced with similar problems encountered by the
characters in the stories presented (Rainbow Edition -
Measure me sky, 1980).

5.1.2 The Mathematics Textbooks

More male than female doers were also presented in
maths books. The portrayal of individuals and work roles was
skewed in favour of males. For every one female doer, MCPS
texts presented four males. Characterisation was more balanced
in the AIS instructional materials with a percentage of 53.9
for males and 46.1 for females. The computed chi-square of 38.13
which was significant at .01 level of significance
shows that there was a sex difference in the subject of
mathematics problems.

It seems our results reinforced the popular view that
mathematics is a masculine subject both in content and usage.
The problems which the textbooks dealt with included those
of banking, shareholding, life insurance, investing, profit
and loss in business transactions as well as simpler problems

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of measuration and computation. Most of the time, male

characters were the doers of these activities. Several .

problems described transactions in which women were losers.

Our findings seem to indicate that American maths books were

near equi-gender in the presentation of female and male doers

of mathematical problems than those of Nigeria. This might be

as a result of the efforts made by individuals (Now, 1973)

resulting in state and federal governments making policy

statements aimed at minimizing sexism and sex discrimination,

particularly in education and employment (HEW, 1975).

However, despite the apparent egalitarian presentation

of characters in American mathematics books, we found that

there was a significant difference in the types and quality

of mathematical activities and problems which female and male

characters engaged in. Boys were solving problems in astronomy;

water treatment, chemistry, buying stock or life insurance;

while girls were measuring curtains for windows or flour for

a cake. In addition, while male characters were saving or

investing their money, the females were either shopping for

dresses and gifts or buying household items. When males were

not engaged in the above activities, they were saving or investing.

5.1.3 <u>Social Studies Textbooks</u>

In the selected texts analysed, far fewer females than males were portrayed in the texts of both schools. AIS presented more males than females in the ratio of 4:1 while it was 7:3 in the instructional materials of MCPS. Our obtained chi-square of 6.66 was found to be significant at the .05 level of significance.

Our finding in relation to the American school appears inconsistent with the trend observed in the presentation of characters in mathematics books, where we observed that the presentation was near equigender. We therefore postulate that it seems that while American society appears to be ready for equalitarian relationship between women and men in matters of intellectual pursuit, our result in relation to social studies may be suggesting that they are not ready for such a relationship when it comes to the rights and privileges of citizenship and governance despite the efforts made to minimize discrimination based on sex.

Treating the three subjects separately, our findings tend to reinforce earlier ones when the three subjects were combined. Thus, our hypothesis which stated that more males than females will tend to be presented in school's instructional materials was reaffirmed.

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The finding that males were predominant in the social
studies textbooks of both schools was hardly surprising.
Social Studies deal with the history of the past in terms
of individual and collective contribution to the development
of one's society. Not that women in the two societies have
not contributed to history, but through acts of omission and
commission, "her-story" has not been told. Our analysis
revealed that the contents of Social Studies were about
males, and by implication, the children who read these texts
are being told that only men take part in politics and
public administration; make decision and are the only
group of people who made society what it is.

However, what surprised us was the apparent lack of
consistency in the effect of the efforts of individuals,
groups and governments to reduce sexism in the instructional materials
of the USA which we have earlier on attempted to rationalize.
We were not surprised about our findings from the Nigerian
sample because the problem of sexism has not been brought into
focus before now. In a particular Nigerian textbook,
A Primary History of Nigeria, Book Two (1973), there were
seven sections:

     A.   Two Wise Men From Ancient Times.

     B.   Great Religious Leaders.

     C.   Great Explorers.

     D.   Famous Scientists and Discoverers.

     E.   Famous Names in the Story of Healing.

     F.   Great Reformers.

     G.   Great Statesmen.

By the very choice of titles for these sections, women were naturally excluded from the history being taught. Of the 34 great people whose contributions to humankind were discussed, only four were women. Of these, three of them came under section E - "Famous Names in the Story of Healing". Those were Florence Nightingale, a nurse; Madam Curie, a scientist; and Helen Keller, a blind woman who devoted her life to teaching blind and deaf people and Elizabeth Fry, a reformer of prisons. When women were not portrayed in service-oriented capacities as the ones assigned to the women depicted in the cited book, they were presented in their relationship to some famous men as their mothers, wives or queens.

Similarly, Social Studies texts for grade six in the American school did not fare any better. In the World and Its People - Europe, Africa and Asia (1984), only Queen Elizabeth I of England and Catherine II of Russia were mentioned as central figures in a section titled "Western Europe Today". It is clear that the two women became rulers in their respective countries as a result of clear-cut succession laws; otherwise, if some other criteria have been used, they would not have been

rulers and thus mentioned.

Moreover, research reports have indicated that picture plays an important role in sex-role socialization of children because they are a vehicle for the presentation of societal values, views and expectations (Weitzman et al., 1977). Pictures are particularly crucial because they are visually represented models of what children can do, what they can be and the amount of amplitude society allows and expects from particular categories of people. Hence, we noted the number of female and male figures, especially for Social Studies. We found that just as females were under-represented in the materials, also were they grossly discriminated against in the number of pictures contained in the texts. In Civics Made Easy, Book II (1975), a textbook for primary six children in Nigeria, 18 pictures of male political, administrative and military leaders were shown, while there was only a cartoon of a female, casting a vote.

The analysis of American and Nigerian Social Studies texts revealed little or no information on the lives and problems of women. The achievements of individual women in commercial and leadership roles were ignored. The results from both schools, indicated that elementary social studies textbooks were biased against women. Through acts

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of omission and by the very selection of topics, the stories
of the contribution of women to society and their problems have
not been told. Severe bias was found in all textbooks analysed,
thus leading us to conclude that textbooks contained slanted
history of the two societies under study.

5.2.0 Analysis of Main Characters: English Language

> Hypothesis II
> The second hypothesis stated that more
> male than female characters will tend to
> be portrayed in leading characters.

The above hypothesis was tested by analysing the number
of female and male characters presented in leading roles. For
the English texts, a leading character was defined as the hero,
the protagonist or the main doer in a theme. In the case of
Social Studies and Mathematics texts, it was taken to mean the
subject of discussion or problem-sentence respectively. An
analysis of the number of female and males as leading characters
was crucial to the purpose of our investigation because as the
protagonists in the themes, they would be involved in a variety
of activities such as decision-making and providing leadership.
As vicarious models for the young reader, sex differentiation
in the presentation of main characters might have unintended
effects on children. While limiting the options opened to the
disadvantaged group, such a practice would also present a biased
view of the world to the other. The table overleaf summarises our
findings.

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Table 5:4 Gender Discrepancy in the Characterisation of Main Actors

School	Subject	Female	Male	Total	χ^2
AIS	All Subjects	291 (40.0%)	437 (60.0%)	728 (100.0%)	** 16.85
MCPS	All Subjects	80 (26.5%)	222 (73.5%)	302 (100.0%)	
AIS	English Lang.	24 (26.7%)	66 (73.3%)	90 (100.0%)	0.84
MCPS	English Lang.	29 (32.9%)	59 (67.1%)	88 (100.0%)	
AIS	Maths	173 (45.6%)	206 (54.4%)	379 (100.0%)	
MCPS	Maths	(16.2%)	(83.8%)	(100.0%)	** 22.15
AIS	Soc. Studies	25 (13.2%)	165 (86.8%)	190 (100.0%)	
MCPS	Soc. Studies	80 (32.0%)	170 (68.0%)	250 (100.0%)	** 21.43

Df = 1

** = Significant at .01 level of significance.

Combining data across schools and subjects, the results displayed on Table 5:4 affirmed our hypothesis which stated that more male than female characters will tend to be depicted in leading roles. Our confidence in the data was thus enhanced. There was sex discrimination in the characterisation of the protagonists of the themes contained in the instructional materials of both schools. For every two female main characters portrayed in the American texts, there were three males.

However, the Nigerian textbooks were found to be more sex-
biased than those of the AIS in the characterisation of
leading actors in the ratio of 3 to 7 for female and male
protagonists respectively. Our obtained chi-square was 16.85
which was found to be significat at .01 level of significance.

Further analysis of our data on each subject yielded the
following results. Though our calculated chi-square of 0.84 was
not significant in the case of English Language texts, a
closer look at our data revealed that instructional materials
in English Language of both schools were biased against women
in the presentation of leading actors. In the American books,
73.3 per cent of all protagonists were male, while only 26.7
per cent were females. In the Nigerian texts, male protagonists
were 67.1 per cent while female ones were 32.9 per cent of
the total main characters depicted.

The above discussion does not imply that the instructional
materials of both schools exhibited the same degree of sex
discrimination in the portrayal of main characters. American
textbooks were found to be less sexist than the Nigerian ones.
This was to be expected in view of the awareness already
generated about the existence of sexism, policy statements
of federal and state governments, and particularly those of
publishers to minimise sex bias from the schooling process.

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Our concern about sex discrepancy in the presentation of leading characters in school readers stemmed from the activities and the experiences the protagonists went through. If males predominated as leading actors, and therefore more of them performed these activities, it meant a denial of the same to female characters, moreso that the American readers have invited the children to empathise with the characters in their readers (Rainbow Edition: Measure Me Sky, 1984). As heroes of the stories, they took part in competition and even won their town's annual youth awards. They were also presidential candidates and campaign managers. They climbed to the top of Everest, the highest mountain in the world (Mastering English, 1974). They were heroic, persevering and they expressed positive qualities which were admired by all those important people in their lives. They were the doers, achievers, builders and sports people. As leading characters, more males than females were presented as the bearers of wisdom and knowledge, ingenious problem-solvers and the rescuers of others; whereas the few females leading characters were most of the time co-protagonists as in the case of Obi and Nneka; Dupe and Joseph in one of the Nigerian books (Macmillan Primary English Course, Book 3, 1976). When they were not presented as co-leading actors, they seemed to be in the leading roles because either their traditional roles of mother, wife and widow or those of their traditional

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professions of nursing and teaching were themes under

consideration (Macmillan Primary English Course, Book 5, 1977;

Your English Handbook, Book 6, 1984). The apparent

condescending attitutdes to females when they were presented

as leading characters.was illustrated by the story of Nene.

Even though Nene was the protagonist, the story opened with

> "Nene is Mr. Bassey's niece. She is Edet's
> cousin. Next week she is going to marry Effiong."
> (Macmillan Primary English Course, Book 3,
> (1976, p. 34).

From the American school readers, Stuart was commanding vessel,

Henry was a poet, a naturalist. In Unit 5 of the Rainbow Edition -

Measure Me Sky, (1980), the authors specifically stated that:

> "Stories in this unit were about young people
> who had decisions to make and more than
> ordinary problems to solve. They each met
> the problems and challenges in a different
> way, but it was always courage and
> unselfishness that gave them wings for
> their flights."

Since the readers were meant for young people, girls inclusive, a

more balanced portrayal of both sexes in leading roles should be

assumed. However, we found that there was a predominance of males

over females as leading actors. The heroes in these stories were

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described as skilful, courageous, powerful, resourceful, stout-hearted, witty, intelligent, famous. They were able to acquire these qualities because the plot of the stories gave them the opportunities to exhibit the above traits. However, the few women portrayed in leading roles were beautiful, shy, graceful, modest, considerate, kind and neat (Your English Handbook, Books 1, 3 and 6, 1984). We are aware that the above qualities exhibited by the female protagonists were not those that motivate one to achieve. They were not like the aggressive nature of the ones ascribed to the male main characters that have motivated them to go to the moon (Rainbow Edition - Measure Me, Sky, Book 6, 1980). Even when Mrs Ferrone was elected major of her city, the police officers, who were men, had to support her in the election. Apparently, she needed police protection before she could be declared elected, otherwise, she might have been robbed of the opportunity.

In sum, the above discussion emphasised our finding that school readers presented more male than female-centred stories, while stories featuring boys involved themes of adventure, heroism, achievement and problem-solving; those of girls depicted them within the family, school or in traditional profession. If they must be portrayed in adventure and rescue stories, as we found out in the American texts, they were usually co-protagonists with boys.

5.2.2 Mathematics Textbooks

. Our findings in the characterisation of the subject of mathematical problem-statements indicated that American textbooks were less sex-discriminatory than those of the Nigerian texts. Of the total subjects in American books, 54.4 per cent were male closely followed with 45.6 per cent for females; whereas the sex discrepancy in the case of the Nigerian instructional materials was as much as 83.8 per cent to 16.2 per cent for males and females respectively. Our obtained chi-square was 22.15 which was significant at the .01 level of significance.

The men and boys as subjects of mathematics problems borrowed, saved, invested money, travelled, worked, took an insurance, took risks which resulted into either profits or losses and speculated in land and other property businesses. Similarly, the few females presented engaged in some activities. However, these activities seemed mere frivolities when compared to the male ones. The females shopped, spent money, measure curtain and strings, sewed, left home to visit friends, measured flour to bake and as housewives and mothers, walked to the grocers' shops. While it was implied that one needed some competence in mathematics to cope with the activities

male characters engaged in, the notion was given that the activities assigned to the few females were those that could be accomplished with little or no ability in mathematics. Thus, one has the impression that mathematics is neither a feminine subject nor a relevant one in the lives of women.

An interesting trend was observed in the instructional materials in the American school. It seemed conscious effort was made to reduce sex disparity in the presentation of characters through the use of "we, theirs, our team", and the use of inanimate objects. Also, there was a clear indication that efforts were made to balance the presentation of females and males both in terms of number and the kinds of roles assigned to them. For instance, Tom was an X-Ray technician, so also was Celia. Both Todd and Maria were flight engineers (Holt School Mathematics, Book 6, 1974). The new trend of balanced presentation of female and male doers in mathematics problem could be attributed to the history of efforts aimed at enhancing girls' participation not only in mathematics but also in science. Because of the relative poor performance of girls in mathematics, this subject was singled out for attention (Jay, 1977; 1975; Schminke, 1975, Burstyn and Corrigan 1975; Kepner and Koehn 1977; NOW, 1972, 1973).

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Evidence from the above cited sources pointed to the imbalanced
presentation of females and males in mathematics textbooks as one
of the likely causes of the lack of girls' interest in mathematics.
Hence, conscious efforts were made to minimise the imbalance, as
evidenced by our results from the American mathematics textbooks.

However, we attribute the greater preponderance of males
over females as subjects of mathematics problems in the Nigerian
texts to the fact that mathematics is still considered a male
subject, just as science and technology generally are male dominated.
For instance in 1976/77 academic year, there were approximately 3777
students enrolled in the faculties of technology in Nigerian
Universities. Only 82 or just under 2 per cent of them were women.
Similarly, in 1977/78 academic year, the figure for women enrolment was
2 per cent of total enrolment (Federal Ministry of Education,
Science and Technology, 1984). The above statistics are illustrative
of the masculine image of mathematics because a good grade in
mathematics is a prerequisite to all science and technology courses.
Few women enrol in them in view of the fact that the majority of them
have not studied mathematics at the lower level of schooling.

5.2.3 Social Studies

Our results on the characterisation of main doers in social
studies texts indicated that there was a significant sex difference
in the presentation of main doers and subjects of discussion of
both school. Males were predominant in the social studies texts
of the two schools with a calculated chi-square of 21.43 which
was found to be significant at the .01 level of significance.

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However, American social studies textbooks appeared to be more
sex-biased against women with only 13.2 per cent females and as
much as 86.8 per cent males, than the Nigerian ones. The Nigerian
books depicted 68.0 per cent males and 32.0 per cent females.

In a particular chapter titled "Some Famous Citizens who
served Nigeria" (Civics Made Easy, Book II, 1978), seven males who
had contributed to different aspects of the Nigerian Society,
including education, politics, nationalism and national defence
were discussed. The impression was given that women have not contribute
to the development of Nigeria because not a single woman was presented
in similar capacities as those of the males. The only woman depicted
was a foreigner - Mary Slessor. The situation was more worrying
when we noted that only a paragraph out of a total of 99 pages
was devoted to women. The paragraph depicted the contribution
of only half of a dozen women in the judiciary, education
and the civil service, as if these were the only areas
opened to women.

Similarly, in the Nigerian social studies texts for
primary three (The community, Book 3, 1976), out of a
total of 38 pictures contained in the book, only nine were
females. While most of the men depicted were either sitting
in council, or working as blacksmith, farmer, carpenter, postman
and doctor, the few females portrayed were portrayed in traditional

roles of mother, housewife, nurse or trader, with the exception
of a cartoon showing a female police officer. The female characters
were either pounding in a mortar, brought their children to
the dispensary or as a nurse, assisted the doctors while
attending to a patient.

In the American social studies book, The World and Its
People, Europe and Asia, (1984), the list of subjects included
Fareinheit, Aristotle, Julius Caeser, Henry VIII, Lenin, Stanley,
Leopold II, people who have made history. Their contributions
included the invention of the calender, building of waterways,
and reforms for the betterment of their communities. The few
women portrayed included Queen Elizabeth I of England, Catherine II
of Russia and Queen Sheba. Some others were presented as queens
and daughters of dignitaries. Also in People in Communities,
(1972), a textbook for the third grade in the American school,
more males than females were subjects of biographies and topics.
Some of the men were rulers of their communities. Those who were
not made rulers nursed the ambition of at least being appointed
into the council. Others built boats. In a particular section,
"The Yoruba of Ife" the story of twins, a boy and a girl was told.
While Taiwo, the boy built a house, and hunted, Kehinde the girl
helped mother in the market and sold cloth and food.

The skewed characterisation of main actors in favour of

males for both school systems might be due to the fact that the

subjects of social studies are largely the exclusive preserve

of male citizens. These topics are usually in the areas of

public administration, politics, diplomatic and military affairs

of a country, and since men take more active part in these

activities, they get prominence over women who are usually portrayed

in their relationship to the national figures either as wives,

mothers, daughters or queens. But the glorification of males

and the implication that only men hold opinions and are the only

people in the social milieu may have damaging effects on the

females who form the majority of any country's population.

Based on the concept of role expectancy behaviour, an

individual develops through the years his or her set of

internalized values, beliefs, ideals and attitudes. Children's

interaction with instructional materials in social studies might

be a unique medium for the development of attitudes, beliefs,

values and ideals. This is so because through social studies,

young people encounter idealized types, persons who illustrate

by their way of life, the values which society rewards and likes

to see in its citizens. Thus, role models not only present

children with future images of themselves, but also influence

their goals and aspirations. And if very few of such models

are presented for a group of children, their options in future
life choices may be limited.

Social studies materials are not only slanted in favour
of males, but through subsuming terminology such as men, man,
mankind in the sense of human beings, manpower, brotherhood,
policemen, cameramen and the feminine suffixes, for example,
managress, females are more likely to be edged out of history.
The use of feminine suffixes particularly implies that females
are a special and unequal form of the correct neuter expression.
The probable effect of reading slanted historical materials
by primary school children is the focus of the present study.

5.3.0 Hypothesis III

Character Presentation in Roles/Occupations

The third hypothesis states that more male than female
characters will tend to be presented in high status roles and occupations
We have earlier operationalized qualitative presentation to
include -

1. The occupations assigned to female and male
    characters.

2. The environment in which members of each
    category of characters were found.

3. The activities members of each group
    performed in the textbooks.

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The data used to test probable sex differentiation in the assignment of roles/occupations were collected at three levels.

1. Using the same method applied earlier, each role/ occupation was counted once. In cases where the same role or occupation occured more than once, only one count was taken. Thus variety was taken care of. Employing Reiss' (1961) technique, all anti-social roles or occupations such as those of a robber, thief and money doubler, were deleted. It is pertinent to state that roles and occupations were used interchangeably throughout this study.

2. To determine the quality of roles assigned to female and male characters, the educational requirement of and the income attached to a particular role/occupation were used as indices to classify the roles/occupations assigned to female and male characters into high and low categories (Reiss, 1961). Education and income have been utilized to measure the socio-economic status of an occupation or role for some reasons. Both variables are major determinants of the status attached to a particular occupation. An individual qualifies for occupational life by obtaining an education and as a consequence of pursuing an occupation, the individual obtains an income. Occupation is therefore the intervening activity linking income to education. Although we are aware of Dore's thesis on qualification escalation and certificate devaluation (Dore, 1976), in the absence of a more objective alternative criterion,

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it is reasonable to classify an occupation
according to the prevailing levels of education
and income of its incumbents. Thus education
and income were the two variables used to
determine the socio-economic status or social
prestige of the roles/occupations assigned to
female and male characters in the school's
instructional materials analysed in the present
study.

The prevailing rankings of occupations in Nigeria,
using education and salary income were adopted.
Hence, those occupations requiring educational
qualifications above the West African School
Certificate were classified into the high-status
category, within the range of salary grade level
eight and above. While those requiring the West
African School Certificate and below were grouped
into the low category with a salary range of
grade level seven and below attached to each of
the occupations/roles in this category.

3. Other two categories were also identified. The
first was the kinship category which covered
all kinship roles such as mother, wife, husband,
father, sister, brother, uncle, niece, grandmother,
grandfather and daughter/son in-law. The second
category covered all the traditional roles which
enjoyed some degree of authority and privilege
and such roles included those of king, chief, queen,
tsar, emperor, empress, prince and princess.

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In all, there were four categories -

1. High Status

2. Low Status

3. Kinship

4. Traditional

The table below illustrates our findings when the number of roles/occupations assigned to female and male characters were compared.

Table 5:5 Sex Disparity in the Assignment
of Roles/Occupations to Characters

School	Female	Male	Total	χ^2
AIS	122	321	443	
	(27.5%)	(72.5%)	(100.0%)	0.2
MCPS	81	230	311	
	(26.1%)	(73.9%)	(100.0%)	

Df = 1
Not significant

Even though the calculated chi-square of 0.2 was not significant the percentage scores for each class of characters in both schools indicated that the instructional materials of both schools assigned fewer roles/occupations to female than male characters. Also, the texts of the schools seemed to compare well in the differential allocation of roles/occupantations to characters. American textbooks assigned 72.5% of all roles/occupations to male characters, while only 27.5% referred to females. MCPS texts were almost as sex-typed as those of AIS in the allocation of roles/occupations to female and male with 73.9% for males and only 26.1% for females.

To further test our hypothesis, the data
generated by classifying all roles/occupations
into four categories - high, low, kinship and
traditional - were analysed. The results
are as shown in   table 5:6 overleaf.

The findings illustrated in table 5:6
overleaf indicated that sex was a significant
factor in the assignment of roles and
occupations to characters in American and
Nigerian text-books. Instructional materials
of both schools assigned more high status roles/
occupations to male than to female characters.
Those of the American texts assigned 25.7 per cent
to males and as little as 3.8 per cent to
females, while the situation in the Nigerian
textbooks was almost the same as that of
American school with 24.8 per cent for males
and as few as 10 (3.2 per cent) to females.

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Table 5:6 Sex Variation in the Assignment of Roles/Occupations to Characters

School	High		Low		Kinship		Traditional		Total		G Total	x^2
	F	M	F	M	F	M	F	M	F	M		
AIS	17 (3.8)	114 (25.7)	59 (13.3)	148 (33.4)	41 (9.3)	22 (5.0)	5 (1.1)	37 (8.4)	122 (27.5)	321 (72.5)	443 (100)	*15.67
MCPS	10 (3.2)	77 (24.8)	33 (10.6)	107 (34.4)	38 (12.2)	27 (8.7)	0 (0.0)	19 (6.1)	81 (26.0)	230 (74.0)	311 (100)	

Df = 7

* = Significant at .05 level of significance.

Also, males were predominant in the low status category in the instructional materials of both schools; 33.4 to 13.3 per cent for males and females in American books respectively; and 34.4 to 10.6 per cent in the Nigerian texts. We had expected that more females would be presented in low-status roles. Even though our findings indicated that more males than females were depicted in low status roles we should not conclude that female characters have been favoured. Our finding only underscored our earlier findings that more males than females were portrayed in schools texts. The fact that more males than females were found in low-status roles meant the general paucity of female characters in these books.

We mentioned earlier that most of the female characters depicted in school's instructional materials were usually in the kinship role as mothers, wives, daughters and queens. The results obtained from classifying all roles into four categories, reaffirmed our assumption. More females (9.3 per cent) than males (5.0 per cent) were shown in kinship relationships in the American books; 12.2 per cent females and 8.7 per cent males in the Nigerian texts. More females than male characters were often presented in their relationship to others.

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Even though America, unlike Nigeria, did not have the traditional institution of rulership and chieftaincy, American texts contained a great deal of materials on such issues in other lands. The analysis of the data collected from the assignment of traditional titles and roles to characters showed that there was sex differentiation as to who was portrayed in these roles. More of the traditional titles and roles were ascribed to male than to female characters in the instructional materials of both schools. However, the Nigerian texts seemed more sex biased in the assignment of traditional titles to male characters. All of the 19 traditional roles which formed 6.1 per cent of the total roles/occupations in the Nigerian books were assigned to males; while the American texts ascribed 37 out of a total of 42 to males. These figures represented 8.4 and 1.1 per cent of the total roles depicted in American textbooks.

Summarising our findings, we discovered that more roles in general were assigned to male than to female characters. The same trend was observed when the quality of the roles assigned was investigated by classifying all roles into four categories - high and low status, kinship and traditional roles. More male than female characters were assigned high status roles. Also males were predominant in low status roles. Female characters were disadvantaged in the assignment of roles generally, and

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particularly in those of lower prestige where we assumed they
would be dominant, because the relatively higher number of
occupations assigned to males signified the choices unavailable to
females. Thus, our assumption that not only would more male than
female characters be assigned a variety of roles but also that the
quality of male roles would be higher than those of females,
was affirmed. Our obtained chi-square of 15.67 was found to be
significant at the .05 level of significance.

Some of the prestigious occupational roles included those
of doctors, dentists, engineers, prime minister, president,
professors, scientists, pilots, astronauts, architects, inventors
discoverers, bankers, oceanographers, governors, army general,
surveyors. All the high status roles usually require some
professional training; they are usually of the constructive-
productive, physically and mentally exacting and problem-solving
activities. If more males than females were portrayed in these
roles, it seemed as if the textbooks did not mirror the realities
of the two societies where women are increasingly making in-roads
into the roles from which the textbooks have excluded them.
Invariably, the textbooks portrayed women in more low status and
kinship roles than in those of high status. Even though fewer
women than their total number are at present occupying high
status occupational roles, a large number of the children
who read these materials have mothers who

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are professionals. This trend was ignored in the textbooks.
Moreover, if the materials were presented in such a way as to
inform the female readers of the possibilities opened to them rather
than those closed to them, the instructional materials would
have been more balanced in the portrayal of females and male
roles.

Another method of sex-discrimination against females in
the texts was the presentation of motherhood as their all-
important role. Textbook mothers invariably did not combine
motherhood with any other profession whereas most fathers
were presented as combining a job with fatherhood. For an
example, Dupe's father was a trader (Macmillan Primary English
Course, Book 3, 1976, pp 1 and 30). Faraday's father was a
blacksmith; Lister's father was a famous scientist; Elizabeth
Fry's father was a rich banker; Abraham Lincolm's father was
a carpenter. (A Primary History for Nigeria Book 2, 1973).

In the American textbooks, fathers were not only scientists,
presidents, managers, surveyors, doctors, aviators, pilots,
they were also presidents, governors, authors, farmers, meteoro-
logists, dairy farmers, barbers and long distance drivers.
(Your English Handbook, Books 3 and 6).

Considering their relative number to that of male characters,
females were assigned more low-status occupations which, unlike the
high status ones where male dominated, neither requiring extensive
training nor substantial reward in the market place. Such roles

included those of the teachers, nurse, cook/caterer, typist, secretary, clerk, shopkeeper and others in that category. Ranking second to the low status category, the kinship category had more females than males. Females were portrayed as mothers, wives, housewives, brides, grandmothers, sisters, aunts, roles that restrict them to the home and economic dependence on the males (Abe, 1985). As mentioned earlier, it was observed that while fathers were expected to combine a prestigious occupation with fatherhood, mothers were portrayed as being content with motherhood and housewifery.

The social studies textbooks were especially critical because they were about public administration, leadership, the exercise of authority and power and the enjoyment of the rights and privileges of leadership. Apart from the modern leadership roles of the president, prime minister, governor, head of state, army general and others, traditional roles such as those of chiefs, tsars, emperors, sheiks, priests, vassals were more often presented as male than as female roles. The few females presented in traditional roles were usually queens, princesses, empresses and duchesses, all deriving their social status from their association with some important male community leaders. While their male counterparts

were making decisions that would affect the lives of a whole community, they were portrayed in ceremonial roles that seemed to cushion the strains and stresses of office for the males.

Although we did not set out to compare the two sets of texts with respect to the variety of new occupational roles they presented, we observed that American textbooks had a greater variety of roles than the Nigerian ones. Out of a total of 754 occupations depicted in the instructional materials of both schools, those of AIS was 443, representing 58.8 per cent of all occupations. Not only did AIS books portray larger number of occupations, they also presented greater number for each category of characters. Out of a total number of 551 roles assigned to male characters, AIS instructional materials ascribed 321 to males representing 58.3 per cent of male occupations; while those of MCPS was 41.7 per cent. To a greater extent, AIS books presented more varied roles for women than those of MCPS. Out of a total of 203 female roles, AIS instructional materials presented female characters in 122 roles, representing 60.1 per cent of the total roles assigned to females in the instructional materials of both schools.

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The reason for the greater variety of roles in American
instructional materials could be the result of the efforts
of pressure groups to minimise sex discrimination in
employment. Such efforts culminated in the Federal Government's
Amendment of 1981 which made it an offence for employers
to deny anyone of employment on account of sex. Moreover, as a
result of growing industrialization, increasing participation of
women in education especially by returning students most of whom
are mothers, more roles and occupations are now made available to
women than before. Whereas the pautry figure of 81 roles/
occupations in all the Nigerian texts analysed might be an
emphasis on the development of Nigeria and the influence of
traditional beliefs, values and attitudes about women's
status in all spheres of Nigerian life. Such traditional
beliefs and attitudes that emphasise her roles as mothers and
wife have contributed to her low participation in education
resulting in restricted occupational choices for her.

From our study so far, we found that female characters
were under-represented not only in the central roles, but also
among the supporting and other characters. When there
were female actors, they were usually insignificant and
inconspicuous. While males were depicted in a variety of
roles which carried both economic reward and social
prestige, the relatively few female characters portrayed were
mostly in low prestige occupations and as appendages to some

important social figures either as mothers, daughters, wives, queens, princesses or brides.

5.3.1 <u>Types of Environment</u>

We have earlier stated that we have adopted the environment in which female and male characters were found as one of our measures of the quality of character presentation. For our purpose, we have classified all environments into two main categories - outdoor and indoor. Our outdoor environments included those beyond the door-step of the home, while the indoor ones comprised of those in the home-living-room, bedroom, kitchen, porch and bathroom.

Outdoor environments were rated high because we assumed that they provided not only greater amplitude but also public recognition and rewards. The indoor environments were rated low because we assumed that they did not enjoy the characteristics we have ascribed to outdoor ones, and in addition, they are restrictive. Our indoor-outdoor dimensions of environment were based on the assumptions inherent in the discussion of the private versus public domains of Rosaldo and Lamphere (1974) and Stacey and Price (1981).

In counting the number of environments, the same technique which was applied in quantifying the data on characters, was utilized. Each environment for a particular category of characters was counted only once. Where a particular type

of environment occured more than once, this was still
regarded as one. In all, a total of 226 environments were
found in the instructional materials of both schools; 145
(64.2%) from the American texts and 81 (35.8%) from those of
Nigeria. Our findings are presented in the table below.

Table 5:7 Sex Variation in the Types of
Environment in Which Characters Were Found

| School | F | | M | | Total | x^2 |
	Outdoor	Indoor	Outdoor	Indoor		
AIS	45 (31.0%)	13 (8. 9)	77 (53.1%)	10 (6.9%)	145 (100.0%) Approx.	** 20.15
MCPS	5 (6.2%)	12 (14.2%)	58 (21.6%)	6 (7.4%)	81 (100.0%)	

Df = 1
** = Significant at .01 level of significance.

The finding illustrated in the above table confirm our
assumption that sex was a significant factor in the allocation of
environment to characters and that more males than females were
portrayed in higher quality, in this case, outdoor environment.
Our obtained chi-square was 20.15 which was found to be signifi-
cant at .01 level of significance. In addition, our finding
indicated that the instructional materials of both schools were
sex-biased. However, the Nigerian textbooks were found to be
more biased than those of America against women in the allocation

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environment to characters. More outdoor environments,71.6 per cent of all environments were ascribed to male characters and only 6.2 per cent to female ones. Out of a total of 18 indoor environments contained in MCPS' instructional materials, as much as 12 representing 66.7 per cent of all indoor environments, were ascribed to female characters, that is, for every one indoor environment for males, there were two for females.

The outdoor environments for male characters include the moon, other planets, the world, quarries, ranches, Hawaii, beach, open sea, congress, Holy City, factory, park, airport, house of assembly, college, circus, parliament, council meeting. For females, they comprised of restaurants, barns, temples (to seek refuge (Your English Handbook Boook 6, 1984), street, tea party, art museum, grocery, bakery, hospital, farm, school, garden, courtyard, well, play-ground, market, shop and beach.

Males were more often found in exciting and challenging outdoor environments. When female characters were allowed to venture out of their homes, it was usually into places which were complimentary to their familial roles as mothers and wives. They were then presented as being in the garden watering flowers; in the grocery or shop buying family needs; in the hospital to seek medical help for their sick babies (The Community, Book 3, 1976; Macmillan Primary English Course, Book 3, 1983; People in Communities, 1972; Skilpak Rainbow Edition; The Dog Next Door

and Other Stories, Level 7, 1979). Not that men did not go
to shops in these stories. But one got the impression that
men's shops were different from those of women. Male
characters went to sporting shops, co-op stores and tools shops.

As mentioned earlier, a larger proportion of the
females in the Nigerian books were found indoors - home, living
room, house, bedroom and kitchen. Males too were found indoors,
but their indoor environments seemed to be more interesting places,
such as attics, caves, chamber - tower, palaces and castles.

The explanation for the sex discrepancy in the assignment
of environments to characters might be found in the roles or
occupations each category of characters were allowed to perform.
If females were mostly presented as mothers, wives, princesses
and queens, these roles have automatically meant a restricted
amplitude environment for them. By presenting female characters
mostly in the above roles, the school textbooks seemed to have
ignored the economic roles of women because women, especially
Af-ican women have always worked. They are predominant in
farming, market trade and home industries (Boserup, 1970).
Therefore, it seems that the textbooks distorted reality because
the concept of women, particularly in Nigeria is that of
working motherhood (Oloko, 1985). Thus, while male characters
went on adventures, on explorations and journeys, the females
baked, cooked, took care of their family, trimmed the garden,

or at best, went to the supermarket to purchase items to be used in the home. Even the seemingly more liberal American texts made a clear distinction between the roles of females and males and by implication, the types of environment in which members of each category were found. Another explanation for the sex disparity in the types of environment for female and male characters might be the kinds of activities members of each category were allowed to take part in, and this is the subject of the next section of this chapter.

5.3.2 Types of Activities

The last of our measurements to test for probable sex differences in the quality of character presentation was the types of activities female and male characters performed in the instructional materials of American and Nigerian schools. We are aware that environment which we have considered above, is related to activities and therefore the two could have been collapsed.. However, we have intentionally kept them separate because research evidence from the literature review and the findings of the content analysis of selected textbooks have indicated that when women and men are found in similar environments, they do different activities. For an example, while woman and man in

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American books go to the sea-side, one plays with waves, while the other rules the waves respectively. While women and men in Nigerian texts are portrayed in the home, one cooks, sews or takes care of a sick baby, while the other attends meeting in the shrine.

As mentioned earlier, the outdoor-indoor dimension was used to classify the activities which female and male characters engaged in. Similarly, outdoor activities were rated high because we assumed that they allowed for greater amplitude than the indoor ones which we rated low. We also assumed that outdoor activities did not only mean greater opportunity of interacting with space, but also that of uncircumscribed opportunity at expressing oneself physically and mentally. Conversely, we also assumed that indoor activities entailed restricted space and interactions.

As we have done with the previous categories, each activity was counted only once regardless of the number of times it occurred in the instructional materials. There were a total of 640 activities; 416 or 65.0 per cent from the American texts, and 224 or 35.0 per cent from those of Nigeria. Out of a total of 416 for the American school, 264 representing 63.5 per cent of activities were performed by male characters

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while females engaged in 152 or 36.5 per cent. In the Nigerian case, they were in the proportion of 53.5 per cent outdoor activities to males as against as little as 2.9 per cent for females. Instructional materials of both schools were also very close in the proportion of indoor activities allowed for female and male characters. Our findings are summarised in Table 5:8 below.

Table 5:8 Sex Disparity in the Assignments of Activities to Characters

	Female		Male			
School	Outdoor	Indoor	Outdoor	Indoor	Total	χ^2
AIS	89 (21.4%)	63 (15.1%)	213 (51.2%)	51 (12.3%)	416(100.0%)	2.37
MCPS	47 (20.9%)	38 (16.9%)	12¼ (53.6%)	19 (8.5%)	224(100.0%)	N.S.

Even though, statistically our finding was not significant, we observed differences in the activities of female and male characters. Not only were males presented in more exciting and adventuresome activities, but they also engaged in more varied pursuits that demanded more independence and assertiveness.

The more active pursuits were observed for boys than for girls. To give an example, Nechan, the hero in "Adventure of the Last Frontier" (Rainbow Edition - Measure me Sky Book 5, 1980), dived and spearfished, Asoka made war. Mathew in "Sea Fever" (Your English Handbook, Book 6, 1984) went to the moon. Tijani Alamu, in "By Car Across Africa" (Brighter Grammar, Book I, 1983) intended to visit East Africa by car. Edet made traps to catch animals (Macmillan Primary English Course, Book 3, 1976). Hillary and Tenzing climbed to the top of Everest, the highest mountain in the world. Stanley in "The Dark Continent" explored the Congo Basin (Mastering English, 1974).

In contrast, most of the girls never did anything exciting
or stimulating. They were picking flowers, singing, baking,
cooking, knitting. In "A Story Without A Name", (Study Book -
How Is It Nowadays, 1976), out of a total of 224 activities, 139
or 62.1 per cent were male activities, while 85 representing 37.9
per cent of the activities were performed by female characters.
While men were portrayed as sitting in council, women were depicted
either drawing water from a well or pounding grains in the
courtyard (The Community, Book 3, 1976).

Whenever girls were presented in exciting activities, it
was mostly in company of boys. For example, Marianne in "The
Day of Glory" (Rainbow Edition - Measure Me Sky, 1961) went in
company of Oliver to the lake on expedition. Marianne was not
only surprised at her own courage and strength but was at the
same time grateful to Oliver without whose company such a self-
discovery could never have been made.

We also observed that girls were more often portrayed as
performing service activities. They played traditional
feminine roles, directed towards pleasing and helping others.
A few examples from the textbooks will suffice. In "Having Fun
in a Community," (The World and Its Peoples; Communities and
Resources, Book 3, 1984), Mrs. Garcia helped plan new parks.
Angela helped people to find books and information. Pam taught

sports and tennis. Mrs Rams cooked, cleaned, sewed and helped
Pedro with school work. Ngozi helped mother to decorate the home
(Macmillan Primary English Course, Book 3, 1984). Nneka, as a nurse
would clean and dress cuts, make beds, congratulate mothers for having
healthy babies. Habiba in "The School Play," carried food to the
poor, cared for small children and old people (Macmillan
Primary English Course, Book 6, 1976). Florence Nightingale
made friends with the poor and went to see sick people in their
homes. Helen Keller taught blind and deaf people. Elizabeth Fry
worked towards reforming the prisons (A Primary History for Nigeria,
Book 2, 1965).

While girls served, boys led. Oliver had to lead the
expedition team to the lake. Fakeye wished to be an Oba or at
the least, to be appointed into the council (People In Communities,
1972). Obi organised and led the search party for Edet when Edet
got lost on a Boys' Scout camping expedition.

In sum, we have investigated differential assignment of
occupations to female and male characters, and naturally, we
found that the types of environment in which they were portrayed
were different. The implication of these findings which we also
discovered in this section was that they engaged in different
activities. Male characters were portrayed as going on adventures

to the moon, other planets and other parts of the world, by air, sea and road. They were portrayed as inventive, building dams, breaking new grounds in science, medicine and technology. They took risks by speculating on landed property. The above are activities consonant with what both societies judge to be prerequisites for success in life. However, their female counterparts were depicted as doll-playing, cooking, or as being satisfied with watching the prowess and ingenuity of the males, apparently preparing for her roles as a mother and wife. The female characters also made blankets, washed dishes and clothes, administered to the needs of her family, the sick and the aged, always contended with the service she rendered to others. While the little boy helped father to build a boat, fish or fix the car, the little girl was presented as helping mother in the kitchen, bathing her baby brother or sister, more or less taking lessons in what would later become her major roles which society has endorsed.

5.4.0   A Comparison of Sex-bias in American and Nigerian
        Instructional Materials

Hypothesis IV
The fourth hypothesis stated that instructional materials of American schools will tend to be more equigender than those of the Nigerian schools.

Comparison, an important aspect of this study, has been an integral part of our analyses and discussions in this work. Specifically, the comparison of the instructional materials of the American and Nigerian schools, in relation to sex-discrimination was embedded in the analysis of our findings so far. However, for

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greater emphasis, some of the earlier findings are highlighted in this section.

Therefore, in testing the above hypothesis, data from both the quantitative and qualitative content analysis of instructional materials of the two schools were analysed.

The findings shown in tables 5:2; 5:3; 5:4; 5:5; 5:6; and 5:7, all seemed to uphold our hypothesis because they tend to indicate that American textbooks appeared less sex-biased than those of the Nigerian school in the number and quality of characters presented. On each of our measurements, viz: the number of female-male characters portrayed, the number of female-male characters as leading actors, the number and the quality of roles/occupations assigned to each category of characters, American textbooks tended to be more equigender than those of the Nigerian schools.

In addition, as mentioned earlier, we also observed that American textbooks presented a greater variety of roles than the Nigerian ones thus apparently creating wider and greater amplitude for females who otherwise would have been disadvantaged. More varied roles were also presented for women in American books than in those of Nigeria. About 60.1 or 122 of all female roles in the instructional materials of both schools were contained in those of the American school. Rationales for the apparent difference between the two school systems, have earlier on been presented.

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Based on our findings in relation to various aspects of our investigation into the instructional materials of both schools, we concluded that our hypothesis that American instructional materials will tend to be less sex-biased than those of the Nigerian schools was upheld.

We have mentioned earlier that like most societies, America and Nigeria have placed great faith in the school as the institution through which most of their national objectives would be achieved, especially those of egalitarian society where all, irrespective of social classes, ethnic background and particularly gender would be given equal educational opportunities. However, we have observed from the findings of our investigation that despite its special position in society as an agent of change, the school serves to strengthen the sexist attitudes towards girls and women, some of which children absorb even before they start school. The sex stereotypes existing in society are reflected in educational curricula and textbooks which in turn reinforce them to the detriment of women and men.

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CHAPTER SIX

RESULTS OF THE INVESTIGATION

6.1 <u>Sex Differentiation in Teacher-Classroom Behaviour</u>

The main focus of the present study has been stated as the comparison of the influence of the hidden curriculum òn the sex-role development of American and Nigerian primary school children. We have earlier on operationalized the hidden curriculum to include not only instructional materials which have been found to be biased against females in character presentation, but also teacher-classroom behaviour. We have also identified teacher-initiated interactions as an aspect of teacher-classroom behaviour for special attention in the study.

For the purpose of investigating probable sex disparity in teacher-initiated interaction, a modified version of Flander's Interaction Analysis Category (FIAC) (1970) was used to observe classroom process. The adapted FIAC, apart from discriminating between teacher-initiated interaction with female and male pupils, was all teacher-initiated, unlike the original FIAC which has two pupil-initiated and a period of silence and confusion categories. The description and

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administration of the instrument have been given in chapter three of the thesis. However, in addition to the characteristics of the teacher-samples, we observed that, contrary to our expectation, all the teachers involved in the study, were female, thus confirming the claim that the primary school has been feminized (Sexton, 1970). The fact that all the teacher samples were female made it impossible for us to study the effect of teacher's sex on classroom behaviour.

6.2. Hypothesis V

The fifth hypothesis states that teacher classroom behaviour will tend to be directed more often towards male than female pupils.

To obtain data to test the above hypothesis, 12 female teachers, made up of six regular class teachers in classes one, three and six, and six specialists in English Language, Mathematics and Social Studies for class six of both schools were observed using (TIAC) the modified version of FIAC. Classroom observation ranged between 25 minutes for class one and 40 minutes for classes three and six of the two schools under study. Each of the subjects - English Language, Mathematics and Social Studies was observed twice in each of the classes, making a total of six observations in each class. In all, 36 classroom observations convering a total

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number of 2I hours were made. The distribution of observation
by class and subject is presented in the table below.

Table 6:I: Classroom Observation by School,
Class and Subject

School	Subject	Class I	Class 3	Class 6	Total
AIS	English	2	2	2	6
AIS	Mathematics	2	2	2	6
AIS	S. Studies	2	2	2	6
MCPS	English	2	2	2	6
MCPS	Mathematics	2	2	2	6
MCPS	S. Studies	2	2	2	6
Total		I2	I2	I2	36

We have earlier stated that Flander's observational
schedule was adapted into eight teacher-initiated interaction
Analysis categories (TIAC). We have also assumed that the
frequency and quality of teacher-initiated interaction with
female and male pupils might influence their self-concept,
and perception and therefore, their concept of masculinity
and feminity, vocational preferences and expectations for women
and men. The result of our investigation into probable
sex differences in teacher-initiated classroom interaction is
presented overleaf.

Table 6:2: Sex Variation in Teacher-Initiated Classroom Interaction: AIS MCPS Combined

	Categories	Female %	Male %	Total
I.	Teacher accepts feelings	50.0	50.0	I00.0
2.	Teacher praises/encourages	48.3	5I.7	I00.0
3.	Teacher uses pupils' idea	38.I	6I.9	I00.0
4a	Teacher asks questions on content	50.0	50.0	I00.0
4b	Teacher asks procedural questions	50.0	50.0	I00.0
5.	Teacher commands	47.4	52.6	I00.0
6.	Teacher criticises	45.7	54.3	I00.0
7.	Teacher assigns academic tasks	50.0	50.0	I00.0
8.	Teacher assigns non-academic tasks	77.8	22.2	I00.0

Implicit in our hypothesis is the notion that teachers would interact more often with male than female pupils both in terms of quality and quantity. Categories 2, 3, and 7 were designated 'quality' categories because they were assumed to be of higher-level interaction compared to others.

Our findings were as expected in many important areas. For example, on categories I, 4a and 4b, sex seemed not to have been a significant factor in teacher-initiated interactions with pupils.

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However, our assumption that more males would be assigned academic tasks was disproved. Teacher-initiated interaction on this category was equally distributed among males and females. Nevertheless, in such important areas of educational psychology as motivation, categories 2 and 3, more boys than girls were praised and encouraged. Also, more boys than girls' ideas were made use of by the teacher with a percentage score of 61.9 and 38.1 for the two groups respectively.

As we have expected, more boys than girls received teachers' commands and criticisms, 52.6 for boys and 47.4 per cent for girls. This particular finding seemed to agree with the result of earlier studies on sex difference in teacher-pupil contacts. Most of the earlier studies reviewed concluded that more boys than girls exhibit disruptive behaviours which calls for teachers' attention and therefore more teacher contacts (Jackson and Lahaderne, 1967; Good and Brophy, 1971; 1974). Thus, we concluded that an overwhelming amount of teachers' socializing effort was directed at boys as opposed to girls.

As mentioned earlier, in this study, the fact that boys received more criticisms and reprimands than girls might be because, on the one hand, boys have been socialized at home to be independent and active. But the school frowns at the

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exhibition of such traits because they are antithetical to those which the school accepts and reinforces. Therefore, each rebellion, self-assertion and "disruptive" behaviour of boys was met by increased teacher disapproval, reprimand leading to greater teacher attention and contact. On the other, girls received fewer teacher criticisms and disapproval and therefore, increasingly limited number of contacts because they have been trained to be docile, conforming, passive and dependent, characteristics which the school requires for the performance of its task (Gates, 1961; Jacklin, 1966, Biber et al. 1972, Smith, 1973).

As stated earlier, the sex of pupils did not seem to be significant in the assignment of academic tasks. Such tasks included reading a passage, working a problem on the blackboard, working out a puzzle, correcting peers' work on the blackboard and demonstrating some cognitive skills. However, we observe a wide sex discrepancy in the allocation of non-academic tasks such as fetching, arranging and distributing of supplies, house-chores including cleaning and ti. ,ying the classroom after lunch break and assisting in general class management. More of such tasks, 77.8 per cent, were assigned to girls while only 22.2 went to boys.

Our findings regarding sex differentiation in the assignment of non-academic tasks seemed to agree with those of a similar study conducted by Biraimah (1980). Biraimah, in a research conducted in Togo, reported that of all 20 class and school prefects only one was female. Girls did all sweeping, and in-class maintenance tasks such as cleaning the board and returning papers.

In sum, our findings showed that while girls and boys received equal teacher contacts in a few areas of classroom teaching, notably in the assignment of academic tasks; clarifying pupils' feelings and the distribution of questions, there was evidence of gross inequality in teacher classroom interaction not only in terms of the number but also in the quality of such contacts. For instance, we found that teachers made more use of male pupils' ideas than those of the females. They were praised more often, received more of the negative and prohibitory messages than the girls. However, the contrary was the case in the assignment of non-academic tasks. More of in-class chores were assigned to girls than to boys.

Furthermore, we analysed our data to compare the degree of sex discrepancy in teacher-initiated interaction in both schools. Our findings are illustrated in the table overleaf.

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Table 6:3: Sex Disparity in Teacher-Initiated
Interactions By School

| Categories | AIS | | | MCPS | | |
	Female	Male	Total	Female	Male	Total
I.	50.0	50.0	100.0	50.0	50.0	100.0
2.	50.0	50.0	100.0	48.9	51.1	100.0
3.	51.8	48.2	100.0	31.2	68.8	100.0
4a.	50.0	50.0	100.0	50.0	50.0	100.0
4b.	49.0	51.0	100.0	51.0	49.0	100.0
5.	45.8	54.2	100.0	46.2	53.8	100.0
6.	42.2	57.8	100.0	44.6	65.4	100.0
7.	50.0	50.0	100.0	50.0	50.0	100.0
8.	56.8	43.2	100.0	90.0	10.0	100.0

We assume that teachers would interact more with male than female pupils. The results displayed in the above table confirmed the assumption in part. In both schools, sex was not an important factor in teacher's clarifying or accepting pupils' feelings, in the distribution of questions on content and in the assignment of academic tasks. However, we observed a slight difference in teacher's use of praise and motivation. While AIS teachers seemed to have distributed their interaction in this category

more equitably, MCPS teachers appeared to have favoured boys, even though slightly with a percentage score of 5I.I.

As anticipated, MCPS teachers were more male than female-directed in their use of pupils' ideas. They made use of male pupils' ideas 68.8 while female ideas were utilized only 3I.2 per cent of the time. Their American counterparts seemed to be more female directed on this category with a percentage score of 5I.8 for girls as against 48.2 for boys. A mirror image of the MCPS teachers' position was found in AIS in the distribution of procedural questions. While AIS teachers asked male pupils less procedural questions (49.0%) and female pupils 5I.0%, MCPS teachers directed 5I.0 per cent to girls and 49.0 to boys.

Consistent with our earlier findings in respect of boys receiving more of the prohibitory messages, we observed that boys from both schools received more of such. In AIS 54.2 percent of all commands, 57.8 percent of all criticisms went to boys, while girls received 45.8 and 42.2 percent of them.

Similarly MCPS boys received 53.8 and 65.4 percent of teacher initiated contacts in these two categories.

Even though both schools were found to allocate more of the non-academic tasks to female pupils, we observed a wider disparity between female and male share. While American

teachers assigned 56.8 percent of in-class chores to females, as much as 90.0 percent of such duties were apportioned to their Nigerian counterparts. We therefore concluded that in such important areas, such as motivating pupils, using their ideas or criticising and commanding them which could have implication for the development of either positive or negative self-concept and perception, Nigerian primary teachers favoured more boys than girls. We also affirmed that even though females were more favoured than males in the allocation of non-academic tasks, we noted that the allocation of such tasks only reinforced the traditional roles society assigned to them. Thus, the school might only be preparing them for one of their future major roles.

To further test our hypothesis that teachers would interact more with male than female pupils, sex difference in interactional patterns across subject areas - English Language, Mathematics and Social Studies - was investigated. The table overleaf summarises our findings in English Language lessons.

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Table 6:4: Sex Discrepancy in Teacher-
Initiated Interaction Across Subject
Areas - English Language

Category	Female	Male	Total
I	25.0	75.0	I00.0
2	42.2	57.8	I00.0
3	64.5	35.5	I00.0
4a	53.2	46.5	I00.0
4b	52.2	47.8	I00.0
5	43.2	56.8	I00.0
6	47.8	52.2	I00.0
7	4I.7	58.3	I00.0
8	42.9	57.I	I00.0

Combining data across schools, class and subjects, we
have earlier noted that sex was not important in teacher-
initiated interactions in certain categories. However, when
each subject area was considered, we found that sex was a signi-
ficant factor in teacher-initiated interaction. For instance,
boys and girls feelings were accepted and clarified in the ratio
of 3.I. so also, boys were praised and encouraged more often than
girls. However, girls' ideas were made use of more often than those
of boys - 64.5 per cent as against 35.5 for boys. We therefore
concluded that girls received greater qualitative teacher contacts
than their male counterparts. This trend was to be expected

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because research evidence has shown that girls are more
proficient not only in reading but also in language generally than
boys (Johnson, 1974; Anderson, 1956; Gates, 1961). However,
despite the fact that girls' achievement is generally higher
in English Language than those of boys, we discovered that more
academic tasks in this subject were directed towards boys -
58.3 as against 41.7 per cent for girls. Similar to our
earlier findings, boys were disapproved of, commanded and criticised
more often than girls. 56.8 per cent of all commands, 52.2 of all
criticisms were received by boys, while girls got 43.2 and 47.8
per cent of such contacts respectively.

However, our results on category 8 seemed to indicate a
role reversal for boys and girls. More of non-academic tasks were
earlier found to have been communicated to girls. But in English
Language lessons, we found that 57.1 per cent of such contacts
were received by boys while girls were allocated 42.9.

Overleaf table 6:5 is the result of our investigation
into teacher-initiated interactions in Mathematics lessons.

Table 6:5: Sex Differentiation in Teacher-
Initiated Interaction - Mathematics

Categories	Female	Male	Total
I	I2.3	87.7	IOO.O
2	63.6	36.4	IOO.O
3	33.3	66.7	IOO.O
4a	3I.2	68.8	IOO.O
4b	40.0	60.0	IOO.O
5	62.5	37.5	IOO.O
6	50.0	50.0	IOO.O
7	7I.4	28.6	IOO.O
8	57.I	42.9	IOO.O

Our findings on the distribution of teacher-initiated

contacts in Mathematics class were as expected. Research

evidence abounds to show that boys tend to be more mathematically

and spatially inclined, perform and achieve better than girls

in this subject area (Maccoby and Jacklin, I974; Maccoby, I966).

Therefore it was to be expected that boys would receive more

teacher-initiated interactions than girls in mathematics class

as a result of their supposedly natural inclination towards

the subject. Further analysis of our data seemed to have confirmed

this assumption. Both in terms of the number and the quality of

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contacts, boys had an edge over girls. Boys' feelings were accepted and clarified 87.7 per cent of the time as against a pautry I4.3 for girls. Their ideas were made more use of 66.7 per cent compared to only 33.3 for girls. More content and procedural questions were directed at them, 68.8 and 60.0 percent respectively.

However, we noticed a deviation from the general trends in our results in relation to which of the sexes was reprimanded or criticised. Hitherto, we observed that boys have received more of the orders and prohibitory messages. But in the Mathematics lessons, more of such interactions were directed to girls - 62.5 as against 37.5 percent for boys. The new trend could be as a result of the assumption that boys were superior to girls in mathematical skills (Maccoby, I966) and because girls as a group, were presupposed to be low achievers in this subject. Not only was girls' work criticised, they were also disapproved of more often than those of boys. The need to criticise and reprimand girls might be to improve their performance. This supposition seemed to have been confirmed by the number of mathematical tasks assigned to girls; 7I.4 percent of such tasks were given to girls as against 28.6 for boys.

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Similarly, it was found that teachers assigned more non-academic tasks to girls - 57.1 per cent of such tasks went to girls while boys received 42.9 per cent. The findings of the analysis of data obtained from observing social studies lessons are presented in the following table.

Table 6:6: Sex Differences in Teacher-Initiated Interaction - Social Studies

Categories	Female	Male	Total
1	14.0	86.0	100.0
2	25.0	75.0	100.0
3	31.3	68.7	100.0
4a	40.0	60.0	100.0
4b	50.0	50.0	100.0
5	33.3	66.7	100.0
6	33.3	66.7	100.0
7	30.0	70.0	100.0
8	60.0	40.0	100.0

Our findings confirmed our expectations of teacher interactions in social studies lessons. We had expected that teachers' contacts would be skewed in favour of boys both qualitatively and quantitatively. More boys' ideas were accepted, clarified and made use of more often than those of girls. Boys' were asked questions on the content of the lessons more often than girls. They also received more criticisms and commands than girls. They performed more of the academic tasks. The only area where girls seemed to have been more favoured than boys was in in-class

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chores and management. Our finding indicated a strong evidence of discrimination against girls in the distribution of teacher-initiated contacts in Social Studies lessons.

The finding of our investigation into Social Studies subject seemed to confirm those of earlier researchers who reported that not only was instructional materials in Social Studies discriminatory against females, but also that the subject itself was perceived as a male one (Kraft, 1973; Chapman, 1978; Hahn, 1973; Jay, 1975; 1977; O'Donnell, 1973).

Our data was also subjected to further analysis to determine likely sex difference in teacher-initiated interaction across the three classes used in the present study. Our findings are presented in the table below.

Table 6:7: Showing Sex Variation in Teacher-Initiation Interactions Across Classes and Subjects

	Class	Female	Male	x^2	Total
Category I	I	52.4(21)	47.6(19)		100.0(40)
	3	5o.0(20)	50.0(20)	0.02	100.0(40)
	6	52.4(21)	47.6(19)		100.0(40)
Category 2	I	52.4(21)	47.6(19)		100.0(40)
	3	50.0(20)	50.0(20)	6.29	100.0(40)
	6	75.0(30)	25.0(10)		100.0(40)
Category 3	I	33.3(13)	66.7(27)		100.0(40)
	3	42.9(17)	57.1(23)	0.86	100.0(40)
	6	36.4(15)	63.6(25)		100.0(40)
Category 4a	I	55.0(22)	45.0(18)		100.0(40)
	3	50.0(20)	50.0(20)		100.0(40)
	6	55.0(22)	45.0(18)	0.27	100.0(40)
Category 4b	I	55.6(24)	44.4(16)		100.0(40)
	3	50.0(20)	50.0(20)		100.0(40)
	6	52.4(21)	47.6(19)	0.87	100.0(40)
Category 5	I	47.6(19)	52.4(21)		100.0(40)
	3	33.3(14)	66.7(26)	1.31	100.0(40)
	6	42.1(17)	57.9(23)		100.0(40)
Category 6	I	40.0(16)	60.0(24)		100.0(40)
	3	36.4(15)	63.4(25)		100.0(40)
	6	43.7(18)	56.3(22)	0.39	100.0(40)

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Category 7	I	50.0(20)	50.0(20)		I00.0(40)
	3	55.0(22)	45.0(18)		I00.0(40)
	6	43.7(18)	56.3(22)	0.80	I00.0(40)
Category 8	I	50.0(20)	50.0(20)	**	I00.0(40)
	3	25.0(I0)	75.0(30)	I4.0	I00.0(40)
	6	33.3(13)	66.7(27)		I00.0(40)

* Significant at .05 level   Df = 2
** Significant at .01 level

The results shown in the above table do not seem to indicate any definite direction in the distribution of teacher-initiated interactions across classes. We however observed a new trend - that teachers clarified more female than male pupils' feelings in both classes one and six. There was also a clear indication of sex bias in the use of pupils' ideas by teachers. More of male pupils' ideas were utilized by the teacher in all the three classes under study, with the following percentages. In class one, we recorded a ratio of 2:I for males and females. In class three, boys scored 57:I percent while girls had 42.9 percent of all contacts in this category. For class six, 63.6 percent of such interactions were directed towards males and 36.4 to females.

Similar trend was earlier on noted across the three classes when we found that teachers criticised and ordered more male than female pupils in all the three classes.

In the assignment of academic tasks, while these were equally shared between the two groups in class one, more of such went to

girls in class three, while the reverse was the case in class six. In this particular class, as much as 56.3 percent of academic tasks went to boys and girls received 43.7.

In the distribution of non-academic tasks, we noted that there was no distinction between the two categories of sample in class one. However, we found a strong case of bias against boys in classes three and six in the assignment of these tasks. As few as 25 per cent of such tasks were allocated to class three boys while girls received a lion's share of the total number of such interactions. Class six girls received as much as 66.7 per cent of non-academic tasks compared to only 33.3 for boys in the same class. Thus, our findings seem to indicate that the school, instead of blurring differences particularly those of gender may in fact, inadvertently be promoting inequality by ascribing different sets of expectations to each sex, through its organisation and execution of its stated functions.

6.3   Summary of Findings

Our findings indicated that gender was inconsequential in teachers' acceptance and clarification of pupils' feelings. Sex was also found not to be significant in the assignment of academic tasks and the distribution of content and procedural questions. However, we noted that the dispensation of the

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reward system to females and males varied according to subjects and classes.

Our findings were consistent in the apportionment of criticisms and commands. Boys consistently received more of such teacher contacts than girls. So also, their ideas were made use of more often than those of girls. We also discovered that female pupils were assigned the majority of in-class maintenance and management duties.

In all, boys were found to have received more of teacher-initiated interactions both in terms of number and quality.

CHAPTER SEVEN

FINDINGS OF THE INVESTIGATION

7.0 SEX DIFFERENCE IN TEACHERS' PERCEPTION OF PUPILS

In the previous chapter, we investigated sex difference in teachers' classroom behaviour and we found that boys received greater teacher attention and contacts than girls. For the purpose of the present chapter, we assumed that teachers perception of female and male pupils might be accountable for any sex difference in teacher-classroom behaviour and vice-versa. Based on this supposition, an exploration of teachers' perception of female and male pupils was undertaken, using the Teacher Rating Scale (TRS) which was developed by the researcher.

The instrument was designed to find out whether teachers rated female and male pupils differentially in specific areas of academics, social and personality traits. The instrument and its administration have been described in chapter three of the work.

The present study assumed that apart from sexist instructional materials and discriminatory teacher-classroom behaviour, teachers' perception of female and male pupils was also crucial to the development of pupils' self-concept, their concept of masculinity and femininity and expectations for women and men. The TRS was designed to study probable sex difference in teacher's rating of pupils.

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All the teachers who responded to the TRS were female. The American teachers were relatively younger than the Nigerian ones. Their ages ranged between 20 and 35 years. All the Nigerian teachers were above 35 years of age. Both American and Nigerian teachers were professionally qualified - all of them had had some teacher training. However, while the American teachers were all academically qualified with a minimum of undergraduate degrees, the basic educational qualification of their Nigerian counterparts was the West African School Certificate. The wide gap between the educational qualifications of the two sets of teachers is not a phenomenon peculiar to the two schools under study. It is a reflection of the staffing policy of Nigeria and America in relation to primary education. While the first degree is the minimum qualification to teach at any level of the American system, the West African School Certificate has recently been adopted as the minimum academic qualification for teaching in the Nigerian primary schools. However, the Nigerian teachers seemed to have a longer period of professional experience than their American counterparts. All of them have taught for over fifteen years, while the teaching experience of the American teacher ranged between three and fifteen years.

The data collected from the administration of TRS was used
to test our sixth hypothesis.

7.1.   <u>Hypothesis VI</u>

The sixth hypothesis stated that teachers will tend to rate
boys more favourably than girls on selected personality traits and
academic subjects.

For the purpose of our investigation, the selected personality
traits were classified into desirable and non-desirable categories.
We are aware that preferred personality attributes and behaviour
vary universally over a considerable range. Margaret Mead (1935)
illustrated this by pointing to disparate patterns in some preli-
rate and more advanced societies. We know that qualities defined
as male in one society may be defined as female in another.
For instance, American women are expected to show their emotions,
while, on the other hand, men are not supposed to, but to be
coldly practical (Frazier and Sadker, 1973). We are also conscious
of the fact that a particular trait or social behaviour might have
different meanings depending on the context in which it was
being used. Examples of such traits are "aggressive, co-operative,
competitive, quiet", all of which could be used in the negative
or positive sense.

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Therefore, the categorisation of these personality characteristics into desirable and non-desirable categories was partially based on research evidence on sex differences in social behaviour and characteristics (Epstein, 1970; Maccoby, 1966; Maccoby and Jacklin, 1974; Frazier and Sadker, 1973; Garai and Schneinfeld, 1968), and partly arbitrary.

Our findings on this aspect of the study are set out below -

Table 7:1: Sex-Stereotyoing in Teachers' Rating of
Pupils on Desirable Personality Traits

Traits	AIS			MCPS		
	Girls N= 30	Boys N= 30	X^2	Girls N= 30	Boys N=30	X^2
Aggressive						
Never	60.0	0.0	**	43.3	0.0	**
Sometimes	40.0	50.0	29.52	46.7	33.3	23.41
Always	0.0	50.0		10.0	66.7	
	100.0	100.0		100.0	100.0	
Adventurous						
Never	33.3	3.3	**	40.0	0.0	**
Sometimes	56.7	40.0	17.93	46.7	26.7	20.93
Always	10.0	56.7		13.3	73.3	
	100.0	100.0		100.0	100.0	
Competitive						
Never	43.3	3.3	**	30.0	0.0	**
Sometimes	50.0	30.0	24.99	53.3	20.0	23.47
Always	6.7	66.7		16.7	80.0	
	100.0	100.0		100.0	100.0	
Confident						
Never	16.7	3.3	**	10.0	0.0	**
Sometimes	66.7	36.7	11.09	60.0	23.3	15.84
Always	16.7	60.0	30.0	30.0	76.7	
	100.0	100.0		100.0	100.0	

Traits	Girls	Boys	χ^2	Girls	Boys	χ^2
Independent						
Never	I3.3	6.7	** 18.94	I0.0	0.0	** 12.39
Sometimes	83.3	40.0		66.7	33.3	
Always	3.4	53.3		23.3	66.7	
	100.0	100.0		100.0	100.0	
Bright						
Never	I0.0	6.7		3.3	0.0	
Sometimes	60.0	46.7	I.9	60.0	40.0	2.99
Always	30.0	46.7		36.7	60.0	
	100.0	100.0		100.0	100.0	
Hard-Working						
Never	I3.3	6.7		3.3	0.0	
Sometimes	46.7	36.7	I.50	60.0	40.0	2.99
Always	40.0	56.6		36.7	60.0	
	100.0	100.0		100.0	100.0	

Df = 2
Significant at .0I level. **

Table 7:2: Sex-Stereotyping in Teacher's Rating
of Pupils on Non-Desirable Attributes

	AIS			MCPS		
Traits	Girls	Boys	χ^2	Girls	Boys	χ^2
Docile	N= 30	N= 30		N=30	N= 30	
Never	0.0	66.7	** 30.05	I0.0	66.7	** 29.73
Sometimes	43.3	26.7		33.3	33.3	
Always	56.7	6.6		56.7	0.0	
	100.0	100.0		100.0	100.0	
Confor-ming						
Never	0.0	33.3	** 23.27	I3.3	50.0	** 23.99
Sometime	46.7	66.7		30.0	50.0	
Always	53.3	0.0		56.7	0.0	
	100.0	100.0		100.0	100.0	
Co-opera-tive						
Never	3.3	I6.7	** 15.58	6.7	I3.3	** 12.72
Sometimes	30.0	70.0		13.3	73.3	
Always	66.7	13.3		60.0.	13.3	
	100.0	100.0		100.0	100.0	

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Fearful						
Never	3.3	50.0		16.7	73.3	
Sometimes	73.3	50.0	** 13.88	46.7	26.7	
Always	23.3	0.0		36.6	0.0	4.72
	100.0	100.0		100.0	100.0	
Lazy						
Never	50.0	66.7		40.0	60.0	
Sometimes	43.3	33.3	1.82	56.7	40.0	2.33
Always	6.7	0.0		3.3	0.0	
	100.0	100.0		100.0	100.0	

Df = 2
** = Significant at .0I level.

From our analysis, we observed that the sex of pupils was a significant factor in teacher's rating of them on desirable factors. The percentage scores of each sex on these attributes indicated that boys were more favourably rated than girls. Our finding was further confirmed by the clustering of more boys around the high and medium response sets while more girls were found clustering around the low medium response set. To illustrate our observation, we noted that while 66.7 per cent of AIS boys were rated as always competitive, as many of 43.3 per cent of the girls were rated as never competitive. Similarly, 80 per cent of MCPS boys were competitive, while 30.0 per cent of the girls were rated as never competitive. We therefore concluded that not only were teachers discriminatory in favour of boys in their rating of pupils, but were also sex-stereotypical, thus affirming earlier research reports on pupils' performance on such personality

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traits and behavioural areas as aggression, competitiveness, adventurousness, positive self-concept and independence (Maccoby, 1966; Maccoby and Jacklin, 1979; Frazier and Sadker, 1973).

Thus, our hypothesis which stated that teachers will tend to rate boys more favourably on selected personality traits and academic subjects was partially confirmed. The analysis of teacher's rating of pupils on non-desirable personality traits and social behaviour was also found to be more favourable to male than female pupils. We also observed that teachers were sex-stereotypical. More girls than boys were found to be co-operative, docile, conforming and fearful, while the majority of boys clustered at the low and medium levels of response and were therefore either never or sometimes docile, conforming, co-operative or fearful. Most girls were found in the high level response set and were mostly docile, conforming, cooperative and fearful. Again our hypothesis was confirmed. Teachers were discriminatory against girls in their rating of pupils on non-desirable personality characteristics and social behaviour. They were also found to be sex-stereotypical in rating their pupils on such traits. Our findings were therefore as expected.

Part of our focus in this study was the comparison of AIS and MCPS on the various variables being investigated. Our finding in this direction was also as envisaged. We had expected

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MCPS teachers to be more sexist than their AIS counterparts. Our findings indicated that while American teachers seemed to agree that a few boys always exhibited some non-desirable traits as being docile, and fearful, the MCPS teachers seemed to agree that boys were not always docile or fearful. However, both groups of teachers seemed to concur that boys were not always conforming. As expected both groups of teachers were discriminating against girls in attributing more un-desirable characteristics to them, whereas, they rated boys more favourably on the desirable traits.

However, it was interesting to note that sex was not an important factor in teacher's rating of pupils on such social behaviour as being lazy, bright and hardworking. Even though, our various calculated chi-square on such traits were non-significant statistically the percentage score for each category of pupils seemed to indicate that boys were once again more favourably rated on such traits as being bright and hardworking. More boys from both schools clustered around the medium and high response areas, while more of the girls were in the medium area.

It is imperative to single out a particular trait for further discussion. Our finding indicated that the sex of the pupil was not a major factor in being bright. We are aware that intelligence is partially naturally endowed. Nevertheless, research evidence

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has also suggested that for the optimal development and utilization of such attributes as intelligence, environmental factors both in the home and the school, play a significant role. This is because such personality traits as self-concept, competence mastery, achievement-motivation, competitiveness, aggressiveness, and independence training, are acquired through the reciprocal interaction patterns available in both settings, particularly via those between the teacher and the pupils (Mccleland and Atkinson 1958; Bruner, 1972; Hoffman, 1974; Campbell, 1970; Havighurst and Neugarten, 1967). But the teachers in our study have rated their female pupils much lower than their male counterparts on these attributes which we have noted to be prerequisites for the full development and utilization of their potentials. By implication, it seemed these teachers were saying that even though girls and boys were equally naturally endowed, girls were not likely to be able to utilize their potentials because they lacked the social ingredients necessary for maximum use of their talents.

We are also conscious of the fact that not only would

teachers' differential perception of female and male pupils

on these traits influence teacher's interaction with their pupils.

It would also have implications for the pupils' self-concept which

is bound to affect their sex-role perception, expectations for

women and men and also their future occupational choices.

Our finding that teachers have differential perception of,

and expectation for, female and male pupils was particularly

revealing because it seemed that teachers might not be aware of

any sex difference in the way they view and treat their female and

male pupils. The differential perception and expectation of female

and male pupils seem to be based on different reasons. For an

example, the teacher's need is to cover the curriculum. Given

this need, the teacher prefers students who are docile, conforming,

quiet and co-operative so that teaching can go on with little

or no disruption. Invariably, female pupils usually exhibit

these traits and are therefore preferred to males for this reason.

This may account for why girls perform and cope better than boys

in the primary school which is perceived as being feminized and

therefore more suited to the needs of girls than boys'(Sexton, 1965;

Yee, 1973; Kagan, 1964).

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At the same time, boys seem to be preferred for other reasons, particularly at the secondary level. Teachers want pupils who are confident and competitive because they are more critical and more. interesting to teach. The teacher's perception of boys may also account for boys'superior performance at this level.

However, we are aware that such difference in attitudes towards girls and boys might affect the way teachers handle, stretch or encourage girls and boys in their work. We are also conscious of the fact that teacher's attitudes are almost certainly the dominant influence with respect to how children develop in school. They may well be more accountable than teachers realize for the persistence of sex difference in interests, activities, occupational choice; and expectations for women and men, and particularly in their performance in academic subjects. We assume that the teachers' rating of female and male pupils on the personality characteristics would also affect the way teachers rate them on school subject performance The probable sex differences in teacher's rating of pupils on academic subjects is the focus of the section that follows.

Table 7:3: Sex Differentials in Teacher's Rating of Pupils' Performance in Selected School Subjects: Both Schools Combined

Subjects	Girls (N=30	Boys (N=60	Df	x^2
Mathematics	%	%		
Good	36.7	78.3		
	(22)	(47)		
Average	48.3	20.0	2	22.65 **
	(29)	(I2)		
Poor	I5.0	I.7		
	(9)	(I)		
	100.0	100.0		
English Language				
Good	73.3	50.0		
	(44)	(30)		
Average	23.3	4I.7	2	7.02 *
	(I4)	(25)		
Poor	3.5	8.5		
	(2)	(5)		
	100.0	100.0		
Social Studies				
Good	33.3	70.0		
	(20)	(42)		
Average	60.0	30.0	2	17.0I **
	(36)	(I8)		
Poor	6.4	0.0		
	(4)	(0)		
	100.0	100.0		
Science				
Good	3I.7	73.3		
	(I9)	(44)		
Average	55.0	26.7	2	13.9 **
	(33)	(I6)		
Poor	I3.3	0.0		
	(8)	(0)		
	100.0	100.0		

Df= 2
* Significant at .05 level
** Significant at .0I level

Combining data from AIS and MCPS, we found that sex was a significant factor in teacher's rating of pupils' performance in Mathematics, Social Studies, Science and English Language. The calculated chi-square for each of them were 22.65; 17.01; and 13.9 respectively, all of which were significant at .01 level, and 7.02 which was found to be significant at .05 level of significance.

We therefore concluded that just as our findings have indicated that teachers were biased against female pupils and attributed undesirable personality traits to them, so also did they rate the performance of females lower than that of their male counterparts. Teachers seemed more generous in their rating of boys' performance than that of girls particularly in Mathematics, Science and Social Studies. Perhaps this was because these subjects are usually regarded as male ones   (Rossi, 1965; White, 1970, Clements, 1979; Kelly, 1981; Harding, 1980; Hahn, 1982).

Our finding in relation to teacher's rating of pupils was hardly surprising. If teachers perceived their female subjects as being deficient in those personality characteristics such as being competitive, aggressive, and independent, all of which were assumed to be prerequisites to good academic performance, it is logical that teacher's perception of their pupils' personality would affect their interactions with and expectations of them.

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Our findings so far seem to suggest that sex bias in school is cumulative. The content analysis of instructional materials has indicated biased presentation of information in favour of males. Our analysis of classroom interaction also affirmed that teachers interacted more often with boys than girls while teaching these subjects. Moreover, teachers' rating of pupils on both desirable personality attributes and consequently, on performance in selected school subjects has been found to favour boys.

In sum, our assumption that not only would teachers rate boys more favourably than girls on selected personality attributes but also on some school subjects was upheld. Our attempt to explain the consistent finding relied on the result of the content analysis of school textbooks and teacher classroom behaviour both of which we have earlier on discovered to be biased against female characters and pupils respectively.

7.2,.   Hypothesis VII

The seventh hypothesis stated that Nigerian teachers will tend to be more male directed than their American counterparts.

Table 7:4 compares the American and Nigerian teachers' rating of their pupils' performance on selected schools subjects.

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Table 7:4: Sex Discrepancy in Teacher's Rating of Pupils' Performance on Selected School Subjects: AIS and MCPS Compared

	AIS			MCPS		
Subjects	Girls	Boys	X^2	Girls	Boys	X^2
Mathematics	N= 30	N= 30		N= 30	N= 30	
Good	30.0 (9)	76.7 (23)	** 13.7I	43.3 (13)	80.0 (24)	* 8.72
Average	46.7 (I4)	23.3 (7)		50.0 (I5)	I6.7 (5)	
Poor	23.3 (7)	0.0 (0)		6.7 (2)	3.3 (I)	
	I00.0	I00.0		I00.0	I00.0	
English Language						
Good	70.0 (2I)	43.3 (I3)		76.7 (23)	56.7 (I7)	
Average	23.3 (7)	43.3 (I3)	4.5I	23.3 (7)	40.0 (I2)	2.99
Poor	6.7 (2)	I3.3 (4)		0.0 (0)	3.3 (I)	
	I00.0	I00.0		I00.0	I00.0	
Science						
Good	23.3 (7)	70.0 (2I)	** 12.48	40.0 (I2)	76.7 (23)	* 8.72
Average	53.3 (I6)	30.0 (9)		56.7 (I7)	23.3 (7)	
Poor	23.3 (7)	0.0 (0)		3.3 (I)	0.0 (0)	
	I00.0	I00.0		I00.0	I00.0	
Social Studies						
Good	33.3 (I0)	60.0 (I8)	5.55	33.3 (I0)	80.0 (24)	** II.57
Average	53.3 (I6)	40.0 (I2)		66.7 (20)	20.0 (6)	
Poor	I3.3 (4)	0.0 (0)		0.0 (0)	0.0 (0)	
	I00.0	I00.0		I00.0	I00.0	

Df = 2
* = Significant at .05 level
**= Significant at .0I level

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Comparing both schools, our finding indicated that even though sex was not significant in teacher's rating of pupils on English Language, it was a critical factor in teachers' rating of pupils in mathematics and science in both schools. Our obtained chi-square was 13.7 for AIS and 8.72 for MCPS in maths; and 12.48 for AIS and 8.72 for MCPS in science. In addition, we also found that while sex was significant in teacher's rating of pupils in social studies in MCPS, this was not so among AIS teachers. We therefore concluded that Nigerian teachers were more sex-biased in rating their pupils than their American counterparts. They also tended to be more male-directed than the American teachers. In almost all the subject areas and personality traits under consideration. they seemed to rate boys higher than girls. When compared to their American counterparts.

Thus. our proposition that the Nigerian teachers would be more sex-biased and more male-directed than the American ones was partially affirmed. Perhaps. this was because while there is a general awareness of the existence of sexism in the United States, such is yet to take place in Nigeria.

7.3   Summary

So far in this study, the content analysis of selected instructional materials has indicated that more male than female characters were presented. More male than female roles and occupations were depicted. Fewer female than male activities were shown. More male than female characters were presented in greater social amplitude.

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In addition, classroom observation of teacher-initiated interactions has suggested that teachers interacted more with male than female pupils. Boys' ideas were made use of more often than those of girls. Boys were criticised and reprimanded more often than were girls. In sum, they received more of teachers' attention than were girls.

Our findings of teachers' rating of pupils both on selected personality traits and school subjects seemed to suggest that because boys were perceived as being competitive, aggressive, confident and independent, they were more often preferred to girls who were rated as being docile, conforming and co-operative. Teachers' perception of girls and boys' personality attributes seemed to have implication for rating them on selected school subjects. Whilst boys were rated as performing well in mathematics and science, girls were rated as performing poorly. Even though the sex of the pupils was not important in teacher's rating of them in English Language in both schools, we observed that the Nigerian teachers seemed to be more sex-biased than their American counterparts particularly in Social Studies.

We therefore hypothesised that because primary school girls and boys receive differential messages about what is appropriate and expected of each sex in both societies, and because their teachers treat them differentially in the classroom, perhaps as

a result of differential expectations held out for them, they would probably have differential self-concept which might later affect their sex-role perception, their expectations for women and men and also their future occupational choices. Consequences of this assumption are discussed in the next chapter of this work.

CHAPTER EIGHT

FINDINGS OF THE INVESTIGATION

8:0 GENDER AND SELF-CONCEPT

The three preceeding chapters discussed our findings on
the independent variable. This was the school's hidden and circul
curriculum which we operationalized to include instructional
materials in English Language, Mathematics and Social Studies;
teacher-classroom behaviour and evaluation of children. We
have found the above aspects of the hidden curriculum to be
sex-differentiated in favour of males. Consequently, we
postulated that the above independent variables which we have
found to be male-dominated, would, based on the cognitive-
developmental theory of sex-role learning (Kagan, 1964;
Kohlberg, 1966) and social interactionist self theory
(Mead, 1934; Rose, 1962) contribute to children's sex-role
socialization, which was our dependent variable. We have
also defined sex-role socialization for the purpose of the
present study to include self-concept, vocational and
educational aspirations and sex-role expectations for women
and men.

8.1 Sex Difference in Children's Self-Concept

In investigating pupils' self-concept, our assumption was
based on the symbolic interactionist and self theory of Mead
(1934) and Rose (1962). As mentioned earlier, they both posited
that individuals construct a "me" for each distinct social setting

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in which they find themselves. Therefore, in the classroom which is one of the important social settings for most American and Nigerian children, the child must construct a self-concept and a pattern of behaviours, beliefs, attitudes and values consistent with the expectations she or he perceives others to have for him. Through the child's interaction with others, which for our purpose, include not only the teachers but also the imaginary and real characters portrayed in the instructional materials, the child's concept of her/himself, the status and expectations held out for her/his gender category are developed.

Based on the above premises, a twelve item self-concept scale covering academic and social areas contained in the children's questionnaire were (SJAQ) were responded-to by all the pupil subjects involved in the research. Examples of questionnaire items for the two areas of self-concepts were " I can pass all my examinations, and I can be great in future". There were three response sets - always, which was assigned a numerical value of 3; sometimes, with a value of 2, and never, having a numerical value of I. For ease of analysis, each of the two areas of self-concept under investigation were analysed separately. The hypotheses tested and findings are as follows.

8.2   <u>Hypothesis VIII</u>

The eighth hypothesis stated that boys will tend to score higher on the self-concept scale than girls.

The data generated from the self-concept scale to test the above hypothesis yielded the findings shown on the tables below.

Table 8:1: Relationship between the Scores of American Female and Male Pupils on Self-concept Academic (SCA)

Variable		N	X	SD	t	Df
SCA	Female	30	2.03	6.43		
	Male	30	2.39	9.02	1.01	58
	Not significant.					

Table 8:2: Relationship between the Scores of Nigerian Female and Male Pupils on Self-Concept Academic (SCA)

Variable		N	X	SD	t	Df
SCA	Female	30	1.86	37.14		
	Male	30	2.39	8.31	0.53	58
	Not significant					

Table 8:3: Relationship between the Scores of American Female and Male Pupils on Self-Concept Socials (SCS)

Variable		N	X	SD	t	Df
SCS	Female	30	3.8	7.8	**	
	Male	30	2.18	9.45	4.26	58
	Significant at .01 level					

Table 8:4 Relationship between the Scores of Nigerian Female and Male Pupils on Self-Concept Social (SCS)

Variable		N	X	SD	t	Df
SCS	Female	3½	2.31	7.6		
	Male	30	2.18	7.39	0.36	58
	Not significant					

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Table 8:1: conveys a non-significant difference between the scores of American female and male pupils in academic self-concept notwithstanding the fact that the mean scores of American girls were slightly lower than those of the male subjects.

Table 8:2: indicates a non-significant difference between the scores of Nigerian female and male samples, although the Nigerian males had higher mean scores than the females.

Table 8:3: shows a statistically significant difference between the scores of American female and male pupils on social self-concept, with the females recording higher mean scores than the males.

Table 8:4: shows a non-significant difference between the scores of Nigerian female and male pupils on social self-concept.

We then inferred that even though there was no significant difference between female and male subjects in academic self-concepts, we observed some difference between them in social self-concept. We then concluded that our hypothesis was partially confirmed. In addition, we tested for probable difference in the self-concept of American and Nigerian children. The hypothesis and analysis of data on this aspect of our investigation is contained in the next section.

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8.3 Self-Concept of American and Nigerian Primary School Children

Hypothesis IX

The ninth hypothesis stated that American children will tend to score higher than the Nigerian pupils on self-concept scale.

Similar to the procedure adopted in the preceeding section, any likely difference in the self-concept of American and Nigeian children was examined from the academic and social perspectives. Findings are shown in the tables that follow:

Table 8:5: Relationship between the Scores of American and Nigerian children on Self-Concept Academics (SCA)

Variable		N	X	SD	t	Df
SCA	Male	60	2.37	17.79		
	Female	60	2.11	10.01	0.38	118
	Not Significant.					

Table 8:6: Relationship between the Scores of American and Nigerian Female Pupils on Self-Concept Academic (SCA)

Variable		N	X	SD	t	Df
SCA	American	30	2.03	6.43		
	Nigerian	30	1.86	37.14	0.28	58
	Not significant.					

Table 8:7: Relationship between the Scores of American and Nigerian Pupils on Self-Concept-Social (SCS)

Variable		N	X	SD	t	Df
SCS	American	60	2.18	10.7	**	
	Nigerian	60	2.38	11.6	4.14	118
	Significant at 0.01 level.					

Table 8:8 Relationship between the Scores of American and Nigerian Female Pupils on Self-Concept Social (SCS)

Variable		N	X	SD	t	Df
SCS	American	30	3.8	7.8	**	
	Nigerian	30	2.3L	7.6	4.12	58
	Significant at 0.01 level.					

Table 8:5 shows a non-significant difference between the scores of American and Nigerian children on self-concept in academic performance although the American subjects had slightly higher mean scores than the Nigerian ones.

Table 8:6 also shows a non-significant difference in the scores of American and Nigerian female samples even though the American girls recorded slightly higher mean scores than their Nigerian counterparts.

We therefore concluded that even though the mean scores of the different groups of samples varied, there seemed to be no significant difference in the way they perceivedtheir performance in academic work. Sex did not seem to matter in the self-evaluation of their performance in English Language, Mathematics, Social Studies and school examination in general, in both the Nigerian and American schools.

However, the reverse seemed to be the case when we analysed the responses of subjects on social self-concept.

Table 8:7 shows a significant difference between the scores of American and Nigerian pupils on social self-concept, with the Nigerian subjects recording slightly higher mean scores than the American group. The American subjects' mean score was 2.18 while the Nigerian groups recorded a mean of 3.8, a range of I.62. Our finding was not as expected. We had expected that the American group would

score higher than their Nigerian counterparts on the self-concept scale. Instead, we found that the Nigerian samples had a higher mean score of 3.8, compared to that of 2.18 for the American group.

Table 8:8 also indicated a statistically significant difference between the scores of American and Nigerian pupils on social self-concept, with the females recording higher mean scores than their male counterparts. The American females had higher mean scores of 3.8 compared with 2.31 for their Nigerian counterparts, a range of 1.49.

Tables 8:3 and 8:4 show that both the American and Nigerian male samples recorded a mean score of 2.18 on social self-concept. Obviously, they were similar on social self-concept.

Our hypothesis were partially confirmed. We observed a non-significant difference in the scores of the various groups on academic self-concept. The result of the analysis of data on social self-concept indicated a significant difference except for the Nigerian and all the male samples.

As we anticipated, males recorded higher mean scores than females in academic self-concept. However, the reverse was found to be the case in social self-concept. Females had higher mean scores than males. Moreover, as predicted, American children

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were found to score higher than their Nigerian counterparts on academic self-concept. However, even though the various groups of the American sample recorded higher mean scores on social self-concept, they scored less than Nigerians when they were combined as a. group.

We therefore concluded that our result suggested that male children had higher mean scores in academic self-concept than the female ones who recorded higher mean scores in social self-concept; and that the American subjects, as a group, scored less, even though as individual groups, they scored higher than the Nigerian subjects.

In effect, it seemed that the male samples were more achievement oriented, while the females seemed socially-oriented. Boys' responses seemed to suggest that they could do better than girls in selected school subjects, perform better than girls in school generally, and pass all their tests and examinations. On the other hand, girls seemed to be particularly concerned about what others, especially their teachers felt about, and expected from them. Their responses seemed to indicate that they perceived themselves as obedient, likeable, and helpful.

As mentioned earlier, our finding seemed to indicate that boys' self-concept was instrumentally-oriented, while girls' was expressively inclined. Our finding which indicated that girls and boys evaluated themselves differently was not surprising. For instance, the content analysis of selected school texts which children were mandated to read if they must succeed at school, treated female and male characters differently. Apart from the fact that male characters were predominant, they were the heroes, the doers, the decision and policy makers, the subjects of mathematical problems in banking, life insurance, shareholding, investing and business transactions; and the builders and leaders of their societies. On the other hand, the few female characters were at best portrayed in their relationship to the national figures either as mothers, wives, daughters or queens.

Similarly, we found that teachers have more contacts with male than female pupils. Boys' ideas were clarified and made use of more often than those of girls. Boys were criticised and reprimanded more often than girls.

Other findings of the present study indicated that teachers did not only rate boys more favourably than girls but were also

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sex stereotypical. While they rated more boys as being competitive, adventurous, independent and as having drive, more girls were rated as being docile, conforming, fearful and co-operative. Logically, they were more generous in rating boys' academic performance particularly in mathematics, science and social studies than they were in rating girls'. We therefore concluded that it was likely that teachers' rating of pupils on personality attributes might have affected their interactions with, and expectations held out for them or vice versa.

Therefore, based on the symbolic interactionist and self theory of Mead (1934) and Rose (1962); Kagan and Kohlberg's cognitive developmental theory of sex-role learning, all of which we have earlier stated as forming the theoretical framework of the present study, it seemed girls and boys gradually and subliminally, over the years, internalized the messages, contained in the school's hidden curriculum. As children interacted with the characters in their textbooks, and with their teachers, they seemed to have imbibed ideas, beliefs, values and expectations for various categories of people, particularly, those relating to their own group, to the extent that girls and boys developed

different self-evaluation of their social and academic capabilities.

Moreover, there is evidence in the literature to suggest that sexist materials, sex differentiated classroom behaviour and expectations, might likely lead to the development of a feeling of inferiority and lowered self-esteem in girls, and those of superiority and self-worth in boys. These differential self-evaluations might lead to the fear of success for females and the need for achievement for males (Baruch, 1974). Perhaps, the above explains why our female samples recorded lower mean scores in academic self-concept than the male group. Moreover, the sense of belittlement that girls feel has been examined by Choumbart de Lauve (1972) who contended that because children's literature, textbooks and the media portray girls as dull, second-rate, subordinate people, girls are inhibited from developing a positive self-concept. The Zambian study (1984) noted that male-centered materials make the females identify themselves with values which are generally regarded as bad, portraying them as victims all the time, and thereby conditioning children to believe that boys are superior to girls.

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Therefore, based on the cognitive-developmental model of sex role learning (Kagan, 1964; Kohlberg, 1966), which we have earlier adopted as representing the most thorough attempt at integrating the different theories of sex-role learning, we inferred that through cognitive process of differential valuing of females and males, the vicarious modelling of characters and reinforcement by teacher's classroom behaviour and expectations, girls and boys were likely to differ in many important ways.

Moreover, research evidence abounds to show that girls have unrealistically low estimates of their abilities, whereas boys of equal ability do not undervalue themselves (Sears and Feldman, 1965; Wylie, 1963; Durojaiye, 1970). In addition, some studies support the conclusion that early self evaluations are associated with the child's subsequent educational and other experiences. Included among the many factors which have been empirically found to relate to self-concept are academic success or failure, social adjustment and over-all mental health (Coopersmith, 1959; Roth, 1959; Combs, 1963, McCandless, 1969). Important as this relationship is, research data have also indicated that sex stereotyping is one of the most important factors in the governance of behavioural development, motivation and self-concept (Brody, 1973).

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The findings of the present research seem to reaffirm those

of the above cited work in part. Even though there was no

statistically significant difference between the scores of female

and male pupils on academic self-concept, we noted that boys

recorded higher mean scores than girls. However, sex was found to

be a significant factor in social self-concept among children,

with girls recording higher mean scores than boys. Nonetheless,

we are aware that these psychological attributes of passivity,

docility and conformity, on which girls were observed to have

recorded higher mean scores, are not the universally accepted

prerequisites for success; that those required are aggressiveness,

independence, and instrumental competence. (Campbell, 1970;

Baumrind and Black, 1967; Maccoby, 1966).

Therefore, based on the symbolic interactionist and self theory

(Rose, 1962; Mead, 1934) and cognitive-developmental approach

(Kagan, 1964; Kohlberg, 1966), it seemed that girls and boys

developed different self-concept as they interacted with their

textbooks and teachers. In addition, through a process of vicarious

modelling (Bandura, 1969; Mischel, 1970), they seemed to have

internalized the actions, status and expectations held out for the

two categories of characters in their textbooks. We also deduced

that the information about the relative importance and value

of each sex, was further reinforced by teachers' differential

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expectations for, and treatment of girls and boys, to the extent that
they developed different self-evaluations and judgements. It seems as
if the process is a vicious one. Further evidence of difference
in self-evaluation of children is contained in the next section.

8.4.   Sex Variation in Children's Self-Description

To further test for any sex variation in children's evaluation
of themselves, subjects were required to choose from a list of ten
pairs of diametrically contrasting adjectives, words that best
decribed them. Examples of such pairs included active-passive,
strong-weak; clever-dull. In addition, children were asked to
freely describe themselves using adjectives not on our list. The
adjectives were later classified into three categories. These
were positive, neutral and negative. Positive traits reflected
those that were desirable; neutral ones referred to those that were
neither positive nor negative. Such words included,"fat, thin,
short and tall". The negative adjective were the non-desirable
ones such as "weak, dull, always crying and passive." Five
opportunities for such self-description were provided on the
questionnaire. However, only the first response was analysed.
This was based on the assumption that children could express
their self-image in different forms, but that the first one
they expressed would probably be more appropriate than subsequent

ones. The finding is presented in the table below;

Table 8:9 Sex Variation in Children's Self-Description

	American Children			Nigerian Children		
	Positive	Neutral	Negative	Positive	Neutral	Negative
GIRLS	27 (90.0)	3 (10.0)	0 (0.0)	25 (83.3)	2 (6.7)	3 (10.0)
BOYS	26 (86.7)	1 (3.3)	3 (10.0)	27 (90.0)	1 (3.3)	2 (6.7)
	53 (88.3)	4 (6.7)	3 (5.0)	52 (86.7)	3 (5.0)	5 (8.3)
	$x^2 = 2.22$			$x^2 = 2.59$		

Not significant.

Although our finding was not statistically significant, that is, the sex of our subjects did not seem to have determined their self-description, we found that more girls than boys used neutral adjectives. Such words included, small, thin, short, tall. The use of such adjectives by the female samples seemed to suggest that they were more concerned about their physical appearance than with anything else. Concern with social appearance is indicative of social orientation.

Moreover, our finding which seemed to indicate that the majority of both girls and boys perceived themselves positively might be misleading because there was a clear distinction between the positive words both groups attributed to themselves. Mostly, the boys used such words as aggressive, active, adventurous, curious, tough,'always asking questions'. On the other hand, most girls

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selected words which included "not crying, quiet, obedient, not rough, helpful and kind". We therefore concluded that similar to our earlier findings, boys seemed instrumentally-oriented, while girls appeared to be both socially and person-oriented.

Furthermore, children were required to describe both women and men selecting words from the list referred to earlier. Tables 8:10 and 8:11 illustrate our findings.

Table 8:10 Sex Difference in Children's Description of Men

	American Children			Nigerian Children		
	Positive	Neutral	Negative	Positive	Neutral	Negative
Girls	22 (73.3)	3 (10.0)	5 (16.7)	14 (46.1)	6 (20.0)	10 (33.3)
Boys	26 (86.7)	2 (6.7)	2 (6.7)	23 (76.7)	5 (16.7)	2 (6.7)
	48 (80.0)	5 (8.3)	7 (11.7)	37 (61.7)	11 (18.3)	12 (20.0)

$$x^2 = 1.82 \qquad x^2 = 7.77 \ ^{**}$$

Table 8:11 Sex Difference in Children's Description of Women

	American Children			Nigerian Children		
	Positive	Neutral	Negative	Positive	Neutral	Negative
Girls	20 (66.7)	10 (33.3)	0 (0.0)	20 (66.7)	10 (33.3)	0 (0.0)
Boys	15 (50.0)	5 (16.7)	10 (33.3)	20 (66.7)	3 (10.0)	7 (23.3)
	35 (58.3)	15 (25.0)	10 (16.7)	40 (66.7)	13 (21.7)	7 (11.7)

$$x^2 = 12.38 \ ^{**} \qquad x^2 = 10.78 \ ^{**}$$

** = Significant at .01 level

Df = 2

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Table 8:10 shows that while sex was a significant factor in children's attributing personality traits to men among the Nigerian subjects, this seemed not to have been the case among the American samples.

However, the sex of the children was found to be. a critical factor in their description of women in both schools. Some of the positive adjectives applied to males included "intelligent, witty, always serious, active and strong", while the negative ones were "rough, always quarelling, naughty and loud." On the other hand, positive words ascribed to females included "beautiful, neat, always obeying, always caring for people, always laughing and always kind ".

We therefore concluded that children were generally stereo-typical in their description of females and males but that the Nigerian children seemed more sex-biased than their American counterparts. Our finding was therefore as expected. Perhaps, the Nigerian subjects appeared more sex-stereotypical as a result of the relatively low level of general awareness of the existence of sexism in the schooling process, whereas through the activities of private organisations, (NOW, 1972), ∴government and publishers' policy statements (1971; 1972; Scott, Foresman and-Company, 1973; American Education Association, 1972), the American society has

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been sensitized to detect and point out sexism in all its various forms.

In order to further validate our findings, children were also asked to indicate their sex preference if they had been given the opportunity to choose their sex. Our findings are shown in the table below.

Table 8:I2 Preferred Sex of American and Nigerian Children

| Respondents | American Children | | | Nigerian Children | | |
	Female	Male	Any	Female	Male	Any
Girls	2	28	0	2	28	0
	(6.7)	(93.3)	(0.0)	(6.7)	(93.3)	(0.0)
Boys	3	26	I	2	28	0
	(I0.0)	(86.7)	(3.3)	(6.7)	(93.3)	(0.0)
Total	5	54	I	4	56	0
	(8.3)	(0.0)	(I.7)	(6.7)	(93.3)	(0.0)

$X^2 = I.27$

Our finding was quite surprising and unexpected. Almost all American and Nigerian female subjects, 93.3 per cent in each case, indicated that they would have preferred to be males. Only 6.7 per cent of girls from both schools seemed happy with being females. Whereas, none of the boys indicated that they would have preferred to be female.

The above finding might explain why some female samples were found not to be non-commital in describing themselves, but instead, preferred to use neutral words. In addition, the finding seemed to agree with that of D'Andrade (1966) which suggested that for the female to act as a tomboy is not as serious as the boy acting in a feminine way. For boys therefore, since the male role is the preferred, deviation from it, is more penalized and, therefore, less likely to be manifested constantly.

From the above finding, it can be inferred that beside other societal influence, schooling has different outcomes for girls and boys. The cumulative effect of children reading sex-biased textbooks which treated females as marginal people, receiving sex differentiated teacher contacts which were further reinforced by sex differentiated teacher perception of, and expectations for female and male pupils, might be that while boys were being told of their importance and relevance in society, girls were at best informed that they were second-class citizens. As our result has indicated, boys seemed to value themselves more than girls, while girls seemed to feel

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that they have missed out on not being boys.

Another major focus of the present study is to compare the influence of the hidden curriculum on sex-role socialization of American and Nigerian primary school children

Our findings are contained in the next section.

8.5. Sex-Role Socialization of American and Nigerian Primary School Children

Hypothesis X

The tenth hypothesis states that boys will tend to be less stereotypical than girls in their sex-role socialization/adoption.

We have earlier on stated that sex-role socialization and sex-role adoption will be used interchangeably. Sex-role adoption was also operationalized to include children's self-perception which we have found to be sex-differentiated; educational and occupational preferences; and their social and vocational expectations for women and men. As mentioned earlier, two tests, SRAT I and SRAT II were used to collect data on this aspect of the research. Their administration was discussed in chapter three.

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The analysis of the data generated from SRAT I yielded the following results.

Table 8:13 Comparison of Sex-Role Adoption of American and Nigerian Children: Expectations for Women and Men

Items Respondents	American Children		X^2	Nigerian Children		X^2
	Female	Male		Female	Male	
Are Obedient, Girls	20 (66.7)	10 (33.3)		23 (76.7)	7 (23.3)	*4.6
Boys	13 (43.3)	17 (56.7)	3.3	15 (50.0)	15 (50.0)	
Total	33 (55.0)	27 (45.0)		28 (63.3)	22 (36.7)	
Are afraid Girls	27 (90.0)	3 (10.0)		25 (83.3)	5 (16.7)	
Boys	25 (83.3)	5 (16.7)	0.58	30 (100.0)	0 (0.0)	*5.46
Total	52 (86.7)	8 (13.3)		55 (91.7)	5 (8.3)	
Are Clever Girls	13 (43.3)	17 (56.7)		15 (50.0)	15 (50.0)	
Boys	10 (33.3)	20 (66.7)	0.63	10 (33.3)	20 (66.7)	1.72
Total	23 (38.3)	37 (61.7)		25 (41.7)	36 (58.3)	

Table 8:14 Comparison of Sex-Role Adoption of American and Nigerian Children: Academic Expectations for Women and Men

Items Respondents	American Children		X^2	Nigerian Children		X^2
	Female	Male		Female	Male	
Are good in Science Girls	17 (56.7)	13 (43.3)	3.3	13 (43.3)	17 (56.7)	*5.16
Boys	10 (33.3)	20 (66.7)		5 (16.7)	25 (83.3)	
Total	27 (45.0)	33 (55.0)		18 (30.0)	42 (70.0)	
Are good in Maths Girls	15 (50.0)	15 (50.0)		17 (56.7)	13 (43.3)	
Boys	8 (26.7)	22 (73.3)	3.46	8 (26.7)	22 (73.3)	*5.56
Total	23 (38.3)	37 (61.7)		25 (41.7)	35 (58.3)	

		Female	Male	x^2	Female	Male	x^2
Are good in English	Girls	22 (73.3)	8 (26.7)	0.32	22 (73.3)	8 (26.7)	1.83
	Boys	20 (66.7)	10 (33.3)		17 (43.3)	13 (56.7)	
	Total	42 (70.0)	18 (30.0)		39 (65.0)	21 (35.0)	

Df = 1   * = Significant at 0.05 level

Table 8:15 Comparison of Sex-Role Adoption of American and Nigerian Children: Vocational Expectations for Women and Men

Items Respondent		Female	Male	x^2	Female	Male	x^2
Are Good Doctors	Girls	8 (26.7)	22 (73.3)		8 (26.7)	22 (73.3)	
	Boys	6 (20.0)	24 (80.0)	0.37	6 (20.0)	24 (80.0)	0.37
	Total	14 (23.3)	46 (76.7)		14 (23.3)	46 (76.7)	
Are Good Nurses	Girls	29 (96.7)	I (3.3)	0.0	30 (100.0)	0 (0.0)	
	Boys	29 (96.7)	I (3.3)		26 (86.7)	4 (13.3)	0.14
	Total	58 (96.7)	2 (3.3)		56 (93.3)	4 (6.7)	
Are Good teachers	Girls	25 (83.3)	5 (16.7)		25 (83.3)	5 (16.7)	
	Boys	25 (83.3)	5 (16.7)	0.0	21 (30.0)	9 (70.0)	1.48 X
	Total	50 (83.3)	10 (16.7)		46 (76.7)	14 (23.3)	

Df = 1   * = Significant at 0.05 level

Table 8:13 indicates that sex was clearly a significant factor in the Nigerian children's attributing 'obedience' to people, it narrowly missed being significant among the American children with a calculated chi-square of 4.6 and 3.3 respectively.

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Although our finding in relation to which sex is.
usually afraid was not significant among the American children,
as many as 86.7 per cent of them felt that women should be afraid,
while only 13.3 per cent of the total number of children viewed males as
afraid. The reverse was the case among the Nigerian children.
Sex was a critical factor, with obtained chi-square of 5.46
which was statistically significant at .05 level. Also, as
many as 91.7 per cent of all Nigerian children stated that females
should be afraid, while only 8.3 viewed males as afraid. While
no Nigerian male perceived men as afraid, 16.7 per cent of their
American counterparts expressed that males were afraid.

However, sex was not a statistically significant factor in
which sex was clever among both groups of children. Nevertheless,
we observed that while all children seemed to be stereotypical
in their sex-role adoption, the Nigerian pupils seemed more
stereotypical than their American counterparts.

Table 8:14 shows that while sex narrowly missed being a
significant factor with a calculated chi-square of 3.3 for
academic sex-role expectations for women and men among the
American children, it was observed to be a critical influence
among their Nigerian counterparts in relation to the school

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subjects under consideration with the exception of English Language.

Table 8:15 indicates that even though our findings were not statistically significant, the majority of American and Nigerian children, 76.7 per cent in both cases, felt that doctors should be males. Interestingly, the reverse was the case in relation of which sex should be nurses. We found that the majority of subjects from both schools viewed nursing as a female profession. The same trend was observed in relation to the teaching profession.

We therefore concluded that our hypothesis that American children will be less stereotypical in their sex-role sociali- zation, which included their expectations for women and men for social, academic and professional roles, was affirmed. The tendency among the American subjects to be less stereotypical than the Nigerian samples might be attributed to the fact that while there has been a general awareness of sex discrimination among the Americans, such conscience-raising about sexism has not taken place in Nigeria. Moreover, pressure from private groups, particularly women's groups has led to both federal and state legislations aimed at reducing sexism not only in the

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schooling process but also in hiring practices (NOW, 1972; Federal government, 1971: 1975). In addition, publishers have issued policy statements and guidelines, all aimed at reducing sex-typing in instructional materials (Houghton Mifflin Publishers, 1971; American Education Association, 1972; Scott, Foresman and Company, 1973). It is likely therefore, that the general sensitizing of one society, and lack of a general awareness in the other, of the existence of sex discrimination, might be responsible for the different responses from both groups.

8.6   Hypothesis XI
        The eleventh hypothesis stated that American
        children will be less stereotypical than their
        Nigerian counterparts in their sex-role adoption.

To increase confidence in our finding, we subjected our data to further analysis. An item which was of general nature in relation to occupational roles, was analysed. The finding is presented below::

Table 8:16 Comparison of American and Nigerian
Children's Sex.Role Adoption: Occupational
Expectations for Women and Men

Item Respondents		American Children			Nigerian Children		
		Female	Male	x^2	Female	Male	x^2
Have good Jobs	Girls	13 (43.3)	17 (56.7)	2.7	15 (50.0)	15 (50.0)	
	Boys	7 (23.3)	23 (76.7)		14 (46.7)	16 (53.3)	0.7
	Total	20 (33.3)	40 (66.7)		29 48.3)	31 (51.7)	

Not significant.

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Similar to our earlier findings, the above was not statistically significant among the two groups of children. However, an interesting trend was discernible. While the ratio of females and males holding good jobs was 2:1 among the American children, their Nigerian counterparts seemed almost equally divided on the issue of whether women or men have good jobs; 51.7 and 48.3 per cent respectively.

Our finding in this respect might not be unconnected with the variation in culture between the two societies under study. African, including Nigerian women, have always worked (Kaberry, 1952; Alastair, 1960; Paulme, 1960; Lloyd et al. 1967; Dobert, 1970, United Nations, Economic Commission for Africa, 1974, Tinker and Bramson, 1976; Afonja, 1981). In America, this is not always so (Epstein, 1970; Boserup, 1970; Sawhill et al. 1975, Sawhill, 1973; Hoffman and Nye, 1974). To reinforce the above fact, our samples have earlier indicated that most mothers of the Nigeria subjects worked, whereas the reverse was the case with the mothers of the American sample. Most of them were housewives.

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In addition, the fact that the majority of Nigerian girls and boys viewed both women and men as likely to work reflect the influence of maternal employment on children in general and on girls in particular (Hoffman, 1974; Moore, 1963; Siegel, 1963; Yarrow, 1962; Vogel et al., 1970). The cited sources have suggested that maternal employment was not only positively correlated with children's adjustment, acquisition of competence, independence and motivation, but also that it was particularly critical for daughter's sex-role perception and expectation. We then concluded that contrary to our expectation, it seemed the Nigerian children were more equigender as far as expecting both women and men to hold good jobs, was concerned. However, it was observed that when good jobs were specified the Nigerian subjects seemed stereotypical.

To further test our hypothesis, the data generated from SRAT II were analysed. The findings are presented in the table that follows:

Table 8:17 Sex-Role Adoption of Children on Selected Leadership Roles

Items	Female	Male	Total
Lawmaker	17.5(21)	82.5(99)	100.0(120)
Ruler	30.8(37)	69.2(83)	100.0(120)
Minister	10.8(13)	89.2(107)	100.0(120)
President	6.7(8)	93.3(112)	100.0(120)
Senator	18.3(22)	81.7(98)	100.0(120)
School Principal	29.2(35)	70.8(83)	100.0(120)

Table 8:17 shows that in all the leadership roles under consideration, children assigned such roles more often to males than to females. Of particular interest were those relating to political roles, especially that of the president, which a large majority of children attributed to males. The table below shows our findings when the occupations were broadly categorized.

Table 8:18 Children's Sex-Role Adoption on
Selected Occupational Groups.

Item	Female	Male	Total
Science-based professions (Surgeon, doctor, astronaut, pilot, chemist)	18.3 (22)	81.7 (98)	100.0 (120)
Legal Professions (Lawyer, Judge)	27.5 (33)	72.5 (87)	100.0 (120)
Service-Oriented Professions (Secretary, Nurse, Housing-Agent)	41.7 (50)	58.3 (70)	100.0 (120)

A large proportion of our total sample felt that science-based professions were male jobs (81.7%) while only 18.3 per cent viewed them as jobs for females. The same trend was observed in relation to legal professions. Only in service-oriented jobs, were females perceived as capable of rubbing shoulders with men. Apart from the near total domination by men in legal and science-based professions, our subjects might be suggesting that men might

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be competing with women in what used to be regarded as traditional female professions. In addition, it is interesting to note that compared to other occupational categories, our samples assigned more service-oriented professions 4I.7 per cent, to females.

Our data was further analysed using specific professions. The finding is shown below:

Table 8:I9 Sex-Role Expectation of American and Nigerian Children

Item Respondent	American Children		x^2	Nigerian Children		x^2
	Female	Male		Female	Male	
Lawyer. Girls	7	23		7	23	
	(23.3)	(76.7)		(23.3)	(76.7)	*4.55
Boys	3	27	I.92	I5	I5	
	(I0.0)	(90.0)		(50.0)	(50.0)	
Total	IO	50		22	38	
	(I6.7)	(83.3)		(36.7)	(63.3)	

Item Respondent	Female	Male	x^2	Female	Male	x^2
Doctor. Girls	5	25		5	25	
	(I6.7)	(83.3)		(0.0)	(0.0)	
Boys	3	27	0.58	3	27	0.58
	(I0.0)	(90.0)		(I0.0)	(90.0)	
Total	8	52		8	52	
	(I3.3)	(86.7)		(I3.3)	(86.7)	

Item Respondent	Female	Male	x^2	Female	Male	x^2
Surgeons. Girls	0	0		5	25	
	(0.0)	(0.0)		(I6.7)	(83.3)	**7.4
Boys	5	5	2.22	I2	I8	
	(0.0)	(0.0)		(40.0)	(60.0)	
Total	5	5		I7	43	
	(5.0)	(5.0)		(28.3)	(7I.7)	

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Item Respondent		Female	Male	x^2	Female	Male	x^2
Secretary	Girls	12 (40.0)	18 (60.0)		5 (16.7)	25 (83.3)	
	Boys	20 (66.7)	10 (33.3)	0.28	12 (40.0)	18 (60.0)	*4.02
	Total	32 (53.3)	28 (46.7)		17 (28.3)	43 (71.7)	

** = Significant at 0.01 level.

* = Significant at 0.05 level.

Df = 1

Table 8:19 shows that the majority of both American boys, 90.0 per cent, and girls, 76.7 per cent agreed that males should be lawyers, although our finding was not statistically significant. In contrast, sex was found to be a critical factor among the Nigerian children with an obtained chi-square of 4.55 which was significant at .05 level. However, while the majority of Nigerian girls, 76.7 per cent viewed the law profession as a male one, the boys seemed more liberal with a percentage score of 50.0 per cent for females and males. Perhaps, the Nigerian boys are more abreast of development in both the admission ratio of female and male students into law courses and the increasing number of female entrants. into the profession, than the girls.

While sex was found not to be a critical factor in the case of which sex should be doctors, it was noted that the majority of American and Nigerian children felt that males should be doctors. The scores for girls from both schools were in the ratio of 5:1;

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and for boys, 9:I for males and females respectively.

We intentionally duplicated the item on medical profession by asking which of the sexes should be a surgeon because surgery requires longer and specialized training. In effect, the purpose was to test which of the sexes our sample would perceive as having both the mental and psychological capacities to specialize in surgery. Even though our result was not statistically significant among the American sample, we observed that sex was a critical factor among the Nigerian children with a calculated chi-square of 7.4 which was significant at .OI level. It was also observed that the American boys and the Nigerian girls were similar in their views on this item. Among the American boys and the Nigerian girls, 83.3 per cent responded that males should be surgeons, while I6.7 per cent of both groups, felt otherwise.

In addition, while gender was not a determinant in who should be secretaries among the American children, it was an important factor among the Nigerian subjects, with a calculated chi-square of 4.02, which was significant at .05 level.

From the above findings, we concluded that our hypothesis was further upheld. American and Nigerian children were found to be sex-stereotypical in attributing certain occupations to women and men, but that the Nigerian children appeared more sexist than their American counterparts, a pattern that was

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consistent with our earlier findings. Moreover, we presumed that the view of the two groups of children might mirror reality in each of the two societies. For an example, while male secretaries were relatively common and accepted in the Nigerian context, they may be a rare phenomenon in the United States.

Further attempts were made to test the hypothesis. These are contained in the section that follows:

8.7. Sex Difference in the Educational Aspirations of American and Nigerian Children

We have earlier operationalized sex-role socialization/adoption to include among others, children's level of educational aspiration, because we assumed that the cumulative effect of girls and boys' interaction with the hidden curriculum - instructional materials, and teacher-classroom behaviour - would be differential school outcomes for girls and boys. Specifically, we assumed that as a result of differential treatment of female and male characters and teacher sex differentiated classroom behaviour, levels of educational aspiration would differ for girls and boys. We therefore requested children to indicate the highest educational level they would like to attain. Our findings, using the corrected form of chi-square test as a result of empty cells, are presented in the overleaf table.

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Table 8:20 Sex Difference in the Level of
Educational Aspiration of American and
Nigerian Children

Respondents	American Children			Nigerian Children		
	GRD 2/WASC	Non-Degree	Degree	GRD2/WASC	Non-Degree	Degree
Female	5 (16.7)	10 (33.3)	15 (50.0)	8 (26.7)	13 (43.3)	9 (30.0)
Male	0 (0.0)	5 (16.7)	25 (83.3)	3 (10.0)	5 (16.7)	22 (73.3)
Total	5 (8.3)	15 (25.0)	40 (66.7)	11 (18.3)	18 (30.0)	31 (51.7)

$X^2 = 9.45$ *
Significant at .05 level
Df = 2

$X^2 = 11.03$ **
Significant at .01 level
Df = 2

The above table indicates that sex seemed to be a significant factor in the level of educational aspiration of American and Nigerian primary school children.

More boys than girls; 83.3 and 50.0 per cent respectively, of American subjects aspired to have university education. While none of the American boys limited their educational ambition to the equivalent of the high school, as many as 16.7 per cent of their female counterparts hoped to stop schooling at that level. Similarly, the ratio of boys to girls whose educational expectation was for non-degree certificate was 2.1. Therefore we concluded that more boys than girls among the American sample hoped for high educational level.

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As mentioned earlier, children's sex was found to have an effect
on their level of educational aspiration among the Nigerian
sample. Similar to our finding in relation to the American
subjects, more Nigerian boys than girls, 73.3 and 30.0 per cent
respectively, expressed their ambition to have university
education. While only I0.0 per cent of the Nigerian boys aspired
to have only high school or grade two teachers' certificate, as
many as 26.7 per cent of the girls set themselves this target. A
similar trend was observed in the non- degree educational level.
Thus, our finding appeared to confirm the hypothesis further.

We then concluded that consistent with our earlier findings
and expectations, sex was found to be a significant factor in the
level of educational aspiration of both the American and Nigerian
subjects involved in this study. Boys from both settings were
found to have higher educational aspiration than the girls.
However, characteristically, the Nigerian sample seemed to be
more stereotypical than their American counterparts in the setting
of educational goals.

Because the girls and boys were found to differ in their
level of educational aspiration, we also assumed that they would
vary in their vocational preferences. Children's occupational

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preference was earlier on included in the definition of sex-role
socialization/adoption. The corrected form of the chi-square
test was also employed to analyse our data for the same reason stated
earlier. The finding is shown in the table below.

Table 8:21 Sex Variation in the Vocational
Preferences of American and Nigerian Primary
School Children

Resp.	Family Job	Self-Employed	Para-Prof.	Prof.	Family Job	Self-Employed	Para-Prof	Prof.
Girls	2 (5.7)	5 (16.7)	11 36.7)	12 (40.0)	5 (16.7)	1 (3.3)	13 (43.3)	11 (36.7)
Boys	0 (0.0)	4 (13.3)	8 (26.7)	18 60.0)	0 (0.0)	7 (23.3)	4 (13.3)	19 (63.3)
Total	2 (3.3)	9 (15.0)	19 (31.7)	30 (50.0)	5 (8.3)	8 (13.3)	17 28.3)	30 (50.0)

Df = 3

x^2 = 4.49

Not siginificant

x^2 = 16.81

Significant at .01 level

Df = 3

As expected, our finding indicated that while sex was a
significant factor in the career choices of Nigerian children,
this was not the case among the American children. However, we
observed that 60.0 per cent of American boys opted for professional
occupations such as those of lawyers, doctors, engineers,
professors, while only 40.0 per cent of their female counterparts
chose such vocations. Even though the difference was small, we
thought it was significant enough to merit attention in view of the
Federal Government's efforts to blur occupational distinctions
between the sexes (U.S. Federal Government, 1975).

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8.8 Age Difference in Children's Sex-Role Adoption and Expectation

For the purpose of investigating probable age difference in children's sex-role socialization, age and class were used interchangeably. This was so because most usually, age is correlated with class levels of children. Therefore, the three age groups, 5 - 6, 7 - 8, 10 - 12 years, which we have earlier identified, corresponded to the three school classes one, three and six, which were the focus of the present study. The twelveth hypothesis addresses this issue.

Hypothesis XII

The twelveth hypothesis stated that age/class will tend to be a significant factor in children's sex-role adoption.

As mentioned above, age/class were used synonymously.

The findings of our investigation are shown on table 8:22.

Table 8:22: Age Difference in Children's Self-Concept

Item	Class	AIS			x^2	MCPS			x^2
		Always	Some-times	Never		Always	Some-times	Never	
I am good in Science	I	1 (5.0)	9 (45.0)	10 (50.0)	* 9.79	1 (5.0)	6 (30.0)	13 (65.0)	** 14.29
	III	10 (50.0)	4 (20.0)	6 (30.0)		12 (60.0)	8 (40.0)	0 (0.0)	
	VI	11 (55.0)	8 (40.0)	1 (5.0)		12 (60.0)	7 (35.0)	1 (0.0)	
I am a good Leader	I	3 (15.0)	9 (45.0)	8 (40.0)	6.45 N.S.	1 (5.0)	12 (60.0)	4 (20.0)	* 10.05
	III	10 (50.0)	5 (25.0)	5 (25.0)		9 (45.0)	9 (45.0)	2 (10.0)	
	VI	13 (65.0)	3 (15.0)	4 (20.0)		13 (65.0)	7 (35.0)	0 (0.0)	

* = Significant at .01 level   Df = 4
** = Significant at .05 level

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Table 8:23 - Age/Class Difference in Children's
Sex-role Adoption

Item	Class	AIS Female	Male	χ^2	MCFS Female	Male	χ^2
Law Maker	I	4 (20.0)	16 (80.0)	28.06**	4 (20.0)	16 (80,0)	
	III	3 (15.0)	17 (85.0)		8 (40.0)	12 (60.0)	5.22
	VI	2 (10.0)	18 (90.0)		2 (10.0)	18 (90.0)	N.S.
Ruler	I	7 (35.0)	13 (65.0)	8.88**	1 (5.0)	19 (95.0)	
	III	3 (15.0)	17 (85.0)		2 (10.0)	18 (90.0)	1.1
	VI	0 (0.0)	20 (100.0)		3 (15.0)	17 (85.0)	N.S.
Leader	I	3 (15.0)	17 (85.0)	9.05**	7 (35.0)	13 (65.0)	
	III	1 (5.0)	19 (95.0)		10 (50.0)	10 (50.0)	10.00**
	VI	4 (20.0)	16 (80.0)		1 (5.0)	19 (95.0)	

** = Significant at .01 level

Df = 2

Similar to our earlier findings, age/class tended to be a significant factor in children's attributing occupational and leadership roles to women and men. Following the trend observed earlier, it appears children in the lower class seemed relatively liberal, perhaps as a result of the fact that they were in the lower classes with relatively less exposure to the hidden curriculum.

But as they moved up the classes, they increasingly appeared sex-stereotypical. Our hypothesis thus reaffirmed, we therefore concluded that, true to the thesis of cognitive developmental theory of sex-role learning, children become more sex-stereotyped as they advanced in age/class and therefore, in the level of cognition.

The preceding table indicates that on each of the variables, age/
class was found to be significant among the American and Nigerian
school children. It would seem as the children grew in age and
therefore, in cognition; also, as they moved from lower to higher
classes and thus got exposed increasingly to the hidden curriculum,
they tended to improve their self-concept. We observed that children
in the lower classes, particularly, in the beginning class, whose age
ranged between five and six years were not as definite as in their
ability/self concept as those in subsequent classes. The fact that
they tended to be unclear about their self-image might be attributed
to the fact that they were just beginning their educational career
and therefore, not yet well exposed to the hidden curriculum. It
appeared children in the upper classes, particularly those in primary
six were fairly certain about their self-concept with a large proportion
of children in this cohort feeling that they could always be good in the
sciences and be good leaders.

Moreover, age/class appeared critical in the sex-role adoption
of our subjects as indicated on table 8:23 overleaf.

The study focuses on the likely effect of the hidden curriculum
on sex-role socialization of American and Nigerian children. Whereas
earlier findings indicated that the hidden curriculum - instructional
materials and teacher classroom behaviour appeared to be accountable
for the difference in the self-concept and perception of girls and
boys, but in this section, we found that it also has an effect not

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only on their educational and vocational aspiration but also on their social and occupational expectations for women and men. The findings also indicated that the Nigerian children in our sample were more sex-stereotyped than their American counterparts on all the criteria employed to measure sex-role socialization. The variation in the findings may be attributed to home factors. More of this will be discussed in the next chapter.

CHAPTER NINE

THE CONTRIBUTION OF THE HOME TO CHILDREN'S
SEX-ROLE SOCIALIZATION

9.0 : Introduction

We have so far examined the influence of the hidden
curriculum on the sex-role socialization of American and
Nigerian primary school children. But it is also known that
the family plays an important role in sex-role socilization.
Ethnographic and sociological studies have highlighted some of
the mechanisms involved in children's sex-role learning within
the family. These are identification with same sex parents
(Davis and Havighurst, 1947; Freud, 1949; Mischel, 1977;
Kohlberg, 1966); manipulation, canalization, verbal appella-
tion and activity exposure, (Hartley, 1966; Delucia, 1963).

Similarly, research evidence abounds to show that
children learn about their sex-roles from early infancy
(Goldberg and Lewis, 1959; DeLucia, 1963). As early as age
three to four, children are presumed to have a firm knowledge
of their sex identity and are able to perceive distinctions of
gender roles. Familial interactions, particularly between
mother and child, are a major medium for sex-role learning
(Goshen-Gottstein, 1981; Thomas et al., 1972; Murphy, 1982
and Hartley, 1966). Therefore, investigations of maternal

child-rearing practices have engaged the attention of many researchers, whose major interest is in the socialization process (Whiting and Whiting, 1975; Barry et al., 1957; Sears et al., 1953; Whiting, 1963). Research evidence also indicates that maternal child rearing practices vary in several behavioural systems. These, among others include punitive and non-punitive disciplinary practices (Sears et al., 1953; Bandura and Walters, 1963; Kagan and Moss, 1962); demand for sharing household responsibilities (Sears et al,, 1953; Mccord et al., 1961). The last of these methods which we have earlier on referred to as activity exposure, is the focus of this aspect of the study.

Our concern was to study probable sex differentiation by mothers as they assigned household chores to their children. Barry et al. (1953) have used responsibility or dutifulness training as one of the criteria for measuring sex difference in socialization. Their primary source of data was training in the performance of chores in the productive or domestic economy and in other duties as reported by ethnographers cited in the Human Relations Area Files (HRAF).

Based on the above review of the important role of the home in sex-role socialization of children, all mothers of the children in our sample responded to a questionnaire (MORAQ) which sought information on their allocation of chores to their

female and male children. The items on the questionnaire (Appendix iv) included tasks which the subjects used in the pilot study frequently referred to as usually ⌐ ⋅ ⋅ performed by most children. The findings of our investigation are presented in this section.

9.1 Characteristics of Mother-Subjects

Mothers of the American and Nigerian children who were the subjects of the study lived with their children. However, the American and Nigerian mothers differed on some important aspects. Whilst all the American families, 95.0 per cent, lived in low density areas, with only 5.0 per cent in semi-low density sections of the metropolis, the majority of the Nigerian samples, 52.3 per cent lived in semi-density areas, with only 6.7 per cent of them in low density areas. Over 40.0 per cent of the Nigerian mothers lived in high density sections of the city.

In terms of levels of education, the two groups of mothers differed widely. While as many as 78.3 per cent of the American mothers had university degrees, only 20.0 per cent of their Nigerian counterparts attended Universities. Whilst the rest of the American group, 21.7 per cent, had professional qualifications, as many as 30.3 per cent of the Nigerian mothers attained this level of education. The largest proportion of the Nigerian mothers, 40.0 per cent, had only the equivalent of secondary school education.

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Even though we observed a wide discrepancy in the educational qualification of mothers, their husbands appeared well-matched. The majority of husbands in both groups, 91.7 per cent in both cases, were university graduates, while almost the same number, 5 per cent in the case of American group, and 4.0 per cent in that of Nigerian, held professional certificates. We recorded one no-response score for the Nigerian group.

In terms of occupation, 98.3 per cent of the fathers were professionals while the rest, 1.7 per cent, were self-employed, all earning well above ₦10,000 per annum. Their Nigerian counterparts were almost an equal match, 80.0 per cent of them were professionals - lawyers, doctors, engineers - while 20.0 per cent were self-employed as businessmen, doctors and accountants.

However, despite the fact that American mothers were relatively better qualified than their Nigerian counterparts, we observed a notable difference between the two groups. A large majority of American mothers, 83.3 per cent, were housewives, while only 16.7 per cent of them worked as semi-professionals - computer operators, accounts clerks and secretaries. The reverse was the case among the Nigerian mothers. Almost all of them were engaged in one activity or the other. About 35.0 per cent of them were professionals. As was customary with the

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womenfolk of southern Nigeria, as many as 48.0 per cent were self-employed in relatively big businesses and petty-trading, whilst 13.7 per cent worked as semi-professionals. Only 3.3 per cent of them reported that they were housewives, a situation which contrasted with the American one, where as earlier indicated, a large proportion of mothers were housewives. Another notable difference between our adult samples was that although they all reported that they had househelps, American mothers usually employed adult male househelps, whilst the majority of their Nigerian counterparts preferred relatively young female helps.

In view of the similarities between the two sets of samples of parents, except in the two attributes just described, it can be assumed that they were matched, although in some respects, the matching was uneven. Perhaps, the matching obtained approximated the optimum that could be obtained especially in a comparison that involved members of different societies which represent different stages of modernisation.

9.2 Sex Difference in the Allocation of Household Responsibilities by Mothers

Hypothesis XIII

The thirteenth hypothesis states that sex will tend to be a significant factor in the number and types of household chores allocated to children by mothers.

The data generated from MORAQ (Appendix iv) were analysed using Yates' corrected chi-square formula in order to test the above hypothesis. The findings are presented overleaf.

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Table 9:1 - Sex Differences in the Allocation of Domestic Chores by Mothers

Activities	Class	American Sample					Nigerian Sample				
		Daughter	Son	Both	H/Help	x^2	Daughter	Son	Both	H/Help	x^2
Sweeping	I	1 (5.0)	0 (0.0)	1 (5.0)	18(90.0)		4 (20.0)	5 (25.0)	5(25.0)	6(30.0)	
	III	5(25.0)	0 (0.0)	4(20.0)	11(55.0)	15.83*	8 (40.0)	2 (10.0)	6(30.0)	4(20.0)	3.88
	VI	4(20.0)	4(20.0)	2(10.0)	10(50.0)		7 (35.0)	3 (15.0)	5(25.0)	5(25.0)	
TOTAL		10(16.7)	4 (6.7)	7(11.7)	39(65.0)		19(31.7)	10(16.7)	16(26.7)	5(25,I)	
Car Washing	I	0 (0.0)	0 (0.0)	0 (0.0)	20(100.0)		0 (0.0)	0 (0.0)	0 (0.0)	20(100.0)	
	III	0 (0.0)	0 (0.0)	0 (0.0)	20(100.0)	5.28	2(10.0)	5(25.0)	2(10.0)	11(55.0)	23.40**
	VI	0 (0.0)	2(10.0)	0 (0.0)	18(90.0)		2(10.0)	10(50.0)	2(10.0)	5(30.0	
TOTAL		(0.0)	2 (3.3)	0 (0.0)	58(96.7)		4(6.7)	15(25.0)	4(6.7)	37(61.7]	
Dish Washing	I	2(10.0)	0(0.0)	1(5.0)	17(85.0)		8(40.0)	2(10.0)	4(20.0)	6 (30.0)	
	III	5(25.0)	0(0.0)	4(20.0)	11(55.0)	10.03	5(25.0)	4(20.0)	7(35.0)	4(20.0)	7.29
	VI	2(10.0)	2(10.0)	2(10.0)	14(70.0)		11(55.1)	2(10.0)	2(10.0)	5(25.0)	
TOTAL		9(15.0)	2(3.3)	7(11.7)	42(70.0)		24(40.0)	8(13.3)	13(21.7)	15(25.0)	

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Table 9:1 Cont'd Sex Differences in the Allocation of Domestic Chores by Mothers

Activities	Class	American Sample					Nigerian Sample				
		Daughter	Son	Both	H/Help	X^2	Daughter	Son	Both	H/Help	X^2
Cooking	I	3(15.0)	0 (0.0)	0(0.0	17(85.0)		5(25.0)	1(5.1)	1(5.0)	13(65.0)	
	III	6(30.0)	0(0.0)	0(0.0)	14(20.0)	13.25*	8(40.0)	1(5.0)	1(5.0)	10(50.0)	
	VI	2(10.0)	2(10.0)	2(10.0)	14(70.0)		11(55.0)	3(15.0)	1(5.0)	5(25.0)	8.72*
TOTAL		11(18.3)	2(3.3)	2(3.3)	45(75.0)		24(40.0)	5(8.3)	3(5.0)	28(46.7)	
Ironing	I	0 (0.0)	0 (0.0)	0(0.0)	20(100.0)		2(10.0)	5(25.0)	0(0.0)	13(65.0)	
	III	1 (5.0)	0 (0.0)	1 (5.0)	18(10.0)	12.74*	1(5.0)	8(40.0)	4(20.0)	7(35.0)	12.76*
	VI	1(5.0)	3(15.0)	2(10.0)	14(70.0)		2(10.0)	6(30.0)	7(35.0)	5(25.0)	
TOTAL		2(3.3)	3(5.0)	3(5.0)	52(86.7)		5(8.3)	19(31.7)	11(18.3)	25(40.0)	

Df = 6

* = Significant at 0.05 level

** = Significant at 0.01 level

When we analysed our data across school classes, we found that more than any other variable, the sex of the children seemed to be an important factor in mothers' assigning certain tasks to children. We observed that while sex seemed to be a significant factor in allocating sweeping tasks among American mothers, with a calculated chi-square of 15.83 per cent which was found to be significant at .05 level, this was not the case among Nigerian mothers. Although our finding was significant, this may be misleading because it gave the impression that the issue of sex difference was between daughters and sons, whereas it was really between female and male children on one hand, and adolescent househelps who are outside the scope of the present study, on the other hand. Although our finding was not statistically significant for the Nigerian subjects, a larger proportion, 26.7 per cent, than among the American samples, 11.7 per cent, reported that they allocated sweeping tasks to both daughters and sons.

Our finding in relation to the allocation of car washing tasks was not statistically significant among the American samples, because the majority of them indicated that they assigned the activity to domestic staff, in this case, drivers. The situation was understand-able, because all the families would invariably have a drive each, in view of their occupational status as professionals and business executives, part of whose condition of service would probably include the provision of drivers by employers. The situation might account for the non-significant finding of our analysis.

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However, with regard to the Nigerian subjects, we noted that our finding was statistically significant with a calculated chi-square of 23.49 which was significant at .01 level, despite the fact that 61.2 per cent of them reported that domestic staff were allocated car washing tasks. As many as 25.0 per cent of them reported that the task was allocated to sons, with only 3.3 per cent of the American counterparts doing so. In addition, none of the American mothers indicated that they assigned car washing duties to their daughters, whilst about 6.7 per cent of the Nigerian mothers reported that they gave such tasks to female children.

In relation to dish-washing tasks,, we noted that while our finding was not statistically significant among both groups of mothers, a larger proportion of Nigerian mothers, 40.0 per cent, than of American ones, 15.0 per cent, indicated that they assigned such tasks to daughters. Fewer than these proportions in each group reported they assigned the same task to their sons.

The allocation of cooking responsibilities seemed more clearly sex differentiated than that of other chores. While the bulk of cooking was reportedly done by domestic staff by the two groups, they also indicated that they assigned more of such tasks to their daughters than to sons. Particularly for American mothers, our finding was significant with an obtained

chi-square of 13.25 · . which was found to be critical at
.05 level. Therefore, for this group of mothers, sex seemed
a significant factor in allocating cooking responsibilities.
Similar conclusions are also true of the Nigerian mothers.

With regard to ironing, a larger part of such tasks - 86.7
per cent - were assigned to domestic staff. However, the balance
of 13.3 per cent was reportedly assigned in the ratio of 2:3 to daughters
and sons respectively. Our finding was statistically significant for
both groups of subjects at .05 level of significant.

From the foregoing, we concluded that mothers seemed to have
polarised certain domestic chores into female and male tasks.
Such tasks were sweeping, cooking and dish-washing for females;
Ironing and car washing for males.

In addition to the sex variable, we were also interested
in the age of the children in relation to mothers responsibility
training. For this purpose, since age is usually correlated with
children's class, as stated in the preceding chapter, we assumed
that class was indicative of the age of each cohort of children.
Our findings as shown in the previous table is discussed below.

Nigerian mothers reported that they allocated sweeping and
other tasks to all children, regardless of their age, while this
tendency was negligible among   their   American

counterparts. One explanation for the observed trend might be because Nigerian parents generally employ the services of their female and male children both in domestic and productive enterprises. The issue of child labour as farm hands, hawkers, baby-nurse, house-keepers and pawns is as old as society itself. Therefore, the natural inclination to send one's children on errands regardless of age, is being manifested in the responses of mothers.

However, we observed that there was a distinction in the type and volume of such tasks assigned to younger children. All the Nigerian mothers in the study did not allocate car washing activity to children in class one, that is, between ages five and six years, whilst such tasks were allocated to older children than was the case among similar age groups in the American sample.

Dish-washing duties seemed to cut across all age groups among the Nigerian sample, whereas, among the American group, while some younger daughters aged between five and seven years were allocated such tasks, their male counterparts in similar age bracket were spared. Similar trends were observed in relation to cooking duties.

In sum, we found that American mothers appeared to take the age of their children into consideration in the types and volume of domestic duties assigned to them. The contrary seemed

the case among the Nigerian mothers. The reason might be that

unlike their American counterparts, who, when not using labour-

saving devices, employed the services of adult male domestic staff;

most Nigerian mothers relied on the services of their children

in the absence of such devices and as a result of hiring young

house-helps, who, some of the time, were of the same age as

their children. In addition, Nigerian mothers probably regarded

training in house work as part of preparing for life.

Based on the above findings, particularly those relating

to sex differentiation in mothers' responsibility training, we

assumed that because mothers discriminated in allocating specific

domestic tasks to their daughters and sons, it was possible that

their actions might have unintended but important implications

for the general expectations held out to their children. We also

assumed that mothers will have differential expectations,

particularly those of education for their daughters and sons, resulting

in differences in sex-roles and expectations for children.

We then hypothesised thus:

9.3

Hypothesis XIV
The fourteenth hypothesis stated that mothers
will tend to have higher educational
expectations for their sons than daughters.

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To test the above hypothesis, mothers were requested to indicate their educational expectation for their daughters and sons on the MORAQ. The findings are presented in the table below, using 'Yates' corrected chi-square.

Table 9:2 - Mothers' Educational Expectation For Daughters and Sons

	Secondary School	Pre-Degree	Degree	Total
Daughters	11	5	44	60
	(9.2)	(4.17)	(36.7)	
Sons	0	13	14	60
	(0.0)	(10.8)	(39.17)	
Total	11	18	91	120
	(9.17)	(15.0)	(75.8)	100.0

$X^2 =$ ** 14.82

$Df = 2$

Significant at .01 level

As expected, sex was found to be a significant factor among mothers in the educational expectations they held out for their children with the obtained chi-square of 14.82 which was significant at .01 level. The degree of freedom was 2.

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While mothers indicated that they expected none of their
sons to have only the equivalent of secondary education, as
many as 9.17 per cent of the girls were not expected to go
beyond this level. More sons than daughters were expected to
have both non-degree and university education. We therefore
concluded that mothers held differential educational expectations
for their sons and daughters.

Furthermore, another focus of the present study was to
investigate likely difference between the educational expec-
tations of American and Nigerian mothers for their children.
We therefore, hypothesised thus:

9.4   Hypothesis XV

That American mothers will be less sex-biased
in their educational expectation for their
children than Nigerian mothers.

American and Nigerian mothers' responses to the questionnaire
item used to test hypothesis fourteen were compared. The findings
using Yates' corrected chi-square are as follows:

Table 9:3 - A Comparison of American and Nigerian Mothers'
Educational Expectation for their Female and Male Children

	American			Nigerian		
	Secondary School	Pre-degree	Degree	Secondary School	Pre-degree	Degree
Daughters	10 (33.3)	1 (3.3)	19(63.3)	1 (3.3)	4 (13.3)	25 (83.3)
Sons	o (0.0)	1 (3.3)	29(96.7)	0 (0.0)	12 (40.0)	18 (60.0)

$X^2 = 14.20$ ** $X^2 = 7.22$ *

*   = Significant at 0.05 level

** = Significant at 0.01 level

As anticipated, sex was found to be a significant factor among American mothers in the educational aspirations they had for their children, with an obtained chi-square of 14.20 which was found to be significant at 0.01 level. American mothers expected more sons , 96.7 per cent, to have university education than their daughters - 63.3 per cent. As regards pre-degree education, they appeared equigender. Thus, our hypothesis was partly confirmed for the American groups.

Similarly, the sex of the child was found to be a critical factor . in educational ' expectations among Nigerian mothers. The calculated chi-square was 7.22 which was found to be significant at 0.05 level. Even though sex was found to be a determinant, there was an unexpected but interesting development among the Nigerian mothers. While their American counterparts expected more of their sons to have university education, they indicated that more of their daughters, 83.3 per cent, than their sons, 60.0 per cent would have university degrees. The unexpected trend among Nigerian mothers might be due to the current campaign to promote the education of women and their increased participation at all levels (Federal Republic of Nigeria:Annual Budgets, 1986 and 1987; Federal Ministry of Education: Statistics of Education, 1985).

Furthermore, we assumed that relative valuing of daughters and sons might have implication for mothers' child-rearing practice and consequently, for the values, beliefs, self-concept and

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aspirations developed by these children. Therefore, we asked mothers to indicate which sex they would prefer if they have been given the opportunity to select the _ sex of their children. Their responses are presented below:

Table 9:4 - Mothers' Preferred Sex

Mothers	Female	Male	Any	Total	x^2
American	13 (21.7)	18 (30.0)	29 (48.3)	60 (100.0)	
Nigerian	10 (16.7)	30 (50.0)	20 (33.3)	60 (100.0)	5.05 N.S
TOTAL	23 (19.2)	48 (40.0)	49 (40.8)	120(100.0)	

Df = 2

The above table indicates that our finding narrowly missed being significant with a calculated chi-square of 5.05 at the .05 level. Nevertheless, it can be observed that both groups of mothers appeared to have sex preferences. For 48.3 per cent of American mothers and 33.3 of Nigerian mothers, the sex of the child was insignificant. However, while only 30.0 per cent of their American counterparts opted for male children; about a half of the Nigerian mothers did so. The two groups of mothers indicated low preference for female children. However, we observed that particularly among the Nigerian mothers, those who indicated preference for female children have had at least a son each.

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We, therefore, concluded that Nigerian mothers appeared more male-oriented than their American counterparts. The reason might be because of the fact that the Nigerian society generally values male than female children. It is not uncommon for marriages to break down as a result of the wife not producing male children who would perpetuate the family name. Indeed, some women are known to have died in the bid to produce male children against odds.

9.5 Summary of Findings

All mothers reported that they used the services of domestic staff most of the time in carrying out their household chores. They all indicated that they assigned house-hold tasks to their children, but that the type and the magnitude of such tasks varied with children's age and sex. While the American mothers reported that their very young children were not actively involved in domestic activities, the Nigerian mothers indicated that all children, irrespective of age, were assigned domestic duties. More importantly, both groups of mothers appeared to differentiate between daughters and sons in allocating household activities to them. However, the Nigerian mothers seemed to make greater distinctions than their American counterparts. By implication, it appears that mothers have polarised domestic chores into female and male tasks because they assigned particular activities to one sex almost to the total exclusion of the other.

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In addition, we found that mothers held differential educational expectations for their daughters, and sons. However, contrary to our expectation, Nigerian mothers were found to be more favourably disposed towards their daughters than to their sons with regard to the level of education expected of them.

Finally, we found that more of the American mothers than the Nigerian ones appeared more equigender in relation to preferred sex of children. We observed that more of the Nigerian mothers indicated they preferred male to female children.

The above findings have demonstrated that in addition to the other mechanisms of sex-role learning which are outside the scope of the present study, through activity exposure and responsibility training, which are important aspects of mothers' child-rearing practice, the home contributes to children's sex-role socialization.

Our findings in relation to the home and the school have indicated that both social settings do contribute to children's sex-role socialization. But obviously, they are not likely to do this equally. How then does one objectively assess which is more critical in causing the differences we have observed between girls and boys as contained in chapter eight of this thesis? We are aware that it may be impossible to provide all the answers to this question. However, an attempt is made

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below to profer some answers.

First of all, apart from the findings of the present study
which will be discussed later in this section, other research
reports have indicated that the school is probably more critical
and more influential in children's sex-role socialization.
McCandless (1969); Inkeles (1966); Dreeben (1968) and Jackson
(1968), all seem to agree that the school, as a result of its
peculiar structure, organisation and functioning, is more
suited than those of the homes, for the socialization, including
sex-role learning of children. Its characteristic pattern
of organization and structural properties are different from
those of other agencies, particularly those of the home.
In addition, those characteristics of the school appear more
amenable than those of the home to the learning of such skills
as competence , independence, achievement and attitudes, all of
which the findings of the present study seem to have indicated as
sex-differentiated.

It is through these characteristic structure, organization
and functioning of the school that it wields an exerting influence
over children's socialization. Apart from sleeping, no other
activity occupies as much of the child's time as that involved
in attending school. The child spends the greater part of its
waking hours in the school. Therefore, the role of the school

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vis-a-vis the home in the child's life becomes more pervading, particularly in view of the fact that the school, unlike the home, has a stable and highly stylized environment. Schools everywhere, be it in the United States of America or Nigeria, have similar structures, organisations and functions. Their artefacts are similar.

In addition, it is a unique world for children, a place where young people have to be, and by extension, children are mandated to take active part in all its activities (Campbell, 1966; Jackson, 1968). Among others, they are required to read the instructional materials and be taught by teachers if they must succeed in school. As a result of the above unique characteristics of the school, it is bound to be more exerting in its influence on the child's socialization in general, and particularly, sex-role learning, than the home.

As stated above, data from the present study seem to corroborate the claim by the cited sources about the unique role of the school in sex-role learning. About 57 mothers (47.5 per cent) reported that they have both female and male children. . Out of these, 37 (64.9 per cent) claimed that they were egalitarian in their allocation of domestic tasks to their children. The table overleaf illustrates the point.

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Table 9:5 - Showing the Proportion of Mothers who
tended to be egalitarian towards Female and Male Children

Tasks	House/Help	Daughter	Son	Both D/S	Total
Sweeping	54 (45.0)	29 (24.17)	14(11.2)	23 (19.17)	120(100
Dish-Washing	57 (47.5)	33 (27.5)	10 (8.3)	20 (16.7)	120(100
Ironing	77 (64.17)	7(5.8)	22 (18.3)	14(11.7)	120(100

The table indicates that on each of the occasions, 19.17; 16.7
and 11.7 per cent respectively indicated that they allocated these
tasks to both categories of children, that is, the sex of the
children appeared non-critical in who was allocated these tasks among
the   sub-group of mothers.

In addition, a proportion of children of these mothers, 49 or 85
per cent, have earlier on responded in the affirmative to an item
on the SPAQ as to whether their mothers treated daughters and sons
equally.

Based on the above information, regarding the egalitarian
tendencies among a sub-group of mothers, we assumed that children
from such homes would be equigender in their sex-role perception
of women and men. However, our findings were not as expected.
Almost all the sub-group of children subjects, 83.3 per cent,
tended to be stereotypical in assigning leadership and occupational

roles including those of the scientist, pilot, surgeon and instructor to men, while those of the nurse, teacher, secretary and trading were ascribed to women. This finding is shown on the table below:

Table 9:6 - Sex-Role Adoption of a subgroup
of Children of Egalitarian Mothers

Items	Female	Male	Total
Are good doctors	12 (24.5)	37 (75.5)	49 (100.0)
Are good Nurses	33 (67.3)	16 (32.7)	49 (100.0)
Are good teachers	36 (67.3)	13 (26.5)	49 (100.0)
Are good Science-based professions	11(22.4)	38 (77.6)	49 (100.0)
Are good in legal profession	20 (40.8)	29 (59.2)	@((TOO 0)
Are good in service-oriented professions	35 (71.4)	14 (28.6)	49 (100.0)
Minister	5 (10.2)	44 (89.8)	49 (100.0)
Senator	18 (36.7)	31 (63.3)	49 (100.0)

The findings presented in this thesis seem to give an indication that the school might be critical in children's sex-role socialization. With children who were already sex-biased, it seems to reinforce the tendency while it appears quite critical for the other group of children. Of course, we are not ruling out other influences such as the mass media but as the data from the present study seem to suggest, the influence is attributable to the school.

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INTERPRETATION OF THE FINDINGS OF THE STUDY

We have earlier stated that the present study rests on
the assumptions inherent in two theories. The first of these
is the cognitive-developmental theory (Kagan, 1964; Kohlberg, 1966),
which we have admitted incorporates the essential aspects of other
sex-role learning approaches (Bandura, 1969; Bandura and Walters,
1963; Bem, 1983). The second is the symbolic interaction and
self-theory (Mead, 1934; Rose, 1962). The reasons for using the
two theories instead of only one of them is adduced later on in
the section.

The thesis of the cognitive-developmental approach to sex-role
learning which we have stated elsewhere in this study includes the
following:

1. That children play an active part in their
    development. Motivated by a desire for
    competence and mastery over their world, they
    seek any information that will improve
    their interaction with both their physical
    and social world.

2. That children's interpretation of their
   world is limited by their cognitive maturity, which
   in turn, is limited by their present scope of
   development.

3. That as children work actively to comprehend their
   social world, they inevitably label themselves.
   Thus, they come to realise their gender and what
   behaviours they should engage in.

4. That because of the child's need for cognitive
   consistency, self categorisation as female or
   male motivates her or him to value that which
   is seen as similar to the self in terms of gender.

5. That the initial emergence of gender as an important
   social category is the result of the child's
   cognitive developmental system.

6. That this gender-based value system, in turn,
   motivates the child to engage in gender congruent
   activities, to strive for gender congruent
   attributes and to prefer gender congruent peers.

7. That for sex-role acquisition to be complete,
   a child must develop a preference for, as well
   as an awareness of the roles, attributes,

expectations associated with her or his gender. In addition, the child is capable of learning concepts and attaching self-reinforcing measure to them.

8. That children's stereotypic categories will change as they grow and are exposed to new information.

Similarly, the gist of self theory, as mentioned earlier in the study includes the following:

1. Self emerges as a result of symbolic communication within a social context and that language, which may be oral, written or non-verbal, is a major facilitator in this environment.

2. The self arises through a social process which implies the existence of a group where members interact in co-operative activities.

3. The individual's self is moulded by an organisation of the particular attitudes of other individuals toward her/himself and toward one another in the specific social acts in which s/he participates with them.

4. The self is also constituted not only by an organisation of these particular individuals' attitudes but also by an organisation of the social attitudes of the generalized other or the social group as a whole, to which s/he belongs.

5. Self does not only take up into her or his experience these attitudes of others towards her or him, but also s/he reacts back on the organisation of which s/he is a part. That through role-taking, significant symbols including meanings and values, guide and direct a person's behaviour in a given social setting. In addition, the individual defines her or himself as well as other objects, actions and characteristics based on the internalized meanings and values acquired through social interactions and transactions with others.

6. Self emerges as a result of the child having ideas about her/himself which are similar to those held about her/him by significant others in her/his life.

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Through the views of these people and the way they
treat her or him, the child will form various pictures
of her/his behaviour in certain situations. The
aggregate of these various selves is the child's
picture of her/himself.

7.   The symbolic interactionist self theory assumes that
people never forget anything. Stored up in their
memories is an integration of old and newly acquired
meanings and values. Therefore, a person's behaviour
is a product of her/his life history - all the experiences
both direct and vicarious that are brought about by
communication with others. Thus, a conception of self
once learnt, affects an individual's behaviour throughout
life.

8.   Finally, that most of the adult's behaviour is learned
behaviour, and that it is specifically learned is
symbolic interaction.

From the analysis of the submissions of the two theories, it seems
each of them cannot, on its own, explain adequately the process of sex-
role learning. For instance, because human thought and behaviour are
highly dependent on context, cognitive theories have been found deficient
for not emphasising the role of contextualism in interaction process
(Jenkins, 1974; Nelson, 1974; Goodnow, 1976). Although self theory seems

to incorporate the concept of contextualism which we have identified as lacking in cognitive theory by placing premium on environmental context of interaction and transaction in symbolic situations, it appears intrinsically lacking as an explanation for concept formation (Zimmerman, 1976), perception (Neisser, 1976) and language acquisition (Nelson, 1974) - all of which are essential aspects of socialization in general, and sex-role adoption in particular. In addition, self theory does not seem to recognise the role of cognitive maturity in the acquisition of these skills.

Therefore, it appears that we can place the content of the two theories along a continuum. While cognitive developmental model seems to focus on the internal requirements of learning, self theory tends to emphasise its external conditions. Thus, the two theories appear to underscore the fact that learning requires both maturation of internal processes as well as environmental resources. Self theory assumes normalcy of individual's ability to learn; whilst cognitive-developmental approach assumes adequacy of the learning environment. Therefore, for the purpose of the present study, the two theories appear complementary. Thus, it was necessary to use the two instead of only one of them as the theoretical underpinning of the study.

In addition, both theories emphasise the importance of role-taking in behaviour as can be observed from assumptions five and seven of the postulates previously presented. Role-taking, an important ingredient for the emergence of self, seems analogous to the concept of

identification in cognitive theories. So also is the contextual

setting as provided in self theory, a prerequisite for role taking

and identification process. The preceeding aspects of the two

theories, namely social context, interaction, sex-role taking/

identification and the role of cognition in learning are the

ones utilized in this study. Other aspects of the two theories

such as thinking and reasoning, memory development, and language

acquisition, are outside the scope of the present study.

For our purpose, therefore, the contextual setting would

include contexts of stories, themes, topics, problem-statements

and actions, speech and options open to the characters in the

pages of school's instructional materials. In addition, the

teaching-learning process in the classroom forms another aspect

of the contextual interaction. The findings of hypotheses one,

two, three, five and six have indicated that all the above were

sex-biased. Specifically, the findings of hypotheses one and two

suggested that male characters were predominant over females

both in leading and subsidiary roles. Those of hypothesis three,

include the fact that in terms of the quality of presentation,

more male than female characters were portrayed in a variety of

rewarding roles/occupations and in exciting and challenging

environments which called for imagination and initiative. The

findings of hypotheses five and six have suggested that not only

were teachers sex-discriminatory in their classroom behaviour toward

pupils, but that they also tended to be sex-stereotypical in their

perception of, and expectations for, the children.

Moreover, all the characters, both real and imaginary, depicted in the contexts become significant others who communicate attitudes, values and information to the children as they strive to master the contents of their textbooks. This is because contextualists (Sampson, 1981) and self theorists generally regard the actions of other people as the most dynamic of environmental stimuli. An integral part of the stimuli are those sex-biased attitudes and values which significant others in form of textbook characters and classroom teachers communicate to school children as they symbolically interact with the schooling process. Thus, based on the assumptions underlying identification process in cognitive developmental theory and role-taking as put forward by self theories, we assumed that as primary school children interacted with the instructional materials in order to succeed at school, they seemed to have regarded these characters as significant others whose values and attitudes thus symbolically communicated, were applied to themselves. True to the assumptions of both theories, the characters became looking glass through which the children began to see themselves until their self/sex identity became fairly well-established.

In addition, the classroom teachers, who of necessity the children must encounter during the teaching-learning process, become another source of significant others, who in line with the above theoretical assumptions, covertly or overtly told girls and

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boys who they were and what was expected of each category of children through their classroom behaviour and evaluation. As earlier stated, the findings of hypotheses five and six have indicated that these teacher-classroom behaviours are sex-discriminatory. Hence, children as active processors of information, both expressive and subtle as a result of growing cognition, and as multiphasic learners, tended to be selective and therefore modelled characters from their gender categories. Therefore, as well as mastering the contents of instructional materials, girls and boys seemed to have adopted the roles, statuses, attitudes and values of female and male characters respectively. The communication of these gender-based attitudes and values appeared to have had important ramifications for the development and the utilization of their potentials as indicated in the findings of the present study which cumulatively suggested that girls and boys differed considerably in their self concept, self-description, educational and vocational aspirations, and expectations for women and men.

Moreover, as their self, including gender identity became fairly well-established and their cognition increased, children seemed capable of categorising people, objects, roles, actions using gender as schemata. Thus, they seemed to have applied most of the context of the hidden curriculum which the findings of hypotheses one, two and three, as mentioned earlier in this chapter, have indicated to

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be sex-stereotyped. This, they appeared to have done, not only by identifying with these characters, but also by taking on the roles prescribed for them, all leading to the emergence of self for each child not only as distinctive individuals but also as girls and boys. Thus, true to the assumptions of the cognitive developmental theory, the findings in relation to hypothesis ten which suggested that children tended to become increasingly sex-stereotypical as they matured in age/class, seemed to have supported this aspect of our theory.

According to the cognitive postulations, once the child has categorised her/himself with some certainty as female or male, s/he will find the performance of sex-role appropriate behaviours exhibited either by herself or himself or others in her or his category acquire a meaning that makes them self-reinforcing for the child. In addition, those messages which the findings of hypotheses one, two and three have indicated to be sex-biased, seemed further reinforced by teacher-classroom behaviour and evaluation of pupils which the findings of hypotheses five and six have confirmed to be sex-discriminatory. Moreover, the findings of hypothesis thirteen has indicated that mothers tended to polarise household chores into female and male areas of competence and activity.

Observation, modelling or imitation are all basic concepts in the cognitive developmental theory (Zimmerman, 1983); so also are role-taking and interaction within social contexts inherent

in self-theory. Therefore, through symbolic communication, which for our purpose included the contents of instructional materials, teacher-classroom behaviour and pupil-evaluation; and mothers' responsibility training and activity exposure, female and male pupils appeared to have been exposed to differential messages. The findings of hypotheses one, two, three, five and six, as earlier stated, have indicated that there was sex discrimination in favour of males in the treatment of female and male categories in the above contexts of symbolic interaction with the schools hidden curriculum.

Specifically, the findings of the first and second hypotheses have suggested that the presentation of textbook characters, who for the purpose of the study are now significant others, was sex-biased. If the propositions of self theory and those of cognitive theories about the importance of significant others to the emergence of self and sex identity, are true, then certain groups of children who of necessity interact with these significant others as contained in their textbooks, are bound to suffer as a result of the imbalance in the presentation of those significant 'mirrors' of the self. Our findings have indicated that fewer of such 'mirrors' were presented to female children compared to the number available to their male counterparts. By extension, it means that fewer actions, activities, roles/occupations, decision-making tasks,

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occasions to demonstrate initiative and face challenges, were
presented to this group of children, whereas a lot more were
portrayed for the other group, as indicated by the findings
of hypothesis three.

Therefore, if the claim of the contextualists that the
actions of other people are the most dynamic of environmental
stimuli (Sampson, 1981) is true, the findings of the first
four hypotheses have indicated that girls have been shortchanged,
not only by the relatively fewer female characters presented,
but also by fewer roles, occupations, actions, options and
activities presented to them. The implication of the situation
appears well illustrated by the findings of hypotheses eight,
and nine, which have shown that females and males differed in their
self-concept and description; academic and vocational preferences;
and expectations for women and men respectively.

Our conclusion was based on the assumptions underlying
identification process as propounded by cognitive theorists, and
role-taking as put forward by self-theorists. We assumed that
as primary school girls and boys interacted with the instructional
materials in order to master them, they seemed to have regarded
the characters as significant others through whom they saw
themselves, their capabilities and the options open to each
category of children. In addition, their self-concept seemed
to have been moulded/organised by attitudes, values, roles
and status attributed to each category of characters.

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Through selective information processing, children took all the attributes of each category of characters as their own. True to the submission of cognitive theories of sex-role learning and self-theory, it appeared that through cognitive processing of information in relation to the relative valuing of females and males, the vicarious modelling of characters and re-inforcement, girls and boys developed different concepts, vocational and educational preferences and expectations for women and men. Thus, as a result of textbooks presenting more male than female characters, particularly in leading roles, depicting more male than female actors in high-status and more economically rewarding roles and occupations; showing more males than females in exciting and challenging environments and by extension, in interesting and inspiring activities as indicated by the findings of hypotheses one, two and three, girls and boys seemed to have developed differently.

The same aspects of the two theories appeared applicable to the role of teacher-classroom behaviour which the findings of hypothesis five have indicated to be sex-differentiated. Teacher-classroom behaviour, an important context for symbolic interaction, has also been found to be sex-biased in favour of boys. Thus, it appeared teachers have communicated differential messages about their relative worth and expectations to girls and boys. In addition, teachers' differential perception of and expectations for girls and boys as shown by the findings of hypothesis six appeared reinforcing

of the messages contained in teacher-classroom behaviour for
girls and boys.

Cumulatively, therefore, it would appear that girls and boys,
having recognized the significant others in real and imaginary textbooks
characters, have come to see themselves in these characters. In
addition, children appeared to have taken on the roles, attributes,
values and attitudes of these characters as demonstrated by the
findings of hypotheses eight and ten. Specifically, the findings
of hypothesis eight showed that although sex was not statistically
significant in children's academic self-concept, it appeared to
be critical in their social self-concept, whilst those of hypothesis
ten included the fact that children tended to be sex-stereotypical
in their expectations for women and men.

Moreover, the sex-differentiated messages contained in
these media of symbolic interaction within the hidden curriculum
seemed to have been selectively processed by girls and boys as
their cognition increased. This particular aspect of the
cognitive-developmental theory seemed to have been borne out by the
findings of hypothesis twelve which suggested that children's
sex-role adoption tended to vary as they grew in age/class, and
therefore progressively interacting more with the hidden
curriculum. This is because, to the cognitive-developmental
theorists, cognitive maturity is critical in children's

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interpretation of their world, which in our case, included

textbooks and teacher-classroom behaviour. Hence, we found

that older children, tended to be clearly sex-stereotypical

in attributing leadership and career roles to women and men.

Therefore, in line with the submissions of cognitive-developmental

theorists, children seemed to have categorised themselves and

others into females and males; and consequently, have come to

value what they perceive as similar to each category.

Thus, because male characters have been presented as

more desirable than female ones, boys having continuously

attributed these highly desirable characteristics' to themselves

seemed to have developed positive self-concept;whereas, girls

who have had to interact with less desirable female personalities

in their textbooks tended to develop relatively poor self-concept,

particularly with regard to academic capabilities.

In addition, it appears the dictum of self-theory

that people never forget anything has been corroborated by the

findings of the present study, because it appears each of

the sex-differentiated experiences within the school's hidden

curriculum was stored up and later, one's behaviour became the

product of all, both old and newly acquired meanings and values

gleaned from each experience· Therefore, as a result of reading

sex-biased instructional materials and exposed to sex-differentiated

teacher-classroom behaviour each succeeding school year, each

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daily experience through these media cumulatively seemed to have influenced children's sex-role socialization as suggested by the findings of the study which we have earlier on referred to.

However, the assumption of the cognitive developmental theorists that children's stereotypic categories will change as they grow and are exposed to new information seemed aptly illustrated by the findings of hypotheses four, seven and nine. Categorically, the findings of hypothesis four indicated that American instructional materials appeared less sex-discriminatory than those of the Nigerian school. That of hypothesis seven indicated that American teachers tended to be less male-directed than their Nigerian counterparts in their perception of children on selected school subjects and personality traits. The findings of hypothesis nine showed that American children tended to record higher mean scores on self-concept scale. In addition, the finding of hypothesis twelve have suggested that American mothers appeared more equigender than their Nigerian counterparts in their responsibility training.

Therefore, according to the thesis of self-theory, it appears that as American children were increasingly exposed to less sexist hidden curriculum, as a result of the general awareness about and efforts made to minimise sex discrimination in the schooling process, American children were found to be less sex-stereotypical in their self concept, sex-role adoption

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and expectations for women and men as illustrated by the findings referred to above. As a result of having been exposed to more egalitarian instructional materials and equitable teacher-classroom behaviour, all of which were facilitated by sensitizing Americans, particularly teachers and publishers to the issue of sex-bias in education (NOW, 1972; McGraw-Hill, 1975), American children were found to be less sex-stereotypical.

In conclusion, we have attempted to explain the findings of the present study, using the assumptions basic to the cognitive-developmental and self theories. From our analysis, it seemed that the two theories have anchored our findings effectively because all the salient aspects of the two theories appeared relevant to our study. Specifically, it appeared girls and boys gradually and subliminally, over the years, selectively processed and subliminally internalized differential messages contained in the school's hidden curriculum. As they interacted with their textbooks' characters and their teachers, they seemed to have imbibed ideas, beliefs, values and expectations attributes to their gender categories, to the extent that girls and boys developed different self-judgement and different expectations for women and men. In consonance with the claim of self theory, children seemed to have subconsciously stored up in their repertoire the events of each experience and these later on come to determine their interpretation, definition and

perception of future events such as their educational and
vocational preferences. Thus, the aggregate of the various
'selves' formed in various social contexts, specifically in
the contents of instructional materials, teacher-classroom
behaviour and mothers' activity exposure, all of which were
found to be sex-discriminatory, seemed to have had important different
consequences for the emergence of girls and boys' self-concept,
vocational and educational preferences, and sex-role
expectations for women and men.

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SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

11.0 Introduction

The results of the analysis of data generated by the fifteen hypotheses tested were presented in chapters five to eight. This chapter proceeds to summarise the conclusions and make some recommendations.

11.1 Summary of Findings and Conclusion

It has been established that the main concern of the study was to compare the influence of the hidden curriculum on sex-role socialization of American and Nigerian primary school children. The hidden curriculum was defined to include instructional materials and teacher classroom behaviour. Sex-role socialization was operationalized as the child's self-concept, educational aspiration, vocational preference, perception of, and expectation for women and men.

The subjects of the study comprised one hundred and twenty primary school children, their mothers (120) and twelve teachers, randomly selected in equal number from the American and Nigerian schools under study. A total of 30 textbooks randomly selected from the array of instructional materials available in English Language,

Mathematics, Social Studies in both schools were subjected to content analysis using CACSIM for the purpose of studying differential presentation of female and male characters.

FIAC (1970) was adapted into eight teacher-initiated interaction categories for the purpose of observing sex difference in teacher classroom behaviour. In addition, teachers' perception of and expectation for female and male pupils on selected personality attributes and school subjects were measured using researcher-made teachers' rating scale.

The children and their mothers completed questionnaires which aimed at investigating their sex-role perception and preferences, and child-rearing practices, respectively. No background data other than those described in the body of the work were obtained for our samples. Data obtained from the above were used to identify selected aspects of the hidden curriculum considered to influence children's sex-role preferences. These were:-

-Sex differentiated teacher classroom behaviour.

-Teachers' sex-stereotyped perception of, and expectation for children.

-Mothers' child-rearing practices which were found to be sex-differentiated.

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Based on the assumptions inherent in cognitive-developmental and symbolic interactionist self-theories which formed the theoretical framework of the study, the process of sex-role learning and adoption was discussed.

Consequent upon the description of the research population, the results of the investigation are hereby summarised. The content analysis of selected American and Nigerian instructional materials in English Language, Mathematics and Social Studies yielded the following results:

1. There was a predominance of male over female characters both in leading and subsidiary roles across all subjects and schools under study.

2. However, those of the Nigerian school were found to be more male-oriented than the American ones.

3. In terms of the quality of presentation, more male than female characters were portrayed in prestigious roles/occupations, while more female than male actors were depicted in either low status or traditional positions.

4. More female than male characters were shown in their relationship with some important personalities as mothers, grandmothers, queens, empresses, wives and princesses, thus inferring the dependent nature of females, a theme that

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was discernible in almost all the stories/
topics analysed.

5. In terms of quality of presentation, males were
    depicted in outdoor environments, almost all of
    which were exciting, challenging and therefore,
    calling for initiatives and imagination; while
    women were most of the time portrayed in being
    indoors, engaging in repetitious and un-interesting
    activities. Male characters were presented as
    going to the moon, being in the other planets,
    congress, and House of assembly; whilst female ones
    were in the home, or at best, in the garden,
    grocery or hospital seeking medical help for their
    sick babies or assisting the doctors to implement
    their decisions on medicare.

6. Similarly, female and male characters engaged in
    diametrically different activities. More male
    than female characters engaged in activities that
    permitted greater amplitude to interact with space
    and also of uncircumscribed opportunity at
    expressing oneself physically and mentally. More
    of indoor activities which were assigned to female
    actors, entailed restricted space, interactions
    and limited opportunity at stretching oneself
    mentally.

We, therefore, concluded that the instructional materials were
sex-biased and sex stereotypical. Thus, instead of facilitating
changes, and widening children's horizon, they seemed restrictive
and obsolete and therefore, do not mirror the realities and

changes in the opportunities available to girls and women in both societies under study. Consequently, we hypothesised that in all probability, the children who, of necessity, must interact with sexist information as contained in their textbooks, would develop differential self-conception, vocational and educational preferences, perceptions of and expectations for women and men.

Employing the modified version of Flander's classroom observational schedule (1970), to observe probable sex differentiation in teacher classroom behaviour, the following results were obtained.

1. While teachers appeared not to differentiate between girls and boys, in assigning academic tasks, however, on such important areas as motivating the pupils by praising, encouraging and making use of their ideas, boys were more favoured than girls in such teacher contacts.

2. As mentioned above, while teachers did not seem to differentiate between girls and boys in assigning academic tasks, the sex of the child appeared to be a significant factor in the assignment of non-academic, in class maintenance duties; more of such tasks were given to girls than to boys.

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3. In addition, more boys than girls received teachers' commands and criticisms. We then concluded that teachers appeared more favourably disposed towards boys than girls in overall dispensation of teacher-initiated interactions.

4. As expected, the Nigerian teachers were more male-directed in their interactions with their children.

5. The level of sex differentiation in teachers classroom behaviour seemed to vary with subjects being taught. While more girls appeared to have received greater overall interaction in English Language lessons, boys seemed more favoured in social studies and mathematics lessons.

Therefore, we concluded that boys were generally at an advantage over girls as targets of teacher-initiated contacts. Consequently, we proposed that the frequency and quality of such contacts might have an influence on children's self-concept, their evaluation of females and males and their educational and occupational choices.

Utilizing researcher-made teachers' rating scale to study probable sex difference in teachers' perception of their pupils and their evaluation of them on selected personality traits and

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school subjects, the following results emerged:

1. Teachers appeared sex stereotypic in assigning personality traits to their pupils. More of the desirable attributes of being aggressive, adventurous, competitive, confident and independent were assigned to male pupils, while more of the undesirable ones such as being docile, conforming, co-operative, fearful and dependent, were attributed to girls. However, we observed that sex was not a critical factor in attributing such traits as being hardworking, lazy and bright to children.

2. Conversely, sex was found to be a significant factor in teachers' rating of pupils on academic performance in selected school subjects. More boys than girls were rated high . in Mathematics and Social Studies, while the reverse was the case in English Language. We noted that this finding was consistent with an earlier finding on teacher classroom interaction with boys and girls in Mathematics, social studies and English Language respectively.

3. Contrary to our expectation that the American teachers would be more equigender in rating their children, we found that they were as sex stereotypical as their Nigerian counterparts on this aspect of the study.

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We then concluded that teachers were biased against female pupils in attributing personality attributes to their pupils. However, in rating their academic performance, there seemed to be a variation according to the subjects under consideration. Thus, teachers appeared sex-stereotypical by rating males higher than females in Mathematics and Social Studies which were generally acccepted as masculine subjects, while they rated girls better on English Language in which girls are generally regarded as being superior to boys. We, therefore, assumed that because teachers treated their female and male pupils differently, thus receiving differential messages through such interactions and transactions in the classroom, and through the expectations held out for them, some of which must have been communciated to them via the assumptions basic to the cognitive developmental and self theories, girls and boys would likely develop different self-concept, vocational preferences, educational aspirations and perception of and expectation for women and men.

The cumulative effect of reading sex-biased instructional materials, of being treated differently by their teachers in the classrooms, of being evaluated differently on selected personality traits and school subjects, on children's sex-role socialization, was investigated. Sex role socialization was operationalized to include self concept, vocational preferences,

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educational aspiration, perception of and expectations for women
and men on selected social and vocational roles. To this end,
children's responses to items relating to self-concept were
analysed. It is pertinent to point out that self-concept
was divided into academic and social self-concept.

Based on the assumptions inherent in symbolic interactionist
theory of Mead (1934) and Rose (1962), and the cognitive
developmental theory of sex-role learning of Kagan (1962)
and Kohlberg (1966), we theorized that exposure to sex-biased
hidden curriculum would have an effect on children's sex-role
adoption.

The summary of our findings on the likely influence of
the above aspects of the hidden curriculum on the children's
sex-role socialization are presented below:

1.   Even though sex appeared not to be
     statistically significant in academic
     self-concept, we noted that boys recorded
     higher mean scores than girls. However,
     we found that sex was a significant factor
     in pupils'social self-concept particularly
     between American and Nigerian children,
     between American male and female children
     and American and Nigerian Female pupils.

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We therefore concluded that while boys recorded higher mean scores than girls in academic self-concept, the reverse was the case on social self-concept where girls recorded higher mean scores than boys. Our finding seemed to indicate that male subjects appeared more achievement oriented while the girls seemed socially inclined. The boys' responses seemed to suggest that they could do better than girls in selected school subjects, perform better than girls in school generally and pass all their tests and examinations. On the other hand, girls seemed particularly concerned about what others, especially their teachers, thought about them and expected from them. Their response seemed to indicate that they perceived themselves as being obedient, likeable and helpful. They hardly could afford to deviate from their teachers' perception of them.

In addition to the above finding, we proferred that our finding might be making a contribution and giving a new dimension to self theory generally and to the study of self-concept in particular, because as far as the present author is aware, this might be the first attempt to dichotomise the self-theory construct into academic and social aspects.

2. While there was no significant difference between girls and boys' description of self, because they both used positive and desirable adjectives, we found that they applied different words to themselves. For instance, females tended to attribute words connected with social appearance. Thus, we suggested that this tendency might indicate social orientation for girls. On the other hand, boys were found to use words that appeared instrumentally inclined to describe themselves.

3. Similarly, in describing men generally, we noted that sex was inconsequential in attributing positive, neutral or negative adjectives to men among the American children, while this was so among their Nigerian counterparts. However, for both groups of children, we found that sex was a critical factor in describing women. Consistent with an earlier finding, we noted that girls and boys' employed different words to describe women and men. Boys used such words as beautiful, neat, always obeying and laughing for women; while they attributes such words as witty, active, strong, always serious, always fighting and brave to men.

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Consequently, we concluded that children were generally stereotypical in their description of women and men, but that the Nigerian children seemed more sex-biased than their American counterparts. We surmised that perhaps this was due to the relatively low level of awareness of the existence of sexism in the schooling process in Nigeria. In addition, we found that a larger proportion of the female samples expressed preference to be boys while only a few of the boys indicated their preference to be girls. Perhaps as a result of the messages communicated through the hidden curriculum that extols boys and men, but puts down girls and women, children, including girls have come to accept that the male category is more important and worthy than the female one. Hence, most children seemed to prefer to be born male if they were given an opportunity to choose their sex.

Thus far, we have shown that the school, through the hidden curriculum, has an effect on children's sex-role socialization, and that it socializes girls and boys differently. In addition, we have evaluated the contribution of the home, among other socializers, to children's sex-role development by investigating mothers' child-rearing practice and the expectations they held out for children. The results are summarized below:

1. Most mothers assigned domestic tasks to their children, but the type and the magnitude of such tasks varied with children's age and sex.

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2. While American mothers spared their very young children, Nigerian mothers assigned domestic tasks to all children irrespective of age.

3. Both American and Nigerian mothers were guided by the sex of their children in allocating specific tasks to them. However, the Nigerian mothers appeared to make more distinctions than the American mothers.

4. Mothers appeared to have polarised domestic chores into female and male tasks because they assigned specific tasks to one sex almost to the exclusion of the others.

5. Mothers held differential educational expectations for daughters and sons. However, Nigerian mothers were found to be more favourably disposed towards their daughters than towards their sons.

6. More of the American than the Nigerian mothers indicated that they preferred any sex, while the Nigerian mothers preferred male children most of the time.

7. Assessing the relative influence of the home and the school on children's sex role socialization, our findings seemed to suggest that the school appeared more critical particularly for children from egalitarian homes while reinforcing the sexist attitudes and values already cultivated by the children.

Based on these conclusions, the following recommendations are made:

11.2 Recommendations

1. Creating General Awareness about the Existence of Sexism in the Schooling Process

Given the importance of books in the formation of children's values, attitudes and self-concept, it is imperative that anachronistic and pejorative sex role stereotyping be eliminated. This is not by rewriting of all books but by creating an awareness of the existence of sexism among educators, parents, publishers and the general public. Teachers and parents may compensate for the present bias by pointing it out to children where it occurs.

In addition, the model used in this study for analysing the instructional materials is recommended as a simple but analytic approach for detecting sex-bias in instructional materials. For emphasis, the features of the checklist which is in three parts are as highlighted below:

a) Quantitative analysis of content: a statistical and comparative evaluation of the number of female and male characters featuring in the titles, texts and illustrations of children's literature and

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textbooks. Distinction should be made between main and supporting characters.

b) <u>Qualitative analysis of content</u>: a statistical comparison of the characteristics attributed to female and male characters. These include the roles/occupations ascribed to female and male actors, the environment in which they are found and the activities they engage in.

c) Even though not included in the approach used in the work, the third part is the analysis of sexism inherent in the language: a study of the use of vocabulary, grammatical structures and insinuations.

An analysis using this approach should result in a thorough and exhaustive evaluation of sexism occuring in any kind of publication. Publishers can use the checklist not only to review new editions of their published works, but also when writing new ones. It is also recommended to teachers so as to guide them in compensating for sexist materials in the classroom.

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2. Action to Eliminate Sexism

It has already been noted that sexism, as it occurs in school textbooks and at school, is merely a reflection of the sexism that prevails in society as a whole. Consequently, action to eliminate sexism must not be confined to the school system alone.

a) In the first place, government, particularly, the Ministries of Education, must take a stand resulting in policy statements, similar to those made in the United States of America (1975) prohibiting sex discrimination in employment, education and other aspects of life. Then education authorities will confer with the relevant publishing houses, authors and illustrators. Action aimed at the ministries may impel them to bring pressure to bear on the public servants who are answerable to them - teachers, illustrators, guidance counsellors.

b) Teachers should be sensitized and trained in anti-sexism. Awareness development and training should not be limited to teachers' colleges alone, but should be a continuous process through seminars, workshops, in-service training and teachers' conferences. Student-teachers should be induced

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to analyse stereotypes and images by means of
an additional form of training.

c) Training future teachers in teacher-training
institutions to combat sexism is recommended.
Training programmes must be assertive about
anti-sexism. The curricula of teacher-training
establishments must be carefully examined and
any persistent sexist tendencies weeded out.
Attention must also be paid to the preparation
of syllabuses and prospectuses for the training
of teachers.

d) The foregoing suggestions are intended not only
for teachers but for all educators, However,
special mention should be made about the role
of education advisers, educational and vocational
guidance counsellors in developing strategies
that will help to break down the social restrictions
that have been imposed by the segregation of the
sexes. They should be made conscious not to
steer children towards traditional occupations.
They should also be careful about the way they make
use of tests, manuals and career guides laden with
sexist stereotypes; their way of saying 'he' when
discussing traditional male activities and 'she'

for those that are allegedly for females and the linguistic use they make of masculine terms to designate certain occupations.

e) Pupils' critical faculties should be awakened so that they come to recognise and reject sexism. They should be familiar with egalitarian legislations and policy statements on the equal status of the sexes and related rights. They should also be helped to recognise the many forms of sexism, in the schooling process and their negative effects; thus helping them to understand their own socialization. Girls in particular should be made to understand that no subjects are exclusively reserved for one sex or the other and that girls, just like boys, can study mathematics, social studies and any other scientific discipline; learn a trade that is supposedly male-oriented. Boys too should be told that, just like girls, they can do housework, take care of children or engage in any other activity that has been considered hitherto to be suitable for girls only.

3. The Role of Pressure Groups in Eliminating Sexism

There is the need for the development of pressure groups similar to the feminist movements in the United States, Canada and France. Such groups should carry

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out research work followed by campaigns denouncing
sex-bias in the schooling process. Such actions
have resulted into the establishment of the Ministry
for Women's Rights in France. If a ministry for
women's right can not be established in Nigeria,
the Women's Unit of the Federal Ministry of Education,
can be given the additional responsibility to initiate
policies aimed at eliminating sexism simultaneously
as it is promoting women education and development.
The newly established National Commission on Women
seems to augur well for the future. It is hoped that
similar to the role which a similar commission has played
in the United States, it will strive to eliminate sex
discrimination, not only in education but also in
employment and public life. Like its American counterpart,
it will fund researches into the roots of discrimination
particularly at the school level.

4.   The Role of Universities and Research in
     Eliminating Sexism

The campaign can be enhanced at the University
level through the establishment of women's studies
programmes whose objectives should include heightening
awareness about the contributions of women to human
progress and establishing a non-sexist orientation in
all academic areas of the University, providing personnel

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with information, advice, special programmes and workshops
_designed to combat sexism and promoting understanding of
the human condition. Some of the courses should be made
compulsory for all students. In addition, the development
of research on women, on the conditions in which women have
livedand on the contributions they have made through the
ages should be undertaken. Such efforts would provide
publishers with egalitarian materials for writing their
books. For this purpose, financial resources should be
made available to conduct research on women in universities
and major research organizations.

Finally, along with sensitizing teacher trainers and
student teachers to the existence of sexism, they should
be made aware of the subtle discriminatory nature of
teacher-classroom behaviour through retraining, workshops,
seminars and conferences.

11.3   Implications of the Study for Further Research

The checklist of criteria for analysis of instructional
materials for sex bias proposed in the study should be applied to
other school texts so that the exercise will be continuous across
various subjects, not only at the primary school, but also at the
secondary and tertiary levels. Other print media such as children's

books, comics and magazine should be analysed using the proposed checklist. In the process of such a continuous exercise, the instrument becomes more refined and thereby enjoys greater validity.

The teacher-initiated classroom interaction schedule developed in this study is another step in the attempt to evolve an interaction analysis system that will be adequate for studying teachers' differential treatment of girls and boys. The instrument should be used in many classrooms and at all levels of schooling, with a view to detecting its weaknesses and effecting modifications.

The self-concept scale which discriminated between academic and social self-concept should be further refined to cover other aspects of self-concept such as political, economic, vocational self-concepts.

Research into other aspects of the hidden curriculum such as extra-curricular activities, organisational structure and counselling practices of the school should be undertaken so that educators might be aware of the magnitude of the work they are facing in eliminating sex-stereotypes, thereby promoting equality of educational opportunity.

Comparative studies of education should go beyond sex differences in achievement and access to school and examine those sociological and psychological constructs such as socialization, interaction and self-concept cross-culturally.

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INSTRUMENT I: Content Analysis - Checklist for Coding Sex-bias in Instructional Materials (CACSIM)

A. Quantitative Analysis of Content:

   i)   Comparative analysis of the number of female
        and male characters in

        a)   leading roles and

        b)   as themes of stories/topics.

   ii) Comparative analysis of the number of female
        and male characters in supporting roles.

   iii) Comparative analysis of the number of female and male
        characters illustrated in children's literature
        and textbooks.

B. Qualitative Analysis of content.

   i)   Comparative analysis of the number of roles/
        occupations assigned to female and male
        characters.

   ii) Comparative analysis of the types of roles/
        occupations assigned to female and male
        characters in terms of high-low prestige;
        kingship and traditional dimensions.

   iii) Comparative analysis of the types of environment
        in which female and male characters are found
        in terms of wide-restricted amplitude requiring
        initiative - inertia.

iv) Comparative analysis of the number and types of activities attributed to female and male characters.

    a) Domestic tasks carried out in the home

    b) Professional activities

    c) Political/Social activities

    d) Leisure activities

v) Comparative analysis of female and male character traits.

C. An analysis of sexism embedded in the language of children's literature and textbooks. This includes:

a) A study of vocabulary

b) Generic terms

c) Grammatical structure (nouns, pronouns)

s) Insinuations.

Teacher-Initiated Interaction Analysis Category (TIAC)
Adapted from Flander's Interaction Analysis Category(1970)

Category i: Teacher accepts the feelings, clarifies the attributes or the feeling tone of female or male pupils.

Category 2: Teacher praises or encourages female or male pupils.

Category 3: Teacher accepts and uses the ideas of female or male pupils; clarifies, builds or develops ideas suggested by female or male pupil.

Category 4a: Teacher asks female or male pupil about content of lesson.

Category 4b: Teacher asks female or male pupil procedural questions.

Category 5: Teacher gives directions, commands or orders to female or male pupil.

Category 6: Teacher criticises female or male pupil with the intention of changing pupil behaviour, including prohibitory or disciplinary statements/ actions.

Category 7: Teacher assigns academic tasks to female or male pupil; asks female or male pupil to read, work on the blackboard, and to solve academic problems.

Category 8: Teacher assigns non-academic tasks: asking female or male pupil to do in-class maintenance tasks - fetching materials; cleaning the blackboard, distributing and arranging materials and assisting in class management.

O B S E R V A T I O N   F O R M

Teacher-Initiated

CATEGORIES	M[1]	F	M[2]	F	M[3]	F	M[4]	F	M[5]	F	M[6]	F	M[7]	F	M[8]	F	Total M	F	G.T.
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
Total																			
%																			

TEACHER-INITIATED

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TEACHERS' RATING SCALE

Introduction:

It is a general belief that teachers know their pupils'
so intimately that they can evaluate their performance,
capabilities and potentials on many tasks. You are, therefore
requested to please rate each of your pupils on the underlisted
criteria.

Your response will be treated with strict confidentiality.

A.   Teachers' Background Information Scale

1.   Teacher's name (optional) _____

2.   a) Teacher's Sex_____ b) Your Age _____

3.   Please state your highest educational qualification___

4.   Professional qualification(s)_____

5.   Your nationality_____

6.   Your school_____

7.   Which class do you teach?_____

8.   Are you a subject(s) teacher?_____

9.   If your answer to question 8 is yes, what
     subject(s) do you teach?_____

10. Years of teaching_____

B. This section is divided into two parts. For part I, a number of words is provided. If you think a word describes or applies to individual pupils always, write 03; if it applies sometimes, write 02 and if it never applies, please write 01.

In part II, you are requested to rate each pupil in selected school subjects. Please write 03 against the pupil's name, if you think the pupil is always good, 02, if you rate her/him as average and 01 if you consider the pupil poor.

S.No.	NAME OF PUPIL	Docile	Aggressive	Quiet	Talkative	Conforming	Obedient	Naughty	Adventurous	Fearful	Competitive	Co-operative	Hardworking	Lazy	Bright	Dull	Confident	Lacks Confidence	Independent	Needs Supervision	Mathematics	Reading	Spelling	Writing	Science	Social Studies	Art	Music	Physical Education	Future Potential
1.																														
2.																														
3.																														
4.																														
5.																														
6.																														
7.																														
8.																														
9.																														
10.																														
11.																														
12.																														
13.																														
14.																														
15.																														
16.																														
17.																														
18.																														
19.																														
20.																														

PART I   PART II

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Thank you very much for your co-operation.

Mrs. I. I. Abe
Department of Educational Foundations
Faculty of Education
University of Lagos

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Mothers' Responsibility Training and Activity Exposure Questionnaire (MORAQ)

A. Introduction

Our focus is on a study of children in their classrooms. However, we are also interested in children's experience in other meliux because we assume that these are critical to children's development.

You are, therefore, requested to respond to the following items which relate to the children's home life as truthfully as possible.

Your responses will be treated as strictly confidential.

B. Parents Background Information Scale

1. Pupils name_____

2. What is your relationship to the child?

    a) _____ Mother

    b) _____ Aunt

    c) _____ Others, please specify _____

3. What is your age-group?

    a) _____ 20-35 years

    b) _____ 36-45

    c) _____ 46 and above.

4. Please state your highest educational attainment _____

5. Please state your husband's education _____

6. What is your occupation _____

7. Please state your husband's occupation _____

8. What class is/are your ___ child(ren) in
   the school? _____   _____

9. Do you always have domestic help? _____

C. Now, kindly respond to the following items:

   1. Whom do you call upon more often to do the following tasks?

		Your Daughter	Your Son	Both	Househelp
a)	Sweeping	_____	_____	_____	_____
b)	Tidying up your room	_____	_____	_____	_____
c)	Washing the car	_____	_____	_____	_____
d)	Washing the dishes	_____	_____	_____	_____
e)	Ironing	_____	_____	_____	_____
f)	Shopping	_____	_____	_____	_____
g)	Cooking	_____	_____	_____	_____
h)	Lifting objects	_____	_____	_____	_____
i)	Trimming the garden	_____	_____	_____	_____
j)	Going on errands outside your home	_____	_____	_____	_____

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D   1a.   What is the highest educational attainment you expect your daughter to have? _____

        1b.   What is the highest educational attainment you expect your son to have? _____

        2a.   What career do you expect your daughter to have in future? _____

        2b.   What career do you expect your son to have in future? _____

        3.   Which do you prefer more often?

            Daughter_____

            Son _____

        4.   Do you, most of the time, differentiate between your daughters and sons in your relationship to each?

Thank you.

                        Mrs. I. I. Abe
                        Faculty of Education
                        University of Lagos

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Children's Sex Role Perception and Attitude
Questionnaire (SPAQ)

A. Introduction

Children have various ideas about their schools,
about themselves, who they think they are, what they think
they can do and what they want to be. They also have
opinions about what women and men can be, do or say.

This questionnaire is in three parts:

1. Who children think they are

2. What they think women and men can do, be or say

3. What they think they want to be and do when they
    become adults.

B. The subjects will be interviewed individually, using this
schedule. However, if the researcher is sufficiently convinced
that they can respond to the items, with some assistance,
such subject will be required to fill out the schedule.

C. Personal Data Information Scale

1. Write your name _____

2. Tick the school you attend:
    a) American International School _____
    b) Maryland Convent Private School _____

3. Tick your class:

    a) Primary I/Grade 1 _____

    b) Primary 3/Grade 3 _____

    c) Primary 6/Grade 6 _____

4. Are you a girl or a boy?

    a) Girl _____

    B) Boy _____

5. How old are you? _____

6. State your country _____

7. Where do you live in Lagos? _____

8. What work does your father do? _____

9. What work does your mother do? _____

10. Does your mother treat her daughters and sons the same way? _____

D. The following statements are about who you think you are. Three different answers are provided. These are always (03), sometimes (02) and never (01). If the sentence is always true of you, tick always, if this is sometimes so, tick sometimes, and if it is never true, tick never.

	Always	Sometimes	Never
1. I am good in English			
2. I do well in Mathematics			
3. I am good in Social Studies			
4. I can be a good class captain			
5. I am generally good at school			
6. My teacher thinks I am clever			

7. My teacher likes me

8. I am obedient

9. I am helpful

10. I think I am brave

11. I can be great in future

12. I can pass all my tests and examinations

13. Write five words that best describe you.

   a) _____

   b) _____

   c) _____

   d) _____

   e) _____

14. Write five words that best describe a woman.

   a) _____

   b) _____

   c) _____

   d) _____

   e) _____

15. Write five words that best describe a man.

   a) _____

   b) _____

   c) _____

   d) _____

   e) _____

16. If you had a choice, what would you like to be?

   a) A girl _____

   b) A boy _____

17. The highest education I would have is _____

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18.   The job I would like to do is _____

E.   Sex-Role Adoption Test I (SRAT I)

Below is a list of some things people generally do, say or think. Complete each sentence by writing F in the space provided if you think that the sentence is true of women generally. Write M if you feel the statement is true of men generally.

1.   _____ generally like children.
2.   _____ are generally obedient
3.   _____ are usually afraid
4.   _____ usually have good jobs
5.   _____ are usually clever
6.   _____ are generally dull
7.   _____ are always good in science subjects
8.   _____ are good in English
9.   _____ are good in mathematics

10. _____ are usually good as doctors

11. _____ are good as nurses

12. _____ are usually good teachers

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Sex-Role Adoption Test II (SRAT II)

We are going to have a game. Each of the cards I am going to show you contains a job. Your part of the game is to write F if you think the job is done mostly by women, or you write M if you feel that it is a man's job.

1.	Lawmaker	16.	Instructor
2.	Ruler	17.	Nurse
3.	Minister	18.	Housing agent
4.	President	19.	Farmer
5.	Senator	20.	Head
6.	School Principal	21.	Accountant
7.	Surgeon	22.	Mathematician
8.	Doctor	23.	Inventor
9.	Astronaut	24.	Builder
10.	Pilot	25.	City Planner
11.	Chemist	26.	Teacher
12.	Scientist	27.	Army officer
13.	Lawyer	28.	Civil servant
14.	Judge	29.	Social worker
15.	Secretary	30.	Trader
		31.	Writer
		32.	Publisher
		33.	Poet
		34.	Leader

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