

THE EFFECTS OF FATHER - ABSENCE ON BOYS IN AN AFRICAN
PATRILINEAL SOCIETY

BY

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It is hereby declared that this dissertation or any part of it has not been submitted for a degree in this or any other University.

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Abstract

Boys from three different family backgrounds were compared on the basis of their performances on six tests - sewing test, carving test, test of sex identity, aggression, discipline and personal construct differentiation. The subjects in this study included children brought up in father-present, father-absent and those who grew up in homes headed by a father-substitute. The purpose of the study was to establish whether fatherless boys in an African patrilineal society suffer from certain disadvantages. The results show that father present boys perform better than the father-absent boys in the masculine test-solving. On the other hand, father-absent boys show better performance in the feminine task-sewing. The results also show that father-present boys express more aggressiveness than boys in other groups. Performances on tests of sex identity, discipline and personal construct differentiation show no significant differences between groups. The results are interpreted as suggesting that family background has a definite impact on the acquisition of sex-linked cognitive skills but has differential impact on the conative or socio-emotional development of children.

CHAPTER 1

BACKGROUND TO THE RESEARCH - INTRODUCTION

Section i - Context of the Problem.

Although a great deal of research has been conducted to investigate the effect of maternal deprivation on children, very little has been done yet to establish the consequences of loss of a father. Rutter (1972) describes the concern with maternal deprivation and the lack of concern with paternal deprivation as "almost exclusive" (p. 64). Rubenstein and Levitt felt that research in paternal deprivation was a neglected area (Heckel 1963). Kisker (1977) has also expressed the same "discontent and emphasized that more research in this area was desirable. Infact one simply needs to visit a few libraries to prove that the allegations made so far are genuine as one will find that research in this area has been "largely anecdotal, impressionistic, speculative and imprecise" (Kogelschatz et. al 1972) and, one can add, 'meagre'.

Perhaps the general lack of interest in investigating the effect of loss of a father on children and the greater concern with mother deprivation is not difficult to explain. Traditionally, in many societies, looking after children and feeding them was a woman's job until the boys were big enough to join the father in his mainly outdoor activities like hunting. Since the mother had more contact and perhaps more concern with the children at a more tender age, loss of a

The situation is obviously different now. The division of labour between the father and the mother which used to be rigid and clear - cut is fast getting diffused in most societies.

The mother's role is no longer strictly that of tending the children for she is expected to contribute effectively in other areas like the economic, political and social welfare of the family. Thus the father is compelled by conditions to share the burden of looking after and feeding the children apart from simply being the provider of bread. Therefore, the death or loss of a father in our age is likely to cause as much harm to the children as the mother's would. It is the nature and the amount of harm or disadvantage the child suffers after the father dies or separates with the mother that has not been adequately investigated. This study was carried out to contribute knowledge in this direction.

Research in this area is desirable particularly because we now have evidence that the number of children growing up in father - absent households is increasing. A World Health Organisation expert committee (1977) noted, "the illegitimate birth rate is rising in many developed and developing countries, and the children concerned (often born to very young mothers) are now, in some parts of the world, less commonly given up for adoption. Consequently a large number of children are being raised in single - parent families and situations of social disadvantage" (p. 11). The WHO attributes this situation to urbanization. Because of the wish for employment, fathers go to town to look for employment leaving their families behind

in the country. As a result, a situation arises where the population in rural areas is composed of more women than men. The following table shows the seriousness of the situation in the Northern and Western provinces of Zambia in 1969.

*Table 1

Age and Sex Structure, Northern and Western Provinces: 1969.

	Northern Province		Western Province	
	Male	Female	Male	Female
	%	%	%	%
0 - 14 Years	25.2	24.8	20.6	20.1
15 - 54 Years	18.3	24.3	20.8	27.8
Over 54 Years	3.4	4.0	4.8	6.0
TOTAL	47.0	53.0	46.1	53.9

As is evident from the table, males and females among the children and elderly populations were represented in fairly similar numbers in both provinces. The situation, however, was very different in the age group (15 - 54 years). The percentages show that in this age group, women were far more than men in the two provinces in 1969.

One reason for the smaller percentage of males is the migration of men to urban areas of the Zambian Copper Belt and the mines in Zimbabwe and South Africa. It is important to note that the age range 15 - 54 years constitutes the most active reproducers. The disproportionate loss of men relative to women has the implication that a substantially

* Source: Marter and Honeybone (1976).

big number of households are single - parent, the mother. What is the fate of the children who grow up in such households?

Browsing through the available literature bearing on the issue of paternal deprivation one quickly notices that most of the studies were conducted on children who were attending mental health units (e.g. Heckel 1963, Kogelschatz 1972), children showing signs of "incipient delinquency" as judged by teachers and the police (McCord et al 1962) and children in hospitals and clinics (e.g. Trunell, 1968 and Wylie and Delgado, 1959).

The list indicates a rather strong emphasis on studying children in health institutions and reformatory - eligible cases as having been the general trend followed by researchers so far. The problems of the fatherless child living in a household have still to be investigated more comprehensively. It is no wonder therefore to find that what little we know about the effect of father - absence on children has been provided mainly by psychiatrists. The problem with these studies is that sometimes their methods of data collection and their interpretations are scientifically unwarranted. The present study was designed in such a way that any conclusions resulting from it would be based on empirical data. The study was also conducted on a population leading a normal life outside health institutions. (Thus running away from the common clinical approach taken by most previous researchers which seems to assume that fatherless children are more prone to psychopathology than any other psychological problem.) These and other factors make the present study unique.

There are two other factors which further emphasize the importance of this study: Firstly, the two or three other studies carried out on children living outside institutions (e.g. Bach 1946, Sears, Pintler and Sears 1946) were "concerned with temporary absence of the father during war time" (Lynn and Sawrey 1959). The study reported here was conducted on boys who had lost regular contact with their father for between five and ten years or more at a stretch.

Secondly, the present study was conducted in a traditional, rural African society; making it one of the few (if not the first one) of its nature to be conducted in Africa. (For, as far as I am aware, no such study has been conducted in Africa and even those done in Europe and America were conducted in urban and non-traditional milieu). Therefore, apart from the results of this study being a new contribution from Africa, they present empirically tested facts about the effects of father - absence on boys in a traditional society.

Section ii - Statement of the Problem

The purpose of this study was to establish empirically whether early father - deprivation in an African, traditional patrilineal society has any significant impact on the male child's cognitive and socio-emotional development. Performances of boys from father - present homes, father - absent households and those coming from households headed by a father substitute were compared on tests of discipline, aggression, sex - linked cognitive skills, sex identity and personal construct differentiation. The aim was to establish

whether boys who grow up with their mothers only exhibited more feminine qualities in areas of cognition and personality as opposed to their father - present counterparts.

Section iii - Review of Literature

Although systematic and empirically tested data bearing on the issue of father - absence are scanty, a few researchers (especially in the Clinical field) have conducted studies on the issue or have theoretically expressed their views on the phenomenon. Generally, the fatherless child is viewed as suffering a disadvantage in comparison to his father-present counterpart and, in fact, this has been demonstrated in some cases. Goode (in McCord et al, 1962) in his study of divorce came up with the following conclusion:

At every developmental phase of childhood, the child needs the father (who is usually the absent parent) as an object of love, security, or identification, or even as a figure against whom to rebel safely..... It would be surprising if the absence of the father had no effect on the child (p. 361).

By way of explaining the importance of the father in the life of the child Biehler (1976) proposes that the father serves as a model to his sons as they grow up. Through the father, the sons acquire the appropriate sex role behaviour. To provide flesh to his thesis Biehler reviews two studies conducted by Biller (1971) and Biller and Davids (1973) which demonstrated in part that boys brought up in father - absent households exhibit lack of masculinity, inadequate peer

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adjustment, dependency, lack of social responsibility, general immaturity and tend to avoid competitive physical games.

In another study by Lynn and Sawrey (1959) in Norway, it was found that on the whole father absence had a significantly negative effect not only on boys alone but on girls as well. As in Biller and Davids' studies, Lynn and Sawrey found that father absent boys showed more immaturity than father - present boys. Other related findings were that father-absent boys showed 'strong strivings for father identification', 'compensatory masculinity' and 'poor peer adjustment' (p. 260).

While Biehler (1976) emphasizes the role of the father he does not insist on the necessity of the availability of the biological father. He seems to imply that as long as the child is provided with any male adult then the child can develop the appropriate masculine qualities necessary. Biehler reasons that when there is a male model in the home, boys are more likely to 'throw themselves whole heartedly into masculine activities and to become contemptuous of sissies'. Infact Biehler goes further to claim that widowed or divorced mothers take compensatory measures to provide their sons with male models by frequently inviting the grand-father home and encouraging their sons to play with other boys of their age.

So far Biehler's 'model' thesis seems to lend support to the generally accepted belief that the extended family system compensates for parental deprivation because of its

multiple mothering and fathering practice. The argument sounds plausible. The only problem is that it has not been subjected to serious systematic empirical investigation to validate it. (To meet this requirement the present study was designed not only to study the father-absent and the father-present but also those boys who grew up under a father substitute).

One thing clear, however, is that generally (especially in Africa) after the husband is dead, the wife does not remarry immediately. There are certain ceremonial observances that she has to abide by after the death of the husband and it may take her something up to a year before she is free to look for a man of her choice. During the interim period, she will be looking after her children, as the main provider and protector of the family. Kogelshatz, Adams and Tucker (1972) reported that mothers who remarry after staying for some time without a husband 'seemed to suffer the most acute feelings of depression and rejection . . . home difficulties were possibly aggravated by the introduction of a new step-father into a heretofore fatherless scene which had become laden with unrealistic, pre-existing demands and expectations. Perhaps, alternatively, the mother, having learned in personal terms that she indeed could function as family provider and protector if necessary, had become aware and critical of men's deficiencies' (p. 375).

A number of questions emanating from the above finding can be raised: If the mother is affected so negatively how do children respond to the situation? If the mother and the step-father fail to establish a firm and strong bond between them, who will or is likely to win the support of the children? If the children team up with mother against the step-father (which is more likely) does the step-father still remain an appropriate model to effectively replace the biological father? Whatever the answers to these questions, we have some information to the effect that step-fathers may not be appropriate male models for the children.

Trunell (1968) was presented with a number of boys (5) who had clinical problems and were fatherless. He found that almost "all had mothers who were sexually promiscuous. There had been an endless succession of brief relationships with men" (p. 187).^{*} If this finding is anything to go by, this is yet another piece of evidence pointing to the fact that mothers may fail to provide their sons with an appropriate surrogate father.

Apart from the problem of getting the appropriate male model the father-absent boy has to be exposed to a lot more socially and educationally inappropriate conditions. Tiller (in McCord et. al 1962) in a study involving Norwegian wives whose husbands were away reported that they tended to be

^{*} I do not necessarily subscribe to Trunell's conclusion for I think a sample of 5 is too small on which to make such a strong conclusion, Secondly, his was not a random sample selected from a normal population and therefore could be unrepresentative.

overprotective, stressing obedience and politeness instead of happiness and self realization. This, if true, would hamper normal development of the child and could even lead to poor school achievement as Wylie and Delgado (1959) found about 20 father-absent boys. Tiller's reported findings were, however, not confirmed in McCord et. al's study. What is clear, however, is that the loss of a father is likely to cause a number of financial problems to the family of the deceased and the financial and social problems may interfere with the child's performance at school.

Related to the point above is Wylie and Delgado's finding that almost 50% of the father-absent boys they studied still shared the same bed with their mothers even when the boy was 9 or above. The authors, rightly or wrongly think that this happened because 'the mother-son relationship became highly sexualized' (p. 648) after the death of the father. Of greater interest than the 'sexual' interpretation given by the researchers is their finding that almost half the mothers in their study shared the same bed with their sons. A more convincing interpretation is the one given by Kogelschatz et. al (1972) that poverty or inadequate facilities determine the sleeping arrangement. Since the resources of a husbandless wife are likely to be limited, lack of accommodation and inadequate bedding facilities could lead to such an arrangement.

Whatever the reason, Wylie and Delgado's finding is important for it emphasizes how much time a fatherless boy can

spend with the mother and how close he can be to the mother for a much longer period than his father-present counter-part who, for obvious reasons, has to leave the parents' bedroom soon after weaning. No wonder, therefore, there is the strong belief that father-absent boys develop strong feminine components, which in fact McCord et. al (1962) proved in their study. Trunell (1968) has also reported that father-absent boys are 'prissy, effeminate, and quite passive' (p. 187). He also observed that there was an intensification of the boy's tie to his mother. The general agreement therefore seems to be that father-absent boys adopt or develop more femⁿⁱ~~ine~~ rather than masculine qualities because of their close affiliation with the mother.

One other personality characteristic that has been studied about father-absent boys is their level of aggressiveness. Trunell (1968), McCord et. al (1962) and Wylie and Delgado (1959) came up with studies that revealed over expression of aggression, antagonistic and anti-social behaviour on the part of father-absent children. Sears, Pintler and Sears (in Berkowitz 1962) on the other hand, found that 'boys of absent fathers had a reliably lower level of aggressiveness doll play than boys whose fathers were not away' (p. 296). Berkowitz thinks this is due to the Oedipal rivalry which creates frustrating conditions between father and son. The frustration further creates conditions suitable for the cultivation of the child's aggressive

instinct. The conclusion we draw from these studies is that researchers are not agreed on which group between the father-absent and the father-present boys are more aggressive.

Another curious topic which would be of natural interest to any researcher who is interested in the issue of father-absence is one of education. I have already indicated that there is some evidence to the effect that poor school achievement is related to father-absence. Most of the information we have to this effect, however, was not derived from studies with father-absent children. If, however, we start from the hypothesis that father-absent families are likely to suffer social and financial problems (as proposed by Kogelschatz et. al, 1972), we will have a reason to predict that if children from fatherless households and those from fathered households are compared on intellectual tasks, the former are likely to perform less well than the latter. The basis for this prediction is as follows:

Bloom, Davis and Hess (1965) have written about children from low income families as having a high likelihood of having organic deficiencies like dental problems, defective vision, impaired hearing, tuberculosis and a lot of other illnesses that sap their energies. The authors also point to the fact that such children are easily fatigued, lack endurance, and also that their energy is directed towards the immediate needs. This, therefore, means that anything which is not relevant to the child's state receives lower priority. A child in such a

situation is surely less likely to attend to learning. The parents, on their part, may be a further source of problems for the child. Their poverty can instil a general attitude of hopelessness because when the child seeks to satisfy his needs, he also expects to be frustrated. Bloom et al, also report that recent research has demonstrated that children who grow up under adverse circumstances will have a lower I.Q. than they would if they had been in more favourable situations. If our initial hypothesis that husbandless households are likely to belong to the low income bracket is correct, we can therefore expect father - absent children to have serious learning difficulties at school.

To demonstrate the role of the father in the educational life of the male child in a more specific way, let us briefly turn to traditional education. Miller (1928) noted that traditional education is not transmitted to the learner in the same way the modern Western education is. He observed that education was mainly through imitation. In other words there is no deliberate effort to lecture to the learner on some educational aspect. The adult acts or performs the task when the learner child observes and then eventually, the child tries it out on his own. LeVine (1962) conducted a study among the Yoruba of West Africa and found that parents of the same sex as the subject provided more rewards than parents of the opposite sex.

Miller's observation and LeVine's finding perfectly tie together to explain the difficult situation in which

a fatherless boy in an African traditional society can find himself. Firstly, the loss of a father removes the model for imitation. Secondly, it removes the vital source of stimulation and motivation that are necessary for the boy to acquire the knowledge and the skills that are attributable to maleness in the society. The fact that children learn more effectively by doing and not through mere instruction is further supported by Piaget who proposed that for permanent learning to occur, children must act on things to understand them (Ginsburg and Oppen 1969). Also, Wandira (1961), Fortes (1938), Raam (1940) describe traditional education as not developing a "sharp distinction between the adults and the child's minds. The emphasis is on learning by doing rather than by teaching and there is no departmentalization of curriculum" (Evans 1970). In other words we witness a situation where education is a joint enterprise between the young and the old with the former taking part in adult activities to the full extent of their age and ability. This aspect alone surely demonstrates how valuable an asset the father is to a boy living in an African traditional society.

As for the Ngoni boys (on whom this study was conducted) Read (1959) points out that they are trained to respect, to be physically strong, persistent and thorough, morally courageous, wise, honourable and dignified. In addition, the Ngoni boys are expected to learn specific skills like building and thatching a house, constructing poultry and sheep pens,

making hoe handles, *Skeis etc. (personal communication with Ngoni male adults).

It is important to note that the acquisition of these skills depends on the availability of a Ngoni male adult. Thus there is a high possibility that fatherless Ngoni boys may not acquire the appropriate masculine skills. Moreover the mere presence or availability of a male adult may not help the fatherless boy much if the boy and the adult do not perform the array of male tasks together.

Douglas (1964) and Swift (1966) report studies which demonstrated that parental education related significantly with children's level of performance at school. In other words, children whose parents had spent a substantial number of years at school tended to have children who performed well in school subjects. If it is true that children's level of performance in the modern school is somehow related to their parents' level of formal education, it would be inappropriate in a study like ours) to compare Ngoni children using their school grades because most of the parent population in our study area is either illiterate or has had very little formal education. In this study, therefore, we opted to concern ourselves with tasks of an informal or traditional nature like carving and sewing which every child in a normal home has an opportunity to learn (see sections iiiia and b, Chapter 2).

* See Chapter 2 under Carving Test for meaning.

Another aspect of children's behaviour which deserves further investigation is that of discipline. Biehler (1976) reports of a study in which children were asked to express their feelings on disciplinary techniques used by their parents. In the study the children felt that the father was more strict, more fear - arousing and as using more physical punishment than the mother. On the other hand, the mother was judged as loving and nurturant. In a related study which involved subjects rating each of their parents as either very strict, fairly strict or not - so strict, Dawson (1967) found that the number of fathers judged as very strict was double that of mothers. Dawson conducted the study in Sierra Leone.

The two studies reviewed above imply that children who grow up with the father are likely to be more disciplined than those who grow up with the mother only; that is if we assume that a very strict parent is better at disciplining children than one who is less strict. This is perhaps supported by Gregory's finding that delinquency rate was higher in boys if father was absent but higher in girls if mother was the absent parent (Rutter 1972). Rutter also reports other findings that associate parental death with a slight rise in delinquency among the affected children.

From the evidence summarized here one is persuaded to predict that father-present boys will score significantly higher than father-absent boys on a test of discipline. However, I quoted Tiller (in McCord et al 1962) earlier

on as having reported Norwegian mothers whose husbands were away as being 'overprotective, stressing obedience and politeness instead of happiness and self-realization'. If Tiller's finding is anything to go by, it means that husbandless wives can also be very strict disciplinarians who are capable of instilling discipline in their children. As such, it would not be surprising if there is no difference in performance between the father-absent and the father-present boys on a test of discipline.

Based on the literature reviewed, we can come up with certain basic hypotheses about father-absence and its effect on boys. There is evidence to the effect that father-absent boys are more effeminate, less disciplined and perform more poorly at school than their father-present counter-parts. On the question of levels of aggressiveness, it seems that researchers are not agreed yet on which group is likely to express more aggressiveness although the more widely favoured view seems to be that father-present boys are more aggressive. It is important, however, to note that whatever facts we have about father-absent children should, as much as possible, be restricted to populations from which they were derived. Attempting to make universal generalizations would be to flout the knowledge we have about different environmental and cultural influences impinging on behaviour in different cultures.

Section iv - Objectives and Hypotheses.

The objectives of the present study have already been mentioned in the previous sections but for purposes of clarity they will be repeated here. There were two main ones, namely:

- (a) to find out if there are any significant cognitive, personality and socio-emotional differences existing between boys brought up in father-absent households and those who grow up in father-present homes in a patrilineal society.
- (b) to provide empirical data on the effectiveness of a father-substitute for the male child's psychological development.

To meet these objectives and on the basis of the literature we have reviewed, six hypotheses were formulated:

- (i) Boys brought up in father-present households are superior in masculine skills to boys brought up in father-absent homes.
- (ii) Father-absent boys are superior to father-present boys in feminine skills.
- (iii) Father-absent boys identify with the female sex to a greater extent than father-present boys.

- (iv) Boys brought up in father-present homes use a more integrated construct system when describing males and boys brought up in father-absent households use a more integrated (polarized) construct system when describing people of the opposite sex.
- (v) Boys brought up in father-absent homes are less disciplined than boys brought up in father-present households.

Apart from testing these hypotheses, a test of intellectual abilities was administered to all the study groups but no prediction was made with regard to their relative performance.

Operational Definitions:

father absent boys - All boys in our sample who, since the age of 5 or earlier have lived in a household minus their biological father or any other male adult for reasons of death, divorce, migration, separation etc. (Age 5 is crucial for Ngoni boys because that is when the father takes over full responsibility for the education of the male child. This information was given by Ngoni adults interviewed during a pilot study leading to the present study.

- . father-present boys - since the age of 5 or earlier the boys have lived with their biological father all the time or most of it.
- . father-substitute boys - since the age of 5 or earlier the boys have lived in a household with a male adult (uncle, brother, stepfather etc.), but without the biological father.
- . masculine skills - skills normally learnt and acquired by male members of the Ngoni society.
- . feminine skills - skills normally learnt and acquired by female members of the Ngoni society.

CHAPTER 2

METHODS

Section i - Research Strategy

A two week long preliminary study was conducted with some male and female adults and school boys in the study area. The purpose of the preliminary study was to learn about the Ngoni way of life in general and to familiarize myself with the separate roles of the Ngoni father and mother in particular. From discussions with parents at drinking places and in their homes, I obtained specific information such as at what age the father takes over the educational responsibility for his male children, what specific skills male and female children are expected to learn respectively and what generally happens to the family of a relative when he dies.

After four months of developing research instruments, the main study was launched. It was arranged that boys from two grade levels (4 and 6) form the study sample composed of Father-Absent (F.A.), Father-Substitute (F.S.) and Father-Present (F.P.) children. No girls were studied. Selection was done by interviewing all boys in the two classes individually using a questionnaire (see Appendix I). The ^{accuracy} of the information provided by the boys was validated by visiting 6 homes of some of the participants to confirm with the parents or the guardians of the children. After I proved that the information provided by the six boys corresponded with that

provided by adults the exercise was discontinued and I decided to rely on the information provided by the boys in the rest of the cases.

More than 90% of the population in the study area is composed of the Ngoni ethnic group. The remainder comprises the Cewa mainly. While the Ngoni are patrilineal, the Cewa are matrilineal. Since the study had its focus on boys brought up in patrilineal families only those of Ngoni origin were chosen to make up the sample.

Selection and Development of Tests

Most of the tests were developed on the basis of the information collected during the preliminary study. A Carving Test (C.T.) was developed to test hypothesis (i) about masculine skills. For hypothesis (ii) a Sewing Test (S.T.) was developed. The Panga Munthu Test (P.M.T.) was adopted without modification to test hypothesis (iii). The P.M.T. was also used as an intelligence test. An adaptation of George Kelly's (1955) Repertory Test was used for hypothesis (iv). Tests of aggression and discipline were developed for hypotheses (v) and (vi) respectively.

The full or more detailed description of each of these tests is given below under the section on Tests. Of the six tests, four were new and were developed specifically for this study. These were the Carving Test (C.T.), Sewing Test (S.T.), Discipline Test (Disc. T.) and the Aggression Test (Agg.T.). Pilot studies were conducted with the

S.T., the Agg. T. and the Rep. T. to establish the best methods of administration and rating scales.

Section (ii) Subjects:

A total of 90 rural primary school boys served as subjects in the study. 45 of these were selected from grade 4 and the other 45 were selected from grade 6 classes. The mean registered ages for the respective grades were 10 and 14½ years. All the boys attended school at either of the four schools, Munoro, Feni, Madzimoyo or Kanyanja. The schools are situated in Senior Chief Mpezeni's area about 600 kilometres east of Lusaka on the fringe areas between Zambia and Malawi.

Identification of subjects was done by interviewing all the grade 4 and grade 6 boys at the first two schools using a questionnaire (Appendix I). From the answers given, father-absent, father-present and father-substitute boys were identified. Because the number of FA and FS boys identified at the two schools was too small, two more schools were added to make up the total sample. This, however, meant that there was a large number of father-present boys far in excess of the number required in our target sample. To overcome the problem, selection was done by randomization.

This was done by first determining how many fathered boys in each class were to be included in the sample. Since there was a total of eight classes (2 at each school) it was decided that an equal number of FP boys be drawn from each class. Since only 15 of them were needed at each grade level,

at most four from each class were to participate. The actual selection was done by first arranging the names of all the FP boys in the class in alphabetical order and assigning numbers to the names from 1 upwards. A table of random numbers (Tuckman 1972:441) was then used to pick out the subjects.

At both grade levels the subjects were divided into three groups. The first group was of boys who, since the age 5 or earlier had been staying in a household without a father, a father-substitute or any male adult and they were 15 in number. The second group was made up of 15 boys who, since the age of 5 or less had been living in homes without their biological father but with a father-substitute. The third and final group was also made up of 15 boys in either grade who, all along had been living in a home with both parents. In all, therefore, there were 30 F.A's, 30 F.S's and 30 F.P.'s adding up to the total of 90. The table below summarises the composition of the three groups.

TABLE 2. - NUMBER OF CHILDREN IN EACH GROUP

AGE	GROUP			TOTAL
	FA	FS	FP	
YOUNGER (GRADE 4)	15	15	15	45
OLDER (GRADE 6)	15	15	15	45
TOTAL	30	30	30	90

(iii)

The Tests

A total of six tests were used in the present study. The and Sewing tests were designed to provide data on possible differences existing among the three fathering groups. For four instruments the Aggression test, the Discipline test, the Munthu test and the Rep. Test were used to test personality differences.

The Carving Test (C.T.)

Of all instruments used in the study this perhaps is the most difficult to describe. It is one of the new tests designed for the study and specifically to test hypothesis (i) which stated that father-present boys are superior at masculine skills to father-absent boys.

Unlike other Zambian population groups who use hoes to cut and turn the soil in the field during the sowing season, the Ngoni use a plough drawn by two oxen joined together by a wooden yoke. A yoke is a cylindrical piece of wood about 5 feet in length. At the centre of the yoke is fixed a steel chain connecting the yoke to the plough. On each side of the chain the yoke has two rectangular holes making up a total of four such holes to each yoke. In the holes four detachable pieces of prepared wood are fixed and each is called a Skei. It is through either pair of these skeis that the ox is fixed to the yoke. To hold the ox firmly between skeis, a leather strap runs from one skei to the other under the neck of the ox.

The present test involved making a skei. (See Appendices A-2 and A-3). An average skei is roughly 12 inches long, 3 inches wide and $\frac{1}{2}$ inch thick. At the upper end the skei forms a knob to prevent it from slipping through the yoke hole. On one of the thinner edges, the skei has two or three notches to keep the leather strap in position. The lower end of the skei is a little wider for easy fixing and unfixing of the leather strap.

Skei-making is just as general a practice among Ngoni men as sewing is for Ngoni women. While other male tasks like carving stools, chairs, cooking sticks and others are generally done by a few specialized individuals, the skill of making a skei is so important that almost every peasant man has to learn it. Skeis break from time to time and they need fast ^{therefore} replacement. Nobody can/afford to waste time looking for somebody to make a skei for him during the critical and hectic sowing season

The fact that skei-making is more of a general skill than a specialized one in part explains why it was chosen for the present purpose. It is a typical masculine activity among the Ngoni. The other reason for choosing skei-making from the rest of the masculine skills is that while most male tasks (like those mentioned above) take hours and days to complete, making a skei takes between 30 and 60 minutes only. Thus being a convenient test for researchers who have limited field work time.

ADMINISTRATION OF THE C.T.

Apparatus: 1. Short logs
 2. adzes

Procedure.

A day prior to the test date the Experimenter asked the children to bring an adze and a piece of wood the following day from their homes. It was emphasized that the piece of

wood had to be big enough to make a skei of normal size. On the day of sitting the test, all participants (from both grades) sat in the bush scattered among the grass so that they could not copy from one another. The Experimenter told the participants to go right ahead making a skei and that there was no time limit. It was also emphasized that they had to make the best skei they could. After finishing, the subjects presented their skeis to E. who inscribed the name, grade and school of the subject on the skei in indelible ink. E. then took away the skeis for safe storage and scoring at the end of the collection of data.

Scoring:

Scoring was done at the end of the whole exercise. An old man resident in the study area who was acclaimed an expert in skei-making was invited to the Experimenter's room to rate the skeis. A pile of 90 skeis was shown to the expert and he was asked to choose the best skeis, the second best, third best and so on. After carefully working through the pile, the expert came up with five groups of skeis arranged from best to poorest. Apart from the five there was the sixth group which he described as 'rejects' and this group was larger than the other five together.

On insisting that the expert should continue discriminating even among the rejects', the Experimenter was told that it was not worth it because the skeis were too small to be of any value. It was also later found that some of the skeis had been rejected on the grounds that they were made out of

cheap and pliable wood. Since our aim was to compare the participants' total skill, it was felt that size and type of wood alone could not be taken as fair criteria for judgement. Therefore
/some basis for scoring which would encompass the reject group had to be found

A scoring system comprising ten items was developed (See Appendix II). After scoring all the 90 skeis on the basis of the new rating systems, the expert's rating was incorporated by giving a few more points to those skeis appearing in group (1) - (V) as follows:

Group I	(best) 5 points
Group II	(2nd best) $4\frac{1}{2}$ points
Group III	(3rd best) 4 points
Group IV	(4th best) $3\frac{1}{2}$ points
Group V	(5th best) 3 points.

The skeis in the 'reject' group received no extra points. When the two rating systems are put together, therefore, the highest possible score that a subject could get was 15 points.

(b) THE SEWING TEST (S.T.)

While skei-making is a typical masculine task among the Ngoni, sewing is just the opposite. Needlework in general is accepted as a feminine job in many societies including the Ngoni. This is not to say, however, that Ngoni women involve themselves in sophisticated and professional needlework like designing and making dresses. Most of the needlework they do is mainly mending seams, collars, a hole in the dress, joints.

replacing a missing button or patching up trousers, shirts and jackets.

The present test involved fixing buttons to a shirt. It was developed to test hypothesis (ii) which states that father-absent boys are superior to father-present boys at feminine skills. Of course, to test such a hypothesis, any other feminine activity like basketry, pottery, cookery and others could have been used. Sewing was considered the most suitable for one reason. As in the case of the carving test, it was observed that most of the female activities like those mentioned above are done by people who have special skills for them and not by the average Ngoni women. As for sewing however, people normally do not take their clothes to a tailor for minor repairs like replacing a button or mending a small hole in the shirt. Instead they do it themselves.

This is particularly¹ so among the Ngoni because even if people wanted to send their clothes to the tailor for mending, there are very few tailors in the area. The chances, therefore, are that each one of the children in our sample had previously been exposed to replacing a button on his shirt or had watched somebody else do this for him.

Administration of the Sewing Test (S.T.)

Apparatus

1. Shirts (30 cm long 22cm wide)
2. 4-hole khaki buttons
3. cotton reel
4. Table
5. sewing needles

Procedure

Subjects were grouped under a tree or in a school hall (where this was available). The experimenter (E) took one shirt and showed it to the group and asked them what it was to make sure that everyone recognized that it was a shirt. The experimenter then distributed the shirts (one to each child) after which the children wrote their names, grade and school on a blank piece of paper that was attached to the shirt.

When this was done, the Experimenter put a box of buttons, a box of sewing needles and a cotton reel on the table. The children were given instructions as follows: "The shirt that I have given you has no buttons but it has three button holes. I want you to fix the buttons for me. All the materials you need are on the table. After collecting the materials you need, look for a place to sit which is far away enough from the next person such that he can not copy what you are doing. Do the best you can and when you finish please bring your shirt and needle to the table. Make sure you do not lose your needle or injure yourself with it:" After supervising the sitting positions the Experimenter sat at the table to receive the finished shirts and the children would go back to their classes.

Scoring

The scoring was done by E. using items on the scoring sheet (Appendix III). For the best performance on an item 2 points were given and for the poorest performance the subject got a zero on that particular item.

The items were developed on the basis of a pilot study conducted earlier on with 15 boys from a non-target school in the study area. The items were developed with the help of a former needlework teacher who is now a research assistant in the Department of Psychology, University of Zambia.

(c) The PANGA MUNTHU TEST (P.M.T.)

The Panga Munthu (make a person) is an intelligence test first developed by Serpell (1977). It is closely related to the Goodenough - Harris Draw - a - Man Test (Harris, 1963) in that both are based on making the human form. The major difference between the two is that while the Draw-a-man test involves the pencil and paper medium, the Panga Munthu uses clay or plastessine. In other words, the former requires that the subject draw when the latter requires him/her to mould a model of a person.

For our purpose the Panga Munthu was chosen in preference to the Draw-a-Man test because it has been demonstrated that the latter is not appropriate for populations which have not undergone intensive Western acculturation. In a study involving Lusaka and Manchester 8 year old boys Serpell (1979) found that the Manchester sample excelled Lusaka boys at a drawing task which included copying a human figure but the difference in performance between the two samples on plastercine reproductions of similar items was not statistically significant. Serpell's interpretation of these results was that while clay modelling was a popular practice for boys and girls in both Manchester and Lusaka,

drawing was less popular among Lusaka children. The Panga Munthu, therefore, can be taken to be a more culturally appropriate test for Zambian children than the Draw - a - Man test.

Apart from being used as intelligence tests both the Panga Munthu and the Draw-a-Man have also been used as indices of sex identity. In a study currently taking place in a rural area of Zambia, Serpell (unpublished) found that 76% of the models made by boys in his sample were of men and 24% of women. He also found that 93% of the models made by girls were of women and 7% of men. On the strength of these results and on the belief that father-absent boys are more effeminate than father-present boys, the Panga Munthu was used in the present study to test the hypothesis that father-absent boys identify with the female sex to a greater extent than father-present boys. The expected result was that most father present boys in our sample would make male models while a relatively high proportion of father-absent boys would mould female models.

The Panga Munthu was also used as a test of intellectual abilities although no prediction had been made as to which group would perform better than the others. The present test was particularly relevant as a test of intelligence in our study because it is one of the few intelligence tests developed in Zambia. Secondly, Ezeilo (1975) and Serpell have used the test and improved it. They also found that performance on the test improved with age. Ezeilo further found that children in urban

schools rated as above average by their class teachers scored higher on the test than children rated average who in turn scored higher than children rated below average, while the last group scored higher than children of the same age attending a Day Care Centre for the mentally handicapped. These various findings suggest a degree of validity for the test as a measure of intelligence. Ezeilo improved the test by increasing the number of scoring items from the original 10 to 20. Since then, the owner of the test has added 5 more items to make 25. It was the 25 point scale which was used for the present study.

Administration

Apparatus:-

1. Balls of plastercine.
2. Blank pieces of paper.
3. Scoring sheet.

Procedure

As in other tests so far described, an attempt was made to create as natural an environment as possible. Since children normally do their clay modelling while sitting in the dust or on a rock, the subjects were asked to sit wherever they liked outside the classroom. The only limitation was that they had to sit alone where the Experimenter could see them.

Before they started their modelling each subject was given a ball of plastercine and a clear piece of

paper bearing his name. The Experimenter gave the following instruction: "I want you to make me a person. Try to make the best person you can. Sit alone anywhere I can see you and bring your person to me when you have finished. The piece of paper I have given is for you to rest your person as you make them." There was no time limit for the exercise and on completion of the model, the subject was asked what sex his model was. The answer was noted somewhere on the paper bearing the subject's name. When all the subjects had gone to their Classrooms, the Experimenter scored the models in accordance with the Scoring Sheet (See Appendix IV).

(d) THE ROLE CONSTRUCT REPERTORY TEST (REP. TEST)

According to Kelly's (1955) theory of personal constructs, man is a "scientist who develops a theory (construct system) to predict events" (Pervin 1970). In other words, man has a representation system of people or events in his environment. Through experience, man develops a fairly fixed pattern or construct system of judging people and the events taking place in his environment. An example can help to clarify the points:

A man may start from the hypothesis that all Watch tower members are unpatriotic citizens while all catholics are patriotic. As he interacts more with members of both church groups he may change his initial

construction of "all Catholics patriotic - all Watch towers unpatriotic" to "all literate church goers patriotic all illiterate church goers unpatriotic," and so on. At each stage the man will use the constructs he holds then to judge the next Catholic or Watchtower member he may meet. It can be assumed therefore, that with more interaction with the Catholics and Watchtowers, the man will continue changing his construction of these people until he develops more accurate constructs about the church members in question.

Man, therefore, according to Kelly, does not make an ad hoc judgement of people he meets or events that occur in his environment. He always has a theory that guides him in his constructions. It can, therefore, be said that the more experience man has of certain events or people the more perfect or stable his construct system about those and related or similar people and events will be.

Having argued in our introduction that boys who grow up in father-absent homes are likely to identify with the opposite sex, be more competent in femⁿⁱine skills and feminized due to their close association with the mother; we hypothesized that father-absent boys develop a more polarized and clear-cut construct system about people of the female sex because of the same close association with the mother. The reverse, logically, was expected of boys who grew up in father-present households.

The Rep. Test is an instrument developed by Kelly to provide a means of determining the constructs one uses to interpret other people or one's environment in general. Although there are a number of forms of the Rep. Test, there is however one basic procedure for all the forms. A role Title List is given to the subject. This is a list of roles, persons or figures which are believed to be of importance to the subject, for example, 'Your father', 'Your mother', 'A classmate you dislike', 'a teacher you liked' and so on. For each role the subject simply writes the name of the person befitting it. When the subject has completed the responses to the list (which may be composed of 20-30 titles) he/she is asked to consider 3 specific figures whose names he himself has provided by indicating which two are similar in some way and different from the third. The 3 figures may be John (the father), Mary (the mother) and Clement (the teacher liked). The subject may choose Clement and Mary as the similar figures because "they are both pleasant people" and John may be the dissimilar figure because he is "unpleasant". In this case the construct dimension would be "pleasant - unpleasant". Different combinations of specific figures are made until the subject has elicited the target number of constructs.

For the present study a Role Title List designed by the Researcher was tried with a number of primary school boys to see if they could elicit constructs. It was found that the boys experienced a lot of difficulties in understanding

exactly what the Researcher was trying to establish. After several attempts the Researcher came to the conclusion that primary school boys could **not** generate constructs that could be used for the study. Some way of going round the problem had to be found

The same Role Title List (See Appendix V) was tried with an older group of boys. These were 8 secondary school Ngoni boys attending school at Chipata Day Secondary School. The school is situated in the study area and all the boys who participated in the pilot study grew up in the area of study. It was thus felt that the constructs they would generate were representative of boys in the society. The boys had no problems in generating constructs this time. There were 5 trials to be considered. In all, therefore, there were 40 construct dimensions produced by the 8 boys. Since I was looking for only 5 constructs for the purpose of the actual study, I chose the 5 which I considered to be common to most of the participants' lists and the final list was as follows:

- | | |
|------------------------------|---------------------------------|
| C.1 Wacithandizo (helpful) | - wacigolo (greedy) |
| C.2 Wanzelu (clever) | - wopanda. zelu (dull) |
| C.3 Mulesi (lazy) | - Wogwila nehito (hard working) |
| C.4 Wokambakamba (talkative) | - Osakambakamba (reserved) |
| C.5 Wacifundo (kind) | - Aliye cifundo (unkind). |

Because of the problem described earlier on that primary school boys failed to generate their own constructs as is normally required when the Rep. Test is used, it was decided that all the subjects use the 5 constructs generated by the secondary school boys.

Administration

- Apparatus
1. Rating Sheet
 2. Ball pen.

Procedure

Before the beginning of the test E. selected 10 individuals from the class (5 boys and 5 girls). None of these belonged to the sample. These were going to be the people to be judged by the subjects using the constructs. The assumption was that the 10 individuals were well known to the subjects since they were selected from their class. After the list of names of the ten target individuals was drawn, subjects were called from the class individually. The subject stood directly in front of E's table. E. then read out the list of names of the preselected classmates to the subject. After that the subject was asked, "Do you know all the people whose names I have read?" If the subject agreed E. then said "Now we are going to talk about these people. Do you think....
..... (E. gives the name of the first male classmate on the list of preselected target individuals) is helpful or unhelpful or do you think he is between being helpful and being unhelpful". If the subject answered 'between' E put a cross in the middle

box headed 'Average' on the rating sheet (see Appendix VI). If the subject answered 'helpful', E asked another question: 'Do you think he is very helpful or just helpful?' If the answer was 'very helpful', or 'very unhelpful' E put the cross in the first box on the left hand side or in the last box on the right respectively. If the answer was 'just helpful' or 'just unhelpful' E put the cross in the second box from the left and the second box from the right respectively. After finishing with the first construct, E moved on to the second, third, up to the fifth construct asking the same questions as those above.

Having gone through the 5 constructs describing the first male classmate, E said 'Now let us talk about a different person. Do you think(name of the first female classmate on the list of the preselected individuals) - is helpful or unhelpful or do you think she is between being helpful and being unhelpful?' Thereafter the same questions and procedure as in the first case were followed until all the ten classmates were described by the subject. The subject would then go back to the classroom and the next subject took his place at E's table. After all the subjects in the class had gone through the exercise E. called subjects from the next class using names of preselected individuals chosen from that particular class and the exercise progressed as before.

Scoring

As can be remembered, our hypothesis was that father-absent develop a more clear cut construct system about females

while father-present boys develop a more clear-cut construct system about males. For an index of clearcutness it was decided that every cross on the rating sheet appearing in a box on the extreme right or left receive a credit of 2 points. Those crosses appearing under 'just' were credited with only 1 point and those appearing under 'average' were given zero points. The prediction was that father absent boys would have more crosses on the extreme right or left when describing girl classmates thus obtaining a higher score on 'female' description than on 'male' description. The opposite was expected of father-present boys.

(e) The Aggressiveness Test (Agg. Test)

Psychologists seem to assume that aggressiveness is an emotional element which remains operative in the individual even if he or she can not reveal it openly. It operates at an unconscious level. This belief or assumption also goes with the conviction by some psychologists and psychoanalysts that this unconscious tendency can be manifested in fantasy activities like the Rorschach, TAT or the doll play (Berkowitz 1962). This explains why psychologists have used such methods to assess or measure people's aggressiveness. Other methods which have been used to measure aggression apart from projective tests are interviews with parents and assessment by teachers (Danziger 1977).

The truth, however, is that there is no agreed method of measuring aggression just as there still is a big argument as to whether aggression is biologically or socially determined;

that is, innate or learned. What we observe, however, is that people get involved in hostile acts. We also observe that some people are more aggressive than others when responding to common situations. These observations, perhaps, are the basis for our continual efforts to compare groups of people with a view to establishing the underlying causes of the observed differences in the manner people express aggressiveness.

As noted above, tests of aggression are varied. Some of them like projective tests seem to be scientifically unwarranted. The problem is further complicated by the fact that cultural differences make it difficult for objective researchers to come to a common agreement on what behaviours are 'aggressive' because what may be interpreted as 'aggressive' in one culture may not be in another culture. It also follows that a test which can be used in one culture may be considered completely irrelevant and inappropriate in another culture. Universally appropriate instruments of measuring aggression are therefore a pipedream. It was with this conviction that we developed a test we judged appropriate in our present culture of study.

The test involved a hypothetical story recorded on tape about a young boy called Mavuto. The story presented the boy as cruel and a thief who broke into houses stealing milk and breaking property in villages. The boy was cruel in that after stealing things, he beat up small children he found playing in the village while their parents were out

in the fields (see full story Appendix VII). The aim behind the story was to arouse anger or hostility in the subjects against the 'bad boy' - Mavuto. This was expected because Ngoni children are trained to be morally strong and honest (Read 1959). A boy of Mavuto's character is surely likely to be taken as morally weak and somebody who should be corrected. What punishment would the subjects inflict on such an offender? The prediction was that father-present boys would exact harsher punishment than the father-absent boys on the hypothetical offender.

Administration:

The administration of the test was done in two parts. The first involved subjects listening to the story on tape. After listening to the story, subjects answered questions. The second part required that subjects punish a doll with a judge assessing their aggressiveness.

Apparatus

1. Tape Recorder
2. Doll
3. Judge
4. 2 stooges
5. Chair and Table.

Procedure:

Before the test session E. asked one member of staff at the school to act as a judge during the test. E. also asked two boys from outside the study sample to come and act as

stooges. Both the role of the judge and that of the stooges were explained to them before the beginning of the test. Since privacy was going to be vital at a later stage of the experiment, a classroom with windows such that a person outside could not see what was happening inside was organised with the help of the school headmaster. E then put the tape recorder on the table in front of the classroom and put the doll in a corner. (The doll was covered in such a way that subjects could not detect what it was).

Once everything was set, the subjects, the stooges and the judge were called in to take their seats. E said, 'We are going to listen to a story. Since you want to understand the story, I know you will avoid making noise.' The story ended with the question, 'If you caught Mavuto stealing, breaking things and beating up small children, what punishment would you give him?' To make sure that the story was clearly understood, it was played twice on the tape and then the tape recorder was put away.

By way of assessing the subjects' hostility against the offender on a theoretical level, E distributed leaflets to each of the subjects and said, 'On the paper I have given you there are four possible ways of punishing Mavuto whose bad ways you have heard in the story. I want you to read them all and then pick one which you think would be the appropriate form of punishment to be applied on the offender.' (For the suggested forms of punishment, See Appendix VII). E also emphasized the need to make an independent choice without asking someone

since the choice was to be done secretly. Because it was observed that some children could not read, E read out the 4 alternative forms of punishment aloud and asked the subjects to take their papers to the table in turns whispering their answer of choice to E. The subject's alternative of choice was indicated by circling the number against the answer chosen.

After all the papers were collected E. said, 'Now I am going to present to you Mavuto himself for he is right in this room'. The huge doll, the size of an 11 year old boy was removed from the corner and seated in a chair in front of the classroom. Then E said, 'Now that we have Mavuto in here, I want you to punish him the way you would if you yourself caught him stealing'. The first stooge was called upon to punish the doll. It had been arranged that the first stooge would simply talk to the doll in an advisory manner emphasizing the fact that stealing is a bad habit. This represented a **very low level** of aggression or none at all. The second stooge was then called upon to demonstrate how he would punish the offender. The information he had was that he should get out of the room, look for a big stick and hit the doll heavily on the head and the body. This demonstrated a very high level of aggression. The stooges left immediately they finished punishing the doll.

Soon after the second stooge had done the punishing E. found some excuse for removing the subjects from the room like, "I think you are making a lot of noise in here.

You will go outside and stay far away from here. I will call you in turns to come and punish Mavuto".

After the children left E presented a sheet of paper to the judge. The sheet of paper had three wide columns headed "Very Aggressive", "Moderately Aggressive" and "Mildly Aggressive". The instructions given to the judge were that he or she simply writes the name of the subject in one of the three columns according to their own judgement of the subject's level of aggression. This had to be done soon after a subject had finished punishing the doll. E had a similar sheet where he was making his own independent judgement.

The subjects were then called in one by one until all had a chance to punish the doll. One precaution that was taken was that after completing his turn of punishing the doll, the subject was told to go straight to his classroom. This was done so that he could not tell the other subjects how he had punished the doll to avoid him influencing the others' performance.

Scoring:

After the judge and the Experimenter had completed their entries, all names appearing under 'Very Aggressive' column were given 3 points. Those appearing under column 'Moderately Aggressive' received 2 points and the ones appearing under 'Mildly Aggressive' received 1 point. ~~since there were two assessors~~ (the judge and the Experimenter) each subject had two scores. (The inter-

rater reliability of aggression of observer - ratings was significant beyond the .001 level, see table below:)

Table 3a Inter - rater Reliability of Aggression
Observer Ratings

JUDGE'S RATINGS	EXPERIMENTER'S RATINGS			TOTAL
	1	2	3	
1	9	4	1	14
2	6	24	2	32
3	3	10	31	44
TOTAL	18	38	34	90

χ^2 value of 54.71 is significant beyond .001 level
(with 4 df)

To get the final score for each subject, the two scores were added together. It should be remembered that the subjects' aggressiveness had also been rated on the leaflets bearing the suggested 4 possible forms of punishment earlier on in the experiment. The scores on this first part of the exercise were determined by a rating scale. The most severe alternative received 4 points and the most mild form of punishment received 1 point indicating the highest and lowest levels of aggression respectively (See rating sheet, Appendix VII).

(f) The Discipline Test (Disc. T.)

Of all the tests used in the present study, the Discipline Test is the only one which was not sat directly by the subjects. To develop the test, six disciplinary

issues were chosen. These were:

- (i) Coming late for classes.
- (ii) Uncooperativeness in group situations.
- (iii) Truancy.
- (iv) Being noisy in class.
- (v) Response to assigned work.
- (vi) Restlessness.

The format of the test was arranged in such a way that there were three categories under each of the six disciplinary issues, namely:

Category (a) - 'Most of the time...'

Category (b) - 'Sometimes . . .'

Category (c) - 'Rarely . . .'

(For full details of the format see Appendix VIII).

It was felt that class teachers were in the best position to assess their pupils' self discipline. Accordingly, class teachers are the ones who provided the data on which hypothesis (vi) was tested. The prediction was that father-present boys would be more disciplined than father-absent boys.

Administration

Each class teacher was given one test schedule with a list of names of the subjects in his/her class. Information on how to complete the schedule appeared at the beginning of the schedule but E explained verbally with examples on how to go about the exercise. Teachers were asked to take at least a week to complete the work. This was done to give

the teachers a little more time to judge the conduct of the subjects in their class.

The instructions were as follows: "Attached is a list of names of some of the boys in your class. Please do me a favour by rating the boys on the six disciplinary issues given below. Simply write the name of the child in the appropriate category basing your judgement on your personal knowledge of the child." This meant that if, for example, subject John was judged as coming late for classes most of the time, his name would appear under the first category of the first disciplinary issue on the list. If, however, John was judged as being 'rarely noisy in class', his name appeared in the third category of disciplinary issue No. (iv). This also meant that each subject's name would appear 6 times throughout the schedule.

Scoring

After all the schedules had been collected from teachers, the scoring was done as follows: All names appearing under the category of 'most of the time...' received 10 points on that particular disciplinary issue. The names under 'sometimes ...' were given 1 point and those appearing under category 'Rarely ...' were credited with 2 points. This therefore meant that if a subject's name always appeared under the first category throughout the 6 disciplinary issues, the subject would get a total of 60 points. If however, his name appeared under the third category throughout, he would obtain a total score of 12 points.

CHAPTER 3

RESULTS

Section (i) Analysis of Data:

Hypotheses (i), (ii), (iv), (v) and (vi) were each tested by means of analysis of variance. In all, therefore, five 2×3 analyses of variance were run. The aim was to determine the effects of fathering and grade on performance. The significance of any interaction existing between these two factors was also determined by the same statistic. In addition, graphs were plotted to highlight this interaction on all the six hypotheses.

To determine whether there was any reliable difference in performance between groups in the same grade the Duncan's Range Test (McGuigan 1960) was run for all the hypotheses except hypothesis (v) while the A - test (short form of the t - test, McGuigan 1960) was used to evaluate the significance of the difference between mean scores of groups at both the grade levels.

In addition to performing analysis of variance to test hypothesis (v) the Spearman's Rank Correlation coefficient (r_s) (Siegel 1956) was used to determine whether there was any correlation between what the subject said and what he expressed practically on the Aggression Test. (Note that each subject was tested on two indices of this variable). One other major statistic used was the chi square test for independent sample. This was used to test hypothesis (iii) only.

In all cases the calculations were done by the author using an electronic calculator.

TABLE 3

MEAN SCORES FOR ALL GROUPS ON ALL TESTS

* THE TESTS	GROUP MEANS					
	** F.A.		F.S.		F.P.	
	Gr.4	Gr.6	Gr.4	Gr.6	Gr.4	Gr.6
C.T.	6.46	7.80	8.66	11.46	7.00	9.73
S.T	8.86	10.86	6.60	9.66	5.93	7.00
P.M.T.	14.66	16.40	15.13	15.73	14.33	14.46
Rep. Test	1.04	0.99	1.05	0.97	1.05	1.00
Agg. Test	4.00	3.80	4.60	4.47	5.20	4.93
Disc. Test	7.40	9.13	5.60	8.93	6.53	6.93

* CT = CARVING TEST
 ST = SEWING TEST
 PMT = PANGA MUNTHU TEST
 Rep. Test = REPERTORY TEST
 Agg. Test = AGGRESSION TEST
 Disc. Test = DISCIPLINE TEST.

** Gr.4 = Grade 4
 Gr.6 = Grade 6

TABLE 4

Reason For Paternal Absence

	FA	F.S.	TOTAL	Percentage
Death	10	7	17	29
Divorce	16	21	37	61
Other	4	2	6	10
TOTAL	30	30	60	

TABLE 5

Type of Relations Staying With
F.A and F.S boys.

	FA	FS	TOTAL	Percentage
Mother	24		24	79
Other Female Relative	6		6	21
Step Father		9	9	29
Other male Relative		21	21	71
TOTAL	30	30	60	

Section (ii) Hypothesis (i)

The first hypothesis - that boys brought up in father-present households would be superior at masculine skills to boys brought up in father-absent homes was partly but not fully confirmed. Mean scores on the Carving Test appear on Table³, Figure 1 indicates that older boys performed better than younger boys in all the three groups. Analysis of variance shown on Table 6 shows that both grade and fathering effects were significant with $F = 11.41$, $p < .05$ and $F = 6.38$, $p < .5$ respectively. There was also a slight

* Table 4 shows that the most common reason for paternal absence is divorce while table 5 shows that most father-absent boys are kept by their mothers and that male relatives rather than step fathers are the more common father-substitutes.

but not significant interaction between the grade and fathering effects with $F = 0.53$, $p > .05$.

Duncan's Range Test shows that at the grade 4 level the three groups did not differ reliably when considered pair-wise as follows: FS-FA = 2.20, $p > .05$, FS-FP = 1.66, $p > .05$ and FP-FA = 0.4, $p > .05$; (with 42 degrees of freedom).

When the grade 6 mean scores on the same test are considered, however, we find that (with the same degrees of freedom) the FS-FA = 3.67, $p < .05$, FP-FA = 1.93, $p > .05$ and FS-FP = 1.74, $p > .05$. This means that the FS group scored significantly higher than the FA group, while the FP group scored at an intermediary level which did not differ significantly from either group FA or FS.

TABLE 6

ANALYSIS OF VARIANCE FOR 2x3
FACTORIAL DESIGN: C.T.

Source of Variation	Sum of Squares	df	Mean Square	F
Grade	117.89	1	117.89	11.41
Fathering	131.71	2	65.86	6.38
Interaction GxF	11.01	2	5.51	0.53
Error Within	868.13	84	10.33	
TOTAL	1128.74	89		

The A - test which was used to evaluate the differences between mean scores of similar groups in grade 4 and grade 6 produced the following A Values 0.71, 0.35 and 0.36 for the

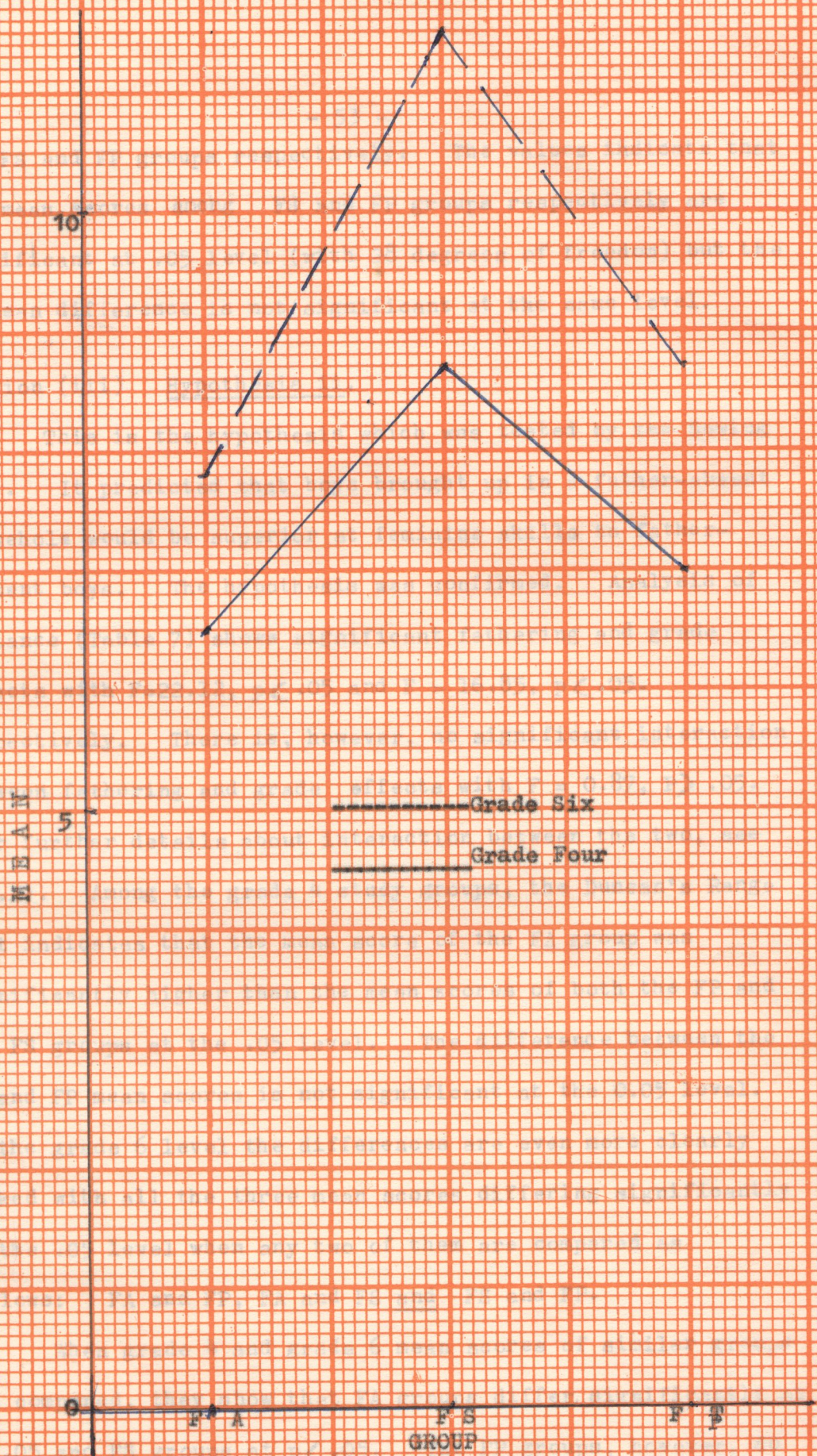


Fig. 1 Carving Test (C.T.)

Grade X Fathering Interaction

FA, FS and FP groups respectively. The values indicate that the mean scores among FS and FP groups respectively are significant at .05 level (with 28 degrees of freedom) but the FA mean difference is not significant at the same level.

Section (iii) Hypothesis ii.

This is the hypothesis which was tested by the Sewing Test. It predicted that boys brought up in a father-absent household would be superior at feminine skills to father-present boys. The hypothesis was confirmed. Analysis of variance (Table 7) shows significant fathering and grade effects with $F=22.12$, $p<.05$ and $F = 16.85$, $p<.05$ respectively. There is, however, no significant interaction between fathering and grade effects with $F = 0.87$, $P>.05$. (For further details about interaction between the two, see Fig.2). Among the grade 4 study groups, the Duncan's Range Test indicates that the mean score of the FA group was significantly higher than the mean scores of both the FP and the FS groups at the .05 level. The difference between the FS and FP mean scores is not significant at the 0.05 level. At the grade 6 level the differences are even more clearly marked with all the three mean scores differing significantly at the .05 level when any two of them are compared as follows: FA and FP, FA and FS and FS and FP.

When grade 4 and grade 6 mean scores of similar groups are compared, they show that FA groups differ significantly at $p<.05$ and FS groups at $p<.05$. The FP groups, however, do not differ significantly at the same level. These differences were determined by running A-tests.

Table 7

ANALYSIS OF VARIANCE FOR 2x3 FACTORIAL DESIGN:
SEWING TEST (ST.)

Source of Variation	Sum of Squares	df	Mean Square	F
Grade	71.11	1	71.11	16.85
Fathering	186.68	2	93.34	22.12
Interaction (GxF)	7.38	2	3.69	0.87
Error Within	354.12	84	4.22	
TOTAL	619.29	89		

Section iv: Hypothesis (iii).

Hypothesis (iii), predicted that FA boys would identify more with the female sex than FP and FS boys. When the results of the P.M.T. (in its capacity as an index of sex identity) are statistically analysed using the Chi square test, the results are not significant at 0.05 level ($\chi^2 = 0.48$, $df = 2$, $p < 80$). This result indicates that there is no significant relationship between the sex of model made and the group to which the subject belonged.

The hypothesis therefore is not confirmed. The table below (table 8 which shows the number and percentage of female models made by each group helps to clarify the situation.)

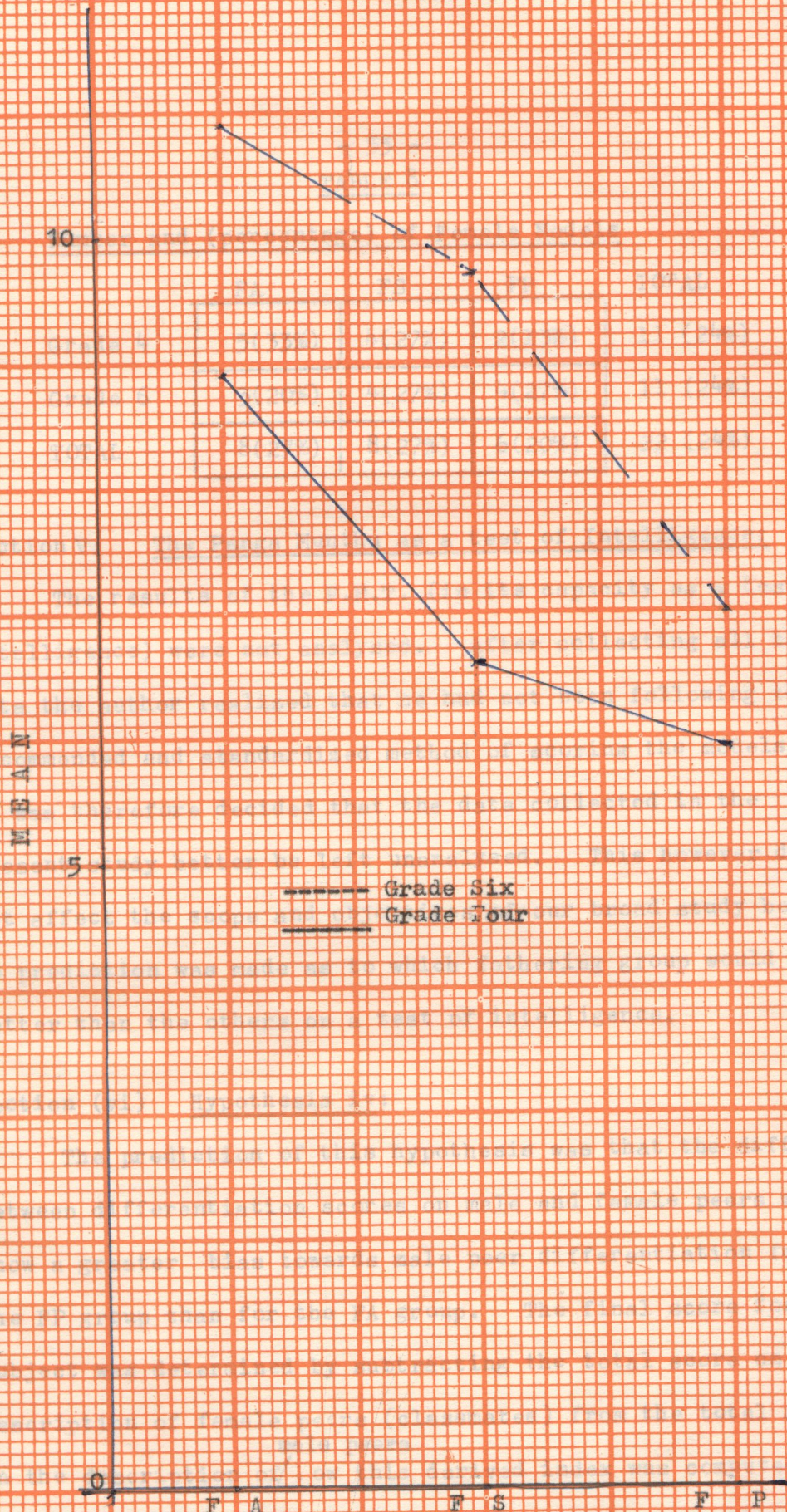


Fig. 2 Sewing Test (S.T.)

Grade X Fathering Interaction

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TABLE 8

Number and (percentage) of Female Models

	FA	FS	FP	TOTAL
Grade 4	5(33%)	4(27%)	2(13%)	11 (24%)
Grade 6	3(20%)	4(27%)	4(27%)	11 (24%)
TOTAL	8(27%)	8(27%)	6(20%)	22 (24%)

Section V: The Panga Munthu as a test of Intelligence:

The results of the P.M.T. (in its capacity as a test of intelligence) were not analysed. After collecting all the data the author realized that he had not been following the recommended and standardized method of scoring the models. It was therefore decided that the data collected in the present study better be left unanalysed. This however does not affect the scope and objectives of our broad study because no prediction was made as to which fathering group would perform better than the others on a test of intelligence.

Section (vi) Hypothesis iv:

The prediction of this hypothesis was that the difference between differentiation scores on male and female peers would show a greater bias towards male peer differentiation for the FP group than for the FA group. The final score for each subject was determined by subtracting the total score on the description of female peers (classmates) from the total score on the description of ^{male peers} ~~now~~ this derived index was computed, (see Appendix IX). Mean scores for each group were then calculated (see mean scores for the Rep. Test, Table 2).

A 2x3 analysis of variance (Table 9) shows that there is no significant grade or fathering effect with $F=0.07$, $p > .05$ and $F=.00$, $p > .05$ respectively. The interaction between grade and fathering effects is also insignificant with $F= .02$, $p > .05$. No further group comparisons were done statistically realizing that the differences between mean scores are very small indicating very insignificant variations.

TABLE 9
ANALYSIS OF VARIANCE FOR 2x3 FACTORIAL DESIGN: Rep Test:

Source of Variation	Sum of Squares	df	Mean Squares	F
Grade	0.07	1	0.07	.07
Fathering	0.00	2	0.00	.00
Interaction (GxF)	0.03	2	0.02	.02
Error (Within)	0.79	84	0.01	
TOTAL	0.89	89		

Section (vii): Hypothesis V.

The hypothesis stated that boys in father-present households are more aggressive than boys in father-absent households. The hypothesis was confirmed. Analysis of variance (Table 10) of scores obtained on the punish - the - doll exercise shows that grade effect is insignificant with $F=0.56$, $p > .05$, while fathering effect is significant with $F=6.35$, $p < .05$. The interaction between the two, however, is not significant with $F=.025$, $p > .05$ (see fig. 4).
(The results on the second test of aggression were not analysed

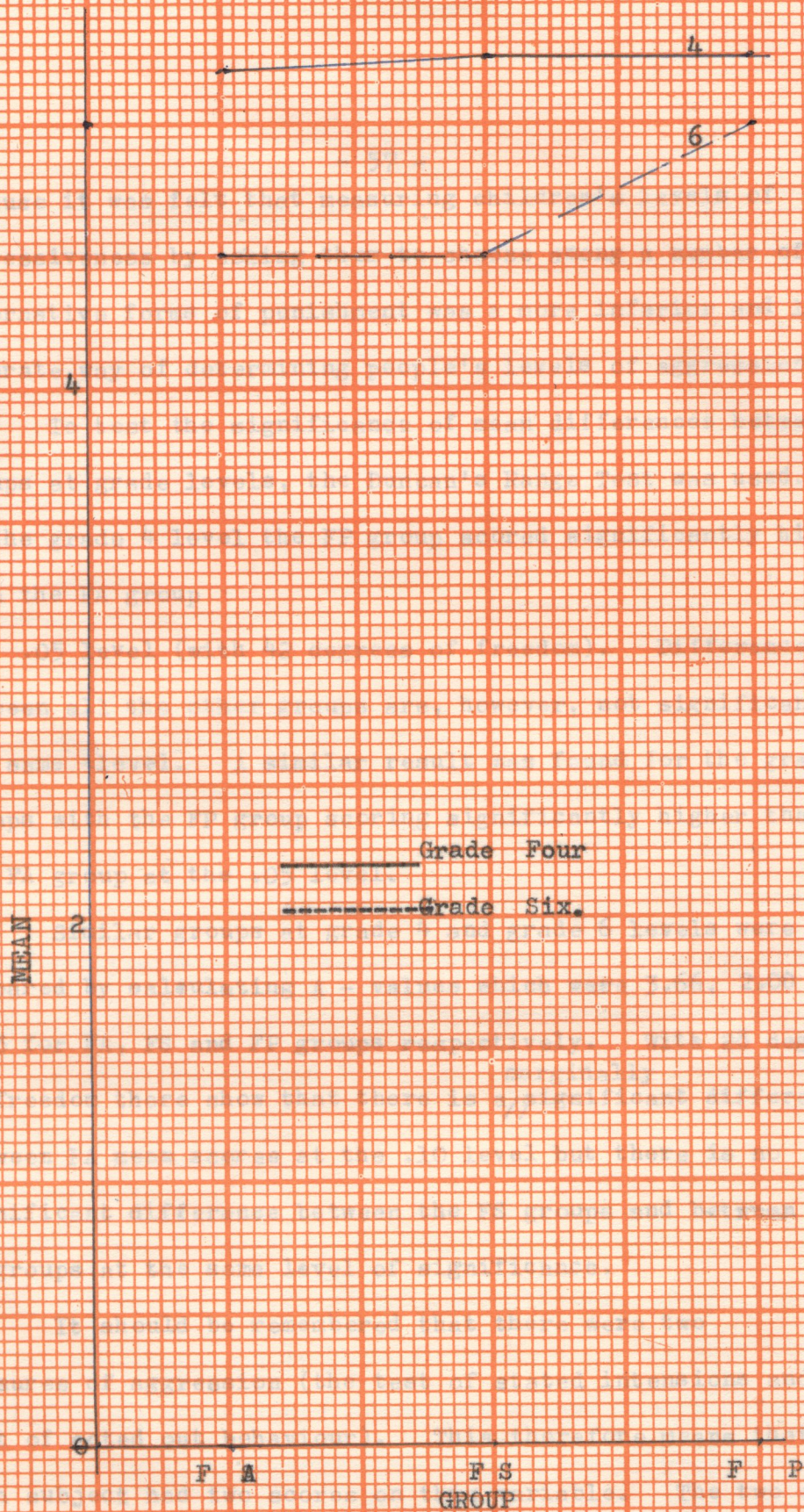


Fig. 3 The Rep. Test.

Grade X Fathering Interaction

because it was felt that measuring children's levels of aggressiveness by asking them to choose among a number of alternative forms of punishment was a more inferior and less accurate way of determining people's levels of aggression).

To test the significance of mean differences between groups at grade levels, the Duncan's Range Test was used. At the grade 4 level the FP group scored significantly higher than the FA group at the .05 level (with 42 degrees of freedom). Differences between all the other groups are, however, not significant at the same level. A similar result was found for the grade 6 groups with the FP group scoring significantly higher than the FA group at the .05 level.

Similar groups at grade 4 and grade 6 levels were compared by calculating A - values which were 3.66, 2.00 and 2.63 for FA, FS and FP groups respectively. With 28 degrees of freedom these show that there is a ^{marginally} significant difference between FA mean scores at the .10 level but there is no significant difference between the FS groups and between the FP groups at the same level of significance.

It should be remembered that there were two measures of aggression (the test of stated intentions and the test of acted out behaviour). This therefore means that each subject had two scores on this variable. The two were matched and a positive correlation ($r_s = +0.36$) was found. This correlation coefficient was statistically significant ($P < 0.1$).

Table 10. Analysis of Variance for 2x3 Factorial Design
The Aggression Test. (Acted out Behaviour)

Source of Variation	Sum of Squares	df	Mean Squares	F
Grade	0.9	1	0.9	0.56
Fathering	20.46	2	10.23	6.35
Interaction (GxF)	0.08	2	0.04	0.025
Error (Within)	135.06	84	1.61	

Section viii: Hypothesis vi.

The prediction under this hypothesis was that father-present boys would be more disciplined than father-absent boys. The hypothesis was not confirmed at both grade 4 and grade 6 levels. (Analysis of variance (Table 11) shows that there is^a significant grade effect with $F = 7.71$, $p < .05$. Fathering effect and interaction between fathering and grade are not significant with $F = 1.88$, $p > .05$ and $F = 1.67$, $p > .05$ respectively.

A - values^{which} were calculated to determine mean differences between grade 4 and grade 6 similar groups were 0.25, 0.13 and 0.362 for FA, FS and FP groups respectively. With 28 degrees of freedom these values indicate grade 6 pupils were significantly more disciplined within the FA and the FS groups at .05 level while the difference between the FP groups is ^mmarginal significant at only .10 level.

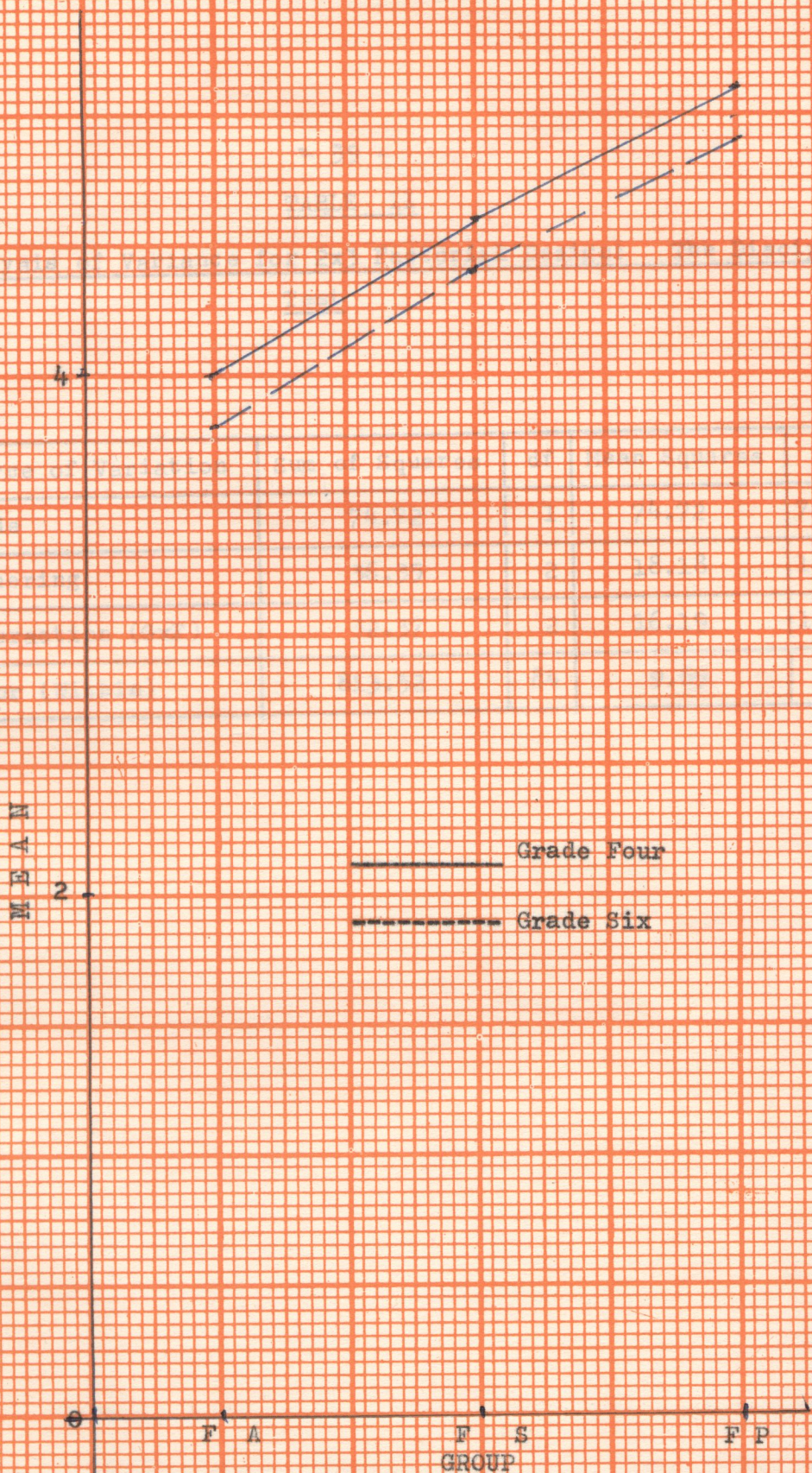


Fig.4 Aggression Test. (Acted out Behaviour)

Fathering X Grade Interaction.

TABLE 11

Analysis of Variance for 2x3 Factorial Design: The Discipline
Test

Source of Variation	Sum of Squares	df	Mean Squares	F
Grade	74.72	1	74.72	7.71
Fathering	36.35	2	18.18	1.88
Interaction (GxF)	32.37	2	16.19	1.67
Error (Within)	813.52	84	9.69	

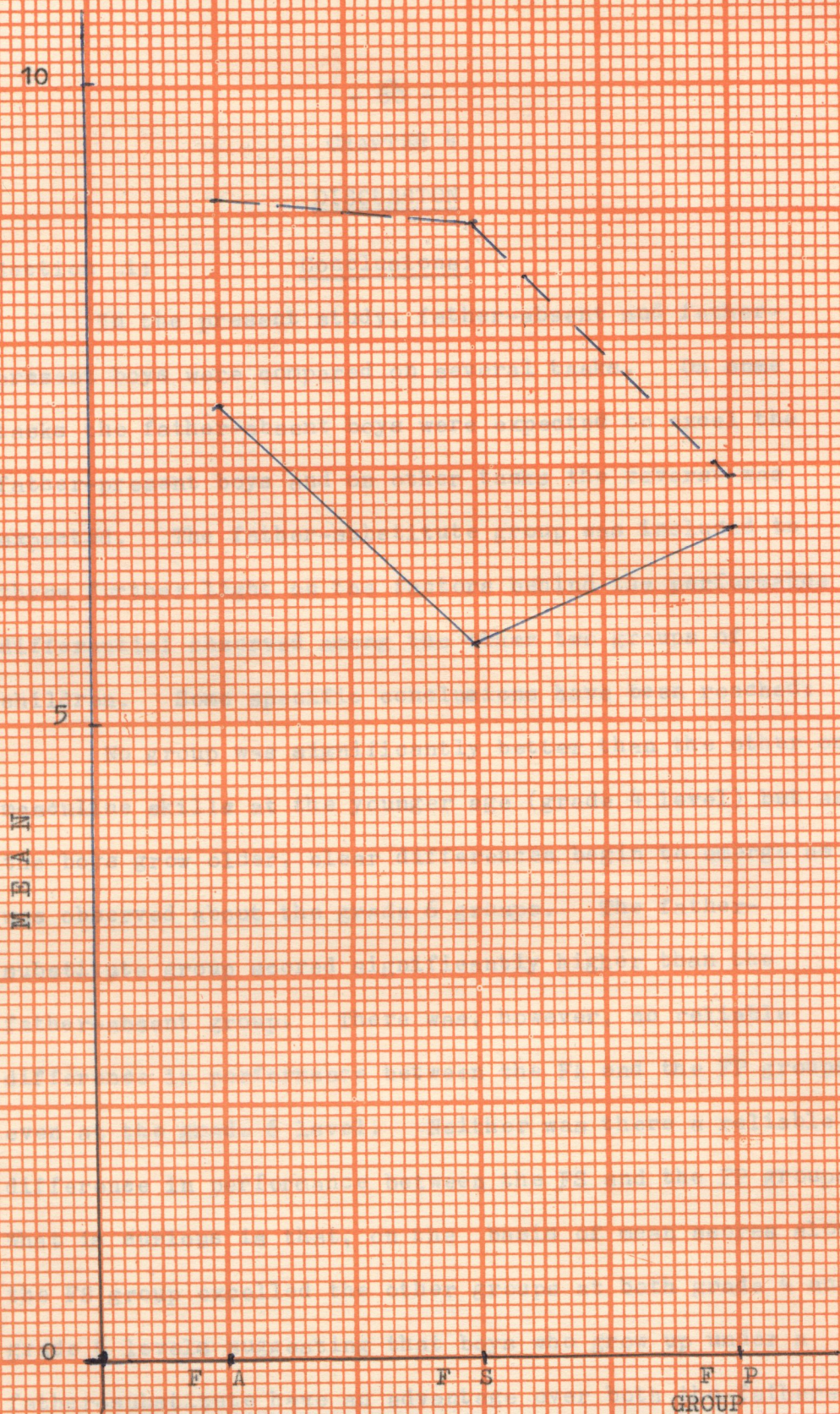


Fig. 5 Discipline Test. (Disc. Test)

Grade X Fathering Interaction

CHAPTER 4

DISCUSSION

Section i; Conclusions:

In the present study, father-absent and father-present boys were compared on several tasks. On some tasks the father-absent boys were expected to excel the father-present boys and on other tasks the reverse was expected. The father-substitute group was included to throw further light on the factors behind the performance differential observed among the other two groups of children. Some specific conclusions have been reached:

- (a) No group was significantly better than the other on masculine skills at the younger age (grade 4 level) but as the boys grow older, clear differences begin to emerge as was observed about the grade 6 groups. The father-substitute group scored significantly higher than the father-absent group. There was, however, no reliable difference in performance between the FA and the FP groups even at the grade 6 level. Neither was there a reliable difference in performance between the FS and the FP groups. What is curious is that, on the basis of mean scores alone, the FS group excelled the other groups at both grade 4 and grade 6 levels suggesting that boys who grow up under a father-substitute have an advantage over both the fathered and the fatherless boys as far as the rate of acquiring this particular masculine skill is concerned.

(b) While clear-cut differentiation begins to show at an older age where masculine skills are concerned, it is different with feminine skills. There were highly significant differences between groups in both grade 4 and grade 6 on feminine skills. The father-absent groups excelled both the father-substitute and the father-present groups and in turn, the FS groups beat the FP groups. It appears then, that as the degree of paternal deprivation increases, the degree and the rate of acquisition of feminine skills increases (assuming that the FS boys are more deprived than the FP boys).

(c) There was no significant finding on the issue of sex identity as almost all groups tended to make male models. It was therefore concluded that fatherlessness does not necessarily make boys identify with the female sex.

(d) Although the expectation as per hypothesis (iv) was that father-present boys would show a more clear-cut construct system when describing males and the reverse

expected of father-absent boys, the mean differences, although in the expected direction, were statistically insignificant. The observation led us to conclude that fathering effect (i.e. being fatherless or fathered) does not influence the boys' judgment or understanding of people on their sex basis.

(e) On the issue of aggressiveness two main observations were made: that FP boys are more aggressive than FA boys at both the lower and upper grade levels. Secondly, (although the differences are not significant), grade 4 groups register a higher score on expression of aggressiveness than the grade 6 groups. We came to the conclusion that, as per our hypothesis, FP boys are more aggressive than FA boys and that as the boys grow up, open expression of aggression may be a little more inhibited by both FA's and FP's.

(f) On discipline, no significant differences between mean scores of groups were observed. This means that our original hypothesis that FP boys would be more disciplined was not confirmed. The results, however, indicate that there is a significant grade effect, with grade 6 groups scoring higher than grade 4's. It appears then, that the major finding of our study was that as the boys progress through school they become more and more disciplined but no individual group was proved particularly more, or less disciplined than the others.

Section (ii), Interpretation of Findings

) Hypothesis (i)

The finding that differences in performance on the Carving Test begin to emerge at the grade 6 (upper) and not grade 4 (lower) level, in part reveals the nature of male skills in relation to the socialization practices among the Ngoni. In Chapter 2 I mentioned that the Ngoni fathers take over the socialization responsibilities over their sons when the boys are five years of age.

Although this is the case it would be inappropriate to expect the father-present boys to excel the father-absent boys in skei-making or any other male task when the boys are only nine or ten years of age because at this age, even the FP boys have not yet had enough time to gain effectively from the knowledge that their fathers have. In the first place, most adult male tasks in traditional societies require considerable muscular power apart from developed motor skills and sensori-motor coordinations. For this reason parents do not generally expect a ten year old son to be exceptionally good at masculine tasks.

Thorough training at an early age may not produce the desired results because of the child's physical limitations. Anastasi (1958) noted that 'very intensive training at an earlier age may produce almost negligible effects when compared with the achievements of an older child with only a minimum training' (p. 217). At the early age physical maturation apart from training and guidance seems to play the major part as far as performance on certain activities is

concerned. It is not surprising therefore that no significant differences were observed between grade four groups.

The importance of physical maturation is further demonstrated by the significant differences between grade 4 FS group and grade 6 FP group. These differences are a reflection of the cumulative effects of physical growth backed by training and experience of everyday life. On the other hand, the insignificant difference between the FA groups shows that physical growth alone without training and guidance is not enough. It further shows the need for a father figure to act as trainer and model of imitation as suggested by Biehler whose stand point we have discussed in the first chapter. Biehler's position is further demonstrated by the non-significance between the mean scores of the FS and the FP boys because this finding demonstrates that as long as the child is presented with a male model (father or otherwise), he can effectively compete with the father-present child on tasks involving a masculine skill.

There are, however, two further observations which present problems in interpretation. One is the fact that there was no significant difference between the father-absent and father-present groups even at the grade 6 level. Perhaps there is particular meaning to this observed phenomenon but I think further research is needed before any interpretation is attempted for the interpretation to tie up with the 'model' thesis presented above.

The second intriguing phenomenon is the outstanding performance of the father-substitute group at both the lower and upper grade levels. Although an attempt to make an interpretation of this result may appear far fetched because of the statistical non significance of the difference, it should be remembered that the superior performance of the father-substitute boys was not originally expected, let alone expected to occur at both the lower and upper grades. Some explanation therefore is justifiable.

It appears as though we are dealing with a situation where there are two categories of mothers from which our father-substitute and father-absent boys came. There is the first category comprising those mothers who, after the death or loss of the husband never were aware of the need to provide their children with a father-figure. This is the group to which the mothers of our father-absent boys most likely belong. The second category is composed of mothers who, after the death of the husband realized the educational and social importance of a father figure to their male children and made an effort to look for one. The mothers of the FS groups in our sample should belong to this category. This latter group could be likened to the one Winterbottom (in Stendler, 1964) found to be composed of mothers who expected relatively early indications of self reliance and mastery from their sons.

Winterbottom found that sons of such mothers demonstrated stronger achievement motivation than any other. In other words, such mothers took steps to ensure

that their children developed the necessary zeal and energy to be self reliant and masters of their own. It would appear that it is this same type of mothers to which Biehler (1976) referred when he wrote of widows taking compensatory measures to provide their male children with male models so as to offset the ill effects of fatherlessness.

Following this line of analysis, we can say that it is not accidental that a child should belong to the FA or FS group. It is a reflection of the personality type or category to which the child's mother belongs. Looked at this way, the superior performance of the FS boys becomes a little more meaningful. They have mothers who belong to a class of their own; mothers who do not perpetually and passively mourn the loss of a husband without taking compensatory measures aimed at curbing or controlling the possible bad effects of the death or absence of their husband on their sons. To achieve this goal, they remarry or send their sons to stay with an uncle or some other male relative.

Apart from their qualities (as explained by Winterbottom) there is also the possibility that once they remarry such mothers make sure that the step-father effectively does his job for which he was 'employed' — to impart skills and masculine qualities in the boys. The step father is also likely to do all he can to impress or satisfy his wife who, as Kogelshatz et. al (1972) observed about mothers who remarry, 'suffer the most acute feelings of depression and rejection and are critical of men's deficiencies' (see introduction).

In such circumstances the children are in a comfortable^m position because they have a double source of motivation and encouragement; (a) the mother who instils a spirit of 'self reliance and mastery' and (b) the step father who is likely to give special weight to his role to avoid criticism and reduce or control his wife's 'depression and rejection'. It is possible, therefore, that in terms of being a model for imitation the father-substitute may be better than a biological father because, in a normal home, the mother may leave the responsibility over the male children wholly to the father while the father makes no deliberate skill - instilling programmes. This would be expected because naturally, in traditional education, 'adults are tolerant of children's learning habits and do not push them, beyond their readiness and capability (Evans 1970).

(b) Hypothesis ii.

In this case, the hypothesis was clearly confirmed.
supporting evidence
The confirmation of the hypothesis is that if boys are not provided with a father figure they acquire feminine skills to a greater extent than their counter parts who are reared in homes with both parents.

When the children's performances on the sewing test (S.T.) are compared with their performances on the carving test (C.T.) the most striking difference is that the differences on the sewing test between groups are clear cut even at the grade 4 level whereas with the carving test differences begin to show at an older age. Perhaps the

explanation for this difference lies in the fact that while most male tasks require physical maturation, as we have discussed above, most female tasks may not be dependent on this quality after a certain age early in life. Sewing, for example, seems to rely more on one's dexterity (which of course can only be realized through training and experience) than on one's physical size. Early training in sewing, therefore, is likely to produce more immediate results than training in wood carving which relies heavily on the learner's physical maturity.

The other reason for earlier acquisition of the sewing skill is that while wood carving is mainly an out door activity and generally a rarer one, sewing is done more often and in the home, during the day or during the night. The children, especially those who are always in the company of the mother or sisters (like the father-absent boys) are likely to observe how it is done from a very early age and thus being afforded a chance to imitate or simply grasp the theoretical details of how to sew at that early age.

The higher performance of the FS group over the FP boys perhaps shows how effective the interim period between the death or loss of the father and the remarrying of the mother can be. Even if the mothers of FS boys are the type that encourages masculinization of their sons as we have discussed in the above section, the period that they are alone with their sons seems to have a significant impact on the boys as far as the learning of feminine skills is concerned.

As for the significantly poor performance of the father-present boys, the reason is clear. Both men and women in patrilineal societies generally take measures to ensure that the division of labour between the two sexes remains. One way this is done is by discouraging any efforts by males to learn feminine skills or to associate with the women folk. The reverse is true for female members of the society. It is possible, therefore, that in normal Ngoni homes boys are deliberately kept apart from female members of the family, thus being denied the chance or wish to consciously or unconsciously learn from them.

(c) Hypothesis (iii)

Our data failed to confirm the hypothesis and show a remarkably close parallel to the data obtained in the matrilineal Chewa society in a neighbouring district of Zambia's Eastern Province. In both samples the proportion of male models made by boys was 76%. This clear preference for making male figures is consistent with the general emphasis of sex-role socialization in Central African Bantu societies. Thus in interpreting the poor performance of the father-present boys on the sewing test we mentioned that association with women and their ways was discouraged as much as possible. The present finding supports our interpretation.

Patriarchal societies have various ways of making boys hate or dislike being associated with any feminine

qualities. Boys are often reminded not to sit like a woman, not to talk, walk, act like a woman. If a boy is not the outgoing type, the type that prefers to be at home, he is described as a coward and a sissy. To make it worse for such boys, it is not only their peers and the male adults who make such derogatory statements but their mothers and the women folk in general.

With the society using such methods boys grow up knowing that being associated with any feminine qualities is a weakness. This is particularly true among the rural populations where segregation on the basis of sex has been conventionalized and maintained for a long time without ideas of equality getting to them. Boys who grow up in such a society therefore cannot consciously do anything that may have them labelled 'a sissy'. This is reflected generally in the items they mould when doing their clay modelling. While girls would prefer making toy clay pots, plates and human shapes, boys like making toy cows, cars and human male models (things associated with masculinity).

One interesting observation the Experimenter (E) made was that most of the models made by the subjects were of a soldier in uniform. This was especially interesting because in the study area there is a large army barrack. At the time the study was conducted there was a lot of troop movement in the area because of the liberation war in neighbouring Zimbabwe. Naturally, the author was curious to find out why there was such a high tendency to prefer

making soldier models and asked a few of the subjects what they would like to do for a career. Most of the subjects said they wanted to be a soldier or a pilot.

Choosing to be a soldier, generally, is a sign of manhood or courage. Apart from the influence of the many soldiers in the area, the history of the Ngoni which is rich with stories of successes in battles as the Ngoni fought their way through from South Africa to where they are settled now may help us to understand why the Ngoni boys (father-present or father-absent) have a special preference for masculinity over femininity.

Considering the way Ngoni boys are socialized, the apparent impressive performance of soldiers in the Ngoni area and the military history of the Ngoni, it is not surprising that even the father-absent boys should identify with people of the male rather than the female sex. Infact information already exists from another culture to the effect that father-absent boys over-emphasize their masculinity by showing 'strong striving for father identification and compensatory masculinity', (Lynn and Sawrey, 1959).

(d) Hypothesis iv:

The conclusion reached on this hypothesis supports the argument presented in the above section that the Ngoni social norms emphasize masculinity for boys and femininity for girls. This is true for both father-present and father-absent households. The tendency, therefore, is to suppress any

form of alignment with the people of the opposite sex, thus creating conditons not conducive enough for father-absent boys to develop a more clear-cut construct system in their description of females and the reverse for father-present boys.

What is more interesting, **however**, is that when the same data are used in a different way they indicate different patterns identifiable with the various fathering groups. When the data are analysed on the basis of how many subjects in each group described the target individuals (preselected classmates) **positively** and how many of them negatively, we come up with the following picture: (It should be remembered that each construct dimension is composed of the positive and the negative aspects e.g. (Clever - dull).

Of the thirty father-absent boys 69% gave a more positive description of the preselected male classmates. For the father-substitute and father-present groups only 30% and 49% respectively were in favour of males, while the remainder spoke more favourably in their description of female classmates. The table below shows further details:

Table 12

Number of subjects in favour of males and females in each group:

	FA	BS	FP	TOTAL
In favour of Males	18	10	13	41
In Favour of Females	8	19	14	41
TOTAL	26	29	27	82

The results of the χ^2 test were highly significant ($\chi^2 = 6.64$, $df = 2$, $p < .05$) indicating that father-absent boys judge people of the male sex in a more positive way than they do people of the female sex. The opposite is true for the father-substitute and father present boys. To say the same thing differently, from these results we conclude that more father-absent boys speak more contemptuously of members of the female sex while father-present and father-substitute boys speak highly or favourably of people of the female sex.

The father-absent boys' close association with the mother seems to produce a negative or unfavourable feeling against females while the father-present boys' close association with the father produces a positively oriented judgment of people of the female sex. Perhaps what happens during the process of growing up is that the close association with the mother exposes the boys to a deeper understanding and knowledge of the weaknesses and deficiencies of people of the female sex while the same

applies to boys who grow up in close association with the father. This detailed knowledge of the weaknesses and deficiencies of the parent is perhaps the key factor behind the negative rating of males and females by the father-present and the father-absent boys respectively. Infact Stecker (revieved in Bossard and Bolls, 1948) reported that apart from the dominance of the mother causing feminization of the child it leads to mother-child conflict. The same could be said of cases where the father is the dominant parent. The mother-child conflict in the case of the father-absent boys gets generalized to all females while the father-present children see every male person through the mirror of the father-child conflict.

(e) Hypothesis V:

The results support Sears, Pintler and Sears (in Berkowitz 1962) who found that father-absent boys had a reliably lower level of aggressiveness than father-present boys. Our finding, however, contradicts findings by Trunell (1968) McCord et. al (1962) and Wylie and Delgado (1959) who found that father-absent boys were more aggressive and more anti-social. What is difficult to say, however, is whether these findings are contradictory because of culture-specific conditions or simply because of the relative appropriateness of the instruments used to evaluate levels of expression of aggressiveness. (We will look at possible effects of the instrument used in this study later under a different section). What seems most

relevant to discuss here is the fact that expression of aggression seems to be inhibited as the boys grow up.

The drop in the level of aggressiveness at the grade 6 level can be explained in two slightly different ways. The first explanation is that since violence or expression of it is discouraged by society, socialization in this line becomes more effective as the boys grow up. Secondly, as Sears, (1954) found out, punishment ' . . . formerly an instigator to antisocial aggression, now seems to have imposed an inhibitory influence on that behaviour and to have created aggression anxiety ' (In Stendler 1954:207). According to Sears, therefore, when children are still young punishing them simply facilitates their aggressiveness. As the children grow up, however, punishment begins to have a reversal effect on their behaviour.

(f) Hypothesis vi:

The lack of significant differences between groups is difficult to interpret although possible reasons can be suggested. It should be accepted that however traditional and conservative a society may be, the changes in economic and social conditions have necessitated an increase in status of the mother in the home as we have already noted in Chapter one. The increase in status by the mother has also resulted in the increase of her roles and the subsequent relinquishing of some of the father's duties. Whereas the father used to be the disciplinarian in the home, this role has fallen to the mother with the father

being rarely involved in controlling children's behaviour. If this is the true analysis of the situation, then it makes no difference whether the child grows up in a normal home or with the mother only, since in either case the mother remains the discipline dispenser. The mother's role as the disciplinarian is confirmed by the fact that FA boys in our sample showed greater discipline than FP boys (although the difference was not significant - see table 3).

The other possible implication of the result is that perhaps school experience has the strong effect of neutralizing any existing differences between the different groups before they go to school. Judging from how teachers emphasize discipline from the time the children first go to school, it is quite possible that by the time they finish their third year at school most of the children (whatever their family background) know what sort of behaviour is expected of them and try to act according to the regulations prescribed by the school and the class teacher.

The effect of school socialization seems to be highlighted by the finding that grade 6 boys scored significantly higher on the test than grade 4 boys. One important issue to mention here is that there is rigorous screening of pupils from grade 4 into grade 5 because of insufficient grade 5 places especially in the rural areas. The following percentages are of the grade 4 pupils who managed to get places in grade 5 in the Eastern Region of Zambia from 1968 to 1976.

<u>*Year</u>	<u>Percentage</u>
1968-69	68.7
1969-70	58.2
1970-71	53.1
1971-72	52.2
1972-73	57.4
1973-74	58.3
1974-75	60.8
1975-76	65.7

The percentages show that only a little more than half the number of pupils in grade 4 proceed to grade 5. The competition at the grade 4 level is high therefore. We might expect boys who have survived such a severe selection process to show a greater degree of commitment to the school curriculum than their peers who drop out. Such a screening of boys for commitment would be expected to show up in a higher general level of discipline as measured by our scale.

Section (iii) Choice of Tests and Administration.

Most of the tests used in the present study were developed locally reflecting an attempt on our part to meet the requirements of what has been described as the 'emic' approach to research as opposed to ^{the} 'etic' approach. Pike describes the emic view point as resulting from 'studying

*Source: Ministry of Education - Statistical Profile of
Zambian Education 1977/78. Lusaka: Government Printer.

behaviour as from inside the system' while the etic viewpoint 'studies behaviour as from outside of a particular system' (1967:37). A growing number of psychologists now recognize that the more common approach of transferring particular instruments standardized in one culture to another is an inappropriate one if the behaviour of a particular cultural group of people is to be objectively understood.

This fairly recent awareness among psychologists has emerged as a result of the recognition that there are cultural and environmental differences as one moves from one culture to another. Psychologists also recognise the fact that these cultural and environmental factors determine or affect the behaviour of people. As such it is only fair that when a behavioral scientist wants to carry out a meaningful study he or she must strive to understand people in a particular culture as a unit first before any global or pan-cultural generalizations are attempted. Such is the emic approach to research.

The use of tests developed in one culture on people of a different culture has sometimes produced very misleading results. To counteract this problem some psychologists have suggested a 'radical cultural relativism' position especially where an assessment of a people's cognitive capacities is concerned. (Berry 1969, 1974). Vernon (1969) has also emphasized that 'it is generally preferable to devise new ones (tests) locally to suit the modes of perception, the language, background and concepts of the particular culture (p. 114). Vernon, however, notes that although this approach

has been advocated by many psychologists very few have had the time or the knowledge to try it. In the present study we have tried to meet the requirement by developing tests that could be as meaningful to the testees as possible. Some of the instruments used in our study were modelled on foreign tests but they were adapted to local conditions as much as possible.

Apart from devising new and culturally relevant tests, we tried to heed very closely a number of warnings given by some well known psychologists like Biesheuvel. Biesheuvel (1943) has, among other things emphasized how performance on a test can be affected by unfamiliarity with the test situation, the presence of an unfamiliar tester and lack of familiarity with the contents and routines. By way of minimizing these problems we took the following measures:

- a) Most of the tests were based on activities that the Ngoni children grow up seeing or doing. Therefore, content wise, the tests were culturally meaningful.
- b) Local people were used at various stages of the study where this was found necessary. The involvement of both adults and children during the pilot study, the use of local people as judges on the Aggression and Discipline tests and the involvement of a local expert in the scoring of the Carving Test are cases in point.
- c) At no point was the English language used throughout, thus removing one of the major problems inherent in most existing psychological tests.

- (d) Cognizant of the need for an appropriate test medium, children were not asked to use pencil and paper at any stage because, culturally, writing is still more of a Western practice than an African one especially among rural populations.
- (e) The environment in which the children were tested was made as 'unlaboratory' as possible. Instead of sitting in a classroom, subjects sat most of the tests under a tree, in the sun or in the grass. Thus, subjects were not tested under very unusual circumstances. It would have been a very unusual environment for example if the children were locked up in separate cubicles when sitting the Carving test because, normally the Ngoni people do not make skei^s under such conditions.
- (f) Finally, speed testing was avoided. Subjects were not credited for completing the tasks earlier than others or penalized for being too slow. This was done in recognition of the fact that African children are not used to working within clock-controlled time in their natural environments at home.

All these measures were taken as a way of controlling extraneous variables and a way of creating as normal a testing situation as possible. These and other related factors have been found to be important in test situations. Mundy - Castle, for example, tested Ghanaian children on an identification task with some four pictures and observed that "the likelihood of

correct identification of pictorial items is greatest if they are realistic representations of familiar objects, least if they relate to abstract concepts" (in Price - Williams 1969:121).

In supporting the use of new tests in crosscultural research Serpell (1976) reasons:

If theories originally formulated to explain the behaviour of Western populations are to be productive in cross-cultural research they will need to be prised free of particular standardized tests, and new instruments devised appropriate for measuring the same psychological constructs in different cultural settings (p. 54).

Serpell's basic conviction is that if cross-cultural research is to be productive the emphasis should not be on using particular standardized tests from one culture to another but it should be on developing new instruments. This way, Serpell thinks, we will be able to know how different peoples become what they are.

Mundy - Castle's finding and Serpell's views help psychologists especially in Africa (where many wrong conclusions have been reached by researchers) to realize that a new approach in the choice of tests must be adopted. They also serve as pointers to the fact that 'psychology should be viewed in its ecological setting...' (Berry 1976).

The importance of locally developed tests is also evident in the results of some of the tests used in the present study. The most meaningful results were obtained with tests such as the Carving, Sewing, Panga Munthu and the Aggression tests. A close look at these tests shows a truly African cultural element. Any differences observed using such tests, therefore, can be said to reflect the true psychological differences existing between groups of a people acting within the same system.

Comment.

So far we have been discussing the ~~positive aspects~~ of the tests used in the present study. This, however, does not mean that there were no negative aspects to some of the tests. Two tests in particular need further discussion to evaluate their appropriateness and level of perfection in their present forms. These are the Aggression and the Discipline tests.

We noted that the Aggression test was in two parts namely, one involving choosing one out of four alternative forms of punishment suggested by the Researcher while the second part of the test involved punishing a doll (representing the offender). While this arrangement has the advantage that we are able to compute the correlation between the subject's self proclaimed level of aggression and the level of his demonstrated aggression, it has one major problem. The problem is that when it comes to punishing the doll physically the subjects tend to be influenced or guided by what they initially said they would do on the earlier part of the test.

What was observed, for example, was that most of the subjects who chose the alternative they would cut off the offender's fingers pretended to do the same using pieces of wood on the practical part of the exercise. This, however, was done in a very non-violent manner.

In such circumstances one wonders whether the subject was not simply trying to stick to his earlier pledge on grounds of faith and consistency without necessarily expressing his true aggressiveness. As such, the positive correlation observed for the grade 4 and 6 FA's and the grade 6 FP boys could as well be a spurious one. It is therefore recommended that if the present test is to be used again in future, the first part involving choosing an alternative form of punishment should be dropped. This should increase the strength of the test greatly.

One other problem with the Aggression test is that it creates a completely artificial situation. The whole idea of asking children to punish a doll sounds suspect or even silly. It is uncommon among African children to see an adult (in this case the Researcher) going round with a doll in the person of an offender and asking them to punish it. The objective of such an exercise is not clear and children may easily suspect that they are being studied thereby being more cautious and reserved in their behaviour. This perhaps could be one explanation for why general drop in the level of aggressiveness was observed with the grade 6 groups (See Fig. 5). While the exercise could have been

quite exciting for the younger (grade 4) children, it could have been interpreted as silly and suspicious by the older and more mature grade 6 children.

Therefore, while we were able to come out with some possible interpretations from the results of this test, we would definitely do better with a more direct instrument which avoids the artificiality surrounding the present one.

As for the Discipline test, nothing really is there to criticize about its form and the manner of administration. The only problem about it is perhaps that it was administered at the wrong time of the school year. It was discovered too late that most of the teachers who helped to rate the children were new at the schools. Some of them had only been working for one month at the school. This surely should have affected the result because it is hard to believe that such teachers had had enough time to study the individual children in their class to make accurate judgments about the children's character.

The other side of the same problem is that the beginning of the year sees pupils moving from one grade to the next. In most cases this involves changing teachers. It is also the time that most transfers between schools by pupils are experienced. The situation therefore, is one of new people in the process of studying and trying to understand one another in the same class. The first term of the year, therefore, is not the best time of the year for such a test.

There^{are}/perhaps two ways of overcoming the problem.

One is to look for teachers who have known the subjects for a substantial period of time even if they are not teaching the children at the time the study is conducted. The other way is to wait until some time later in the year when teachers have had enough time to study their pupils more deeply.

Apart from the two tests discussed above, the rest appear to be strong enough to be adopted as they are if a similar study will be conducted on the same population in future. What may need to be changed is the index of differentiation on the Rep. Test. Instead of using clear-cutness or degree of polarization of subjects on their use of standard constructs as we did, the researcher may consider using the way subjects use the constructs positively or neagatively when describing male and female peers as the index of differentiation.

Section iv. Overview.

This study has demonstrated that family background has a definite impact on the acquisition of the two sex-linked cognitive skills which we have investigated. Growing up with the father facilitates the acquisition of the carving skill while the sewing skill is better acquired by boys who grow up with the mother only.

The FA boys suffer a bigger disadvantage therefore because they are handicapped in a masculine skill whose importance is recognized by the society they find themselves

in. The fact that FP boys cannot sew as well as the FA boys is not a serious disadvantage for the FP boys because boys are not expected to use the feminine skill as much as the masculine one in their adult life. However, this is as far as we can go about emphasizing the disadvantage suffered by father-absent boys in the society we have studied.

While differences among the fathering groups are clear in the cognitive domain no differences are observed in the conative or socio-emotional domain of the children's development. There seem to be no differences in the subjects' self image, sex identity, or their affiliation. Perhaps the only difference in the socio-emotional domain is that while father-absent boys give a positive evaluation of male peers, the father-substitute and father-present boys tend to do the opposite. It is difficult to come to a definite conclusion about our findings in the case of aggression levels of the different groups, because of the methodological problems we have pointed out in the above section.

The observation that there were no significant differences on tests of identity and other socio-emotional variables makes us question whether roles traditionally attributed to the mother and to the father respectively are not just stereotypes in the modern Ngoni society. The results on the discipline test seem to indicate that FA boys are more disciplined than the FP boys (although the differences are not significant). The difference shows how

effective the mother is as a disciplinarian despite the fact that traditionally the role of disciplining the male child was left to the father.

As we have noted above, the mother in the modern Ngoni society is not exactly the same as the mother in the traditional or old society. She has adopted roles which were once reserved for the father and as can be concluded from our results, the mother can effectively take over most of the father's duties in his absence apart from instilling in the boy the utilitarian masculine skills like carving.

As for the father-substitute boys, our results indicate that they suffer no real disadvantage in both the cognitive and socio-emotional domains of psychological development. In the cognitive area the FS boys demonstrated that they are significantly better than the FP boys in both the masculine and feminine skills which were under investigation. When compared with the FA boys, the subjects performed significantly better in the masculine task. Thus showing how effective a father-substitute can be. This result lends support to Biehler's (1976) model thesis which states that as long as a child is presented with a male adult (not necessarily the biological father), he will develop the necessary masculine qualities.

One final thing our study has demonstrated is that the extended family system does not fully cater for the developmental needs of the father-absent boys as is always claimed by some people. The grand view held by some people

that the loss of a parent in an African society has no adverse effect on the children is obviously erroneous. It is not being realistic for anybody to argue that African tribal societies are not individualistic; that they are traditionally, socialists or collective workers as some historians (e.g. Woodson, 1936) would like us to believe.

The fact is that the modern African tribesman's life is very different from that of the one who lived in the 19th century. The economic and social life of the people has changed. Because of urbanization and industrialization, people's way of life has become more expensive and more sophisticated. Western cultural influence and the money economy are some of the new factors which have affected the status quo in the tribal societies.

As a result, instead of working towards solving the needs of the clan or the extended family as they used to do, men and women have to spend almost all their time fending for their own families because of the new individualism, coupled with the general scarcity of resources. The importance of the extended family is therefore dwindling while that of the nuclear family is increasing. The general difficulties of life have also created mistrust and fear among the people such that if one has to enjoy a feeling of security and love one has to look to the family. For children, it is the family which has become the source of positive social tendencies and not the wider society.

As such, a mother in a fatherless household has a very big burden on her shoulders for she has to take over her absent husband's duties and execute them concurrently with hers. It is therefore not an easy task. After all, even if she manages to teach and train her sons to do several tasks, she obviously cannot teach them what she does not know. The fatherless boys, therefore, will always need the guidance of some male adult for them to acquire most of the necessary masculine qualities.

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Appendix I

Questionnaire Used for Subjects Selection.

Name of Pupil.....School.....

Age..... Grade..... Patrilineal/Matrilineal

1. Do you have any elder brothers?..... Yes/No

2. If YES, how old are they now?

1st brother.....

2nd brother.....

3rd brother.....

3. Have you been staying with any of your elder brothers in the same house since you were 5?YES/No.

4. If YES, which brother(s)?.....

5. Do you have any elder sisters?.....Yes/No

6. Have you been staying with any of your elder sisters in the same house since you were 5?.....

7. Do you stay with your real father in the same house?

.....Yes/No.

8. If NO, what happened to him?.....

9. How old were you when this happened?.....

10. What is/was your father's occupation?.....

11. With whom are you staying right now?.....
.....
12. Since when did you live there?.....
13. What work would you like to do when you grow up?.....
.....

Appendix II

Scoring Sheet - Carving Test.

Name..... School.....

Grade..... Group.....

TOTAL Score.....

Score 1 or 0.

-1. Thinner sides straight.
-2. Body tapers at lower end.
-3. Wider sides have a level surface.
-4. Neck: Definite demarcation between body and head
-5. Neck strong enough not to break.
-6. Notches not less than 2 and not more than 3 in
 number.
-7. Notches not too deep: Do not reach the central
 region of the skei.
-8. Notches can hold strap: not too shallow, not
 tending head wise.
-9. Enough space between upper notch and head to
 accommodate yoke.
-10. First notch not too close to lower end to be
 functional.

Appendix III

Scoring Sheet - Sewing Test.

Name..... Date.....
School..... Grade.....
Group..... TOTAL

1. Location of Buttons on Vertical scale relative to holes. Score.

Both spaces straight	(Good)	2
One space straight	(Fair)	1
Both spaces crooked	(Poor)	0

2. Location of button relative to edge of shirt.

Same distance for 3	(Good)	2
Same distance for 2	(Fair)	1
Different distance for different buttons	(Poor)	0

3. Pattern of sewing across 4 holes (over button)

X or = for 3 buttons	(Good)	2
X or = for 2 buttons	(Fair)	1
Other	(Poor)	0

4. Loose ends over button.

None over the 3 buttons	(Good)	2
Loose end on only 1 button	(Fair)	1
Loose ends on 2 or 3 buttons	(Poor)	0

5. Tying of loose ends (Behind button)

All loose ends tied behind	(Good)	2
2 loose ends tied behind	(Fair)	1
Only 1 or all untied behind	(Poor)	0

6. Tidiness (Behind buttons)

All 3 ends neatly cut short	(Good)	2
Only 2 ends neatly cut short	(Fair)	1
1 or none neatly cut short	(Poor)	0

7. Firmness of buttons.

All 3 buttons firm	(Good)	2
Only two buttons firm	(Fair)	1
One or none firm	(Poor)	0

Appendix IV

Scoring Sheet - Panga Munthu Test

TOTAL Score Sex of Model

Name..... Date..... Age.....
Home..... School..... Grade.....
Tested by..... At..... Group.....

Score 1 or 0

-1. Head and Body distinguishable.
-2. Head shorter than length of body (excluding neck).
-3. Proportion of face - length of head greater than its width.
-4. Ears present: Any indication of ears.
-5. Nose present: Any clear method of representation.
-6. **Eyes** present: Two eyes must be present.
-7. Mouth present: Any clear representation.
-8. Eye-brows present: Any indication of eyebrows.
-9. Neck: Definite extension of body between head and arms. Must be clearly thinner than head.
-10. Proportion of trunk - length of trunk must be greater than breadth.
-11. Umbilicus: Any clear presentation.
-12. Arms: Two arms at opposite sides of body.
-13. Proportion of arms - arms at least equal to the trunk in length. Tips of hands extend to the middle of hip but not to knee.

-14. Shoulders: definite angle below neck where arms
join trunk.
-15. Elbows: Second definite angle in arms.
-16. Hands: Either 3rd definite angle in arms, or some
shaping to differentiate hands from fore arms.
-17. Fingers present: Any indication of fingers.
-18. Two legs at opposite end of body from head.
-19. Proportion of legs: length of the legs not less
than the vertical measurement of trunk nor greater
than twice the measurement.
-20. Knees: definite angle in legs.
-21. Second definite angle in legs in opposite direction
from knee angle.
-22. Proportion of feet: the length of the foot must
not be greater than its height from sole to instep.
-23. Toes present: Any clear presentation of toes.
-24. Any extra items or detail.....
.....
.....
.....
.....
.....

Appendix V

Role Title List

- THE REP. TEST.

- A - The fastest person you know personally.
- B - A boy you do not like.
- C - The slowest person you know personally.
- D - The most intelligent person you know personally.
- E - The most dishonest person you know personally.
- F - A boy you like.
- G - Your sister nearest your age or somebody most like one to
you.
- H - The person you feel most sorry for.
- I - A person you would enjoy most as a companion on a long
journey.
- J - A person whom you would not enjoy having as a companion on
a long journey.

Sorts or Combinations

ABC

EFH

JGD

IBA

CJH

Appendix VI

Rating Sheet - The Rep. Test.

Subject..... School.....

Group..... Grade.....

Name of (Male) Class mate.....

<u>Construct Dimension</u>	<u>Very</u>	<u>Just</u>	<u>Av.</u>	<u>Just</u>	<u>Very</u>
1. Wacithandizo (helpful) - wacigolo (greedy)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Wanzelu (clever)-wopanda nzelu (dull)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Mulesi (lazy)-Wogwila nchito (hard working)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Wokamba kamba (talkative) - Osakamba kamba	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Wacifundo (kind) - aliye cifundo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Name of (Female) Classmate.....

1. Wacithandizo - wacigolo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Wanzelu - Wopanda nzelu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Mulesi - Wogwila nchito	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Wokambakamba - Osakambakamba	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Wacifundo - Aliye cifundo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix VII

Taped Story and Questions - Aggression Test

NYANJA VERSION:

Kale kale kunali m'nyamata amene amakhala mudela lafumu Mpezeni. Dzina lace anali Mavuto. Anali m'nyamata wacabe cifukwa anali kuthyola makhiceni a anthu pamene akulu akulu amudzimo anali kuminda. Pamene atathyola makhiceniwo anaba zakudya ndi ndarama. Pamene asanacoke kupita kumudzi wina anaononga mapoto, mbale ndimazila zimene anapeza mukhicerimo.

Analiso m'nyamata wacabe cifukwa anali kumenya ana ang'ono ang'ono amene anapeza akusewera muzimo. Kodi kuti unapeza Mavuto ali kuba, kuthyola zinthu ndiku menya ana ang'ono ang'ono kodi cilango cimene ungapatse ndicotani?

ENGLISH VERSION:

A long time ago there was a boy who lived in Mpzeni's area. His name was Mavuto. He was a bad boy because he used to break into people's kitchens to steal food and money while the elders of the village were out in the fields. Before he left for the next village Mavuto broke pots, plates and eggs he found in the kitchen.

Mavuto was also a bad boy in that he used to beat up small boys and girls he found playing in the village. If you found Mavuto stealing and beating up children, what punishment would you give him?

Scale (Nyanja)

- (a) Ningamuuze cabe kuti asaziba..... 1
- (b) Ningamu menye mambama ang'ono nakumuuza kuti
asakabenso..... 2
- (c) Ningatenge cimutengo cikulu naku kwapula Mavuto
ngako cakuti angalepele nakuyenda..... 3
- (d) Ningatenge nkwangwa nakujuba vimbombo va Mavuto
kuti asakabenso..... 4

Scale (English)

- (a) I would simply advise Mavuto not to steal..... 1
- (b) I would slap him and advise him not to steal..... 2
- (c) I would take a big stick and hit Mavuto so hard
that he would fail to walk..... 3
- (d) I would take an axe and cut Mavuto's fingers so
that he would **not steal** again..... 4

...

Appendix VIII

Scoring Sheet

- Discipline Test

Dear Madam/Sir

Attached is a list of names of some of the boys in your class. Please do me a favour by rating the boys on the six disciplinary issues given below. Simply write the name of the child in the appropriate category basing your judgment on your personal knowledge of the child.

Disc. Issue Number	Cate- gory		Name of Pupil.
i	(a)	<u>Coming late for classes</u>
		Come late for classes
		most of the time
		(Poor - 0 points)
		
	(b)	Sometimes come late for
		classes
		(Fair - 1 point
		
		
	(c)	Rarely come late for
		classes - 2 points
		
		
		

Disc. Issue Number	Cate- gory		Name of Pupil.
ii		<u>Uncooperativeness in Group</u>
		<u>situations</u>
	(a)	Uncooperative most of the
		time
		(Poor - 0 points)
		
		
	(b)	Sometimes uncooperative
		in Group situations
(iii)		(Fair - 1 point)
		
		
	(c)	Rarely uncooperative in
		group situations
		(Good - 2 points)
		
		
		
(a)		<u>Truancy</u>	
		Often do not come to
		school
		(Poor - 0 points)
		
		

(iii) (Continued)

Disc. Issue Number	Cate- gory		Name of Pupil.
(iii)		<u>Truancy</u>	
	(b)	Sometimes do not come to
		school
		(Fair - 1 point)
		
	(c)	Rarely fail to come to
		school
		(Good - 2 points)
		
iv		<u>Noisy in Class</u>
	(a)	Often noisy in class
		(Poor - 0 points)
		
		
	(b)	Sometimes noisy
		in Class
		(Fair - 1 point)
		
	(c)	Rarely noisy in
		class
		(Good - 2 points)
		

Disc. Issue Number	Cate- gory		Name of Pupil.
(v)		<u>Response to Assigned Work</u>
	(a)	Often make very little attempt to complete assigned work (Poor - 0 points)
	(b)	Sometimes make no effort to complete assigned work (Fair - 1 point)
	(c)	Rarely fail to complete assigned work.
vi		<u>Restlessness (inability to sit still)</u>
	(a)	Most of the time restless in class (Poor - 0 points)

vi (Continued)

Disc. Issue Number	Cate- gory		Name of Pupil.
		Restlessness (inability)	
	(b)	Sometimes restless
		in class
		(Fair - 1 point)
		
		
	(c)	Rarely restless
		in class
		(Good - 2 points)
		
		
		

Appendix IX .

The Rep. Test - Example of Derivation of
Differentiation Index.

SUBJECT NO.

10

Step 1. Raw data judgments of 1st male peer

Name of peer (Male Classmate) - John Zulu.

Construct Dimension		Very	Just	Ave	Just	Very
1. Wacithandizo	- wacigolo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Wanzelu	- Wopanda nzelu	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Mulesi	- Wogwila nchito	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Wokambakamba	- Osakambakamba	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Wacifundo	- aliye cifundo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Score on this first male peer

6

Name of peer (Female Classmate) - Elizabeth Phili

Construct Dimension		Very	Just	Ave	Just	Very
1. Wacithandizo	- Wacigolo	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Wanzelu	- wopanda nzelu	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Mulesi	- wogwila nchito	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix IX (Continued)

4. Wokambakariba - Ooakambakamba ☐ ☐ ☐ ☒ ☐

5. Wacifundo - Aliye cifundo ☐ ☐ ☒ ☐ ☐

Score on this first female peer =

Step 2. Compute scores on all 5 male and 5 female peers
as above.

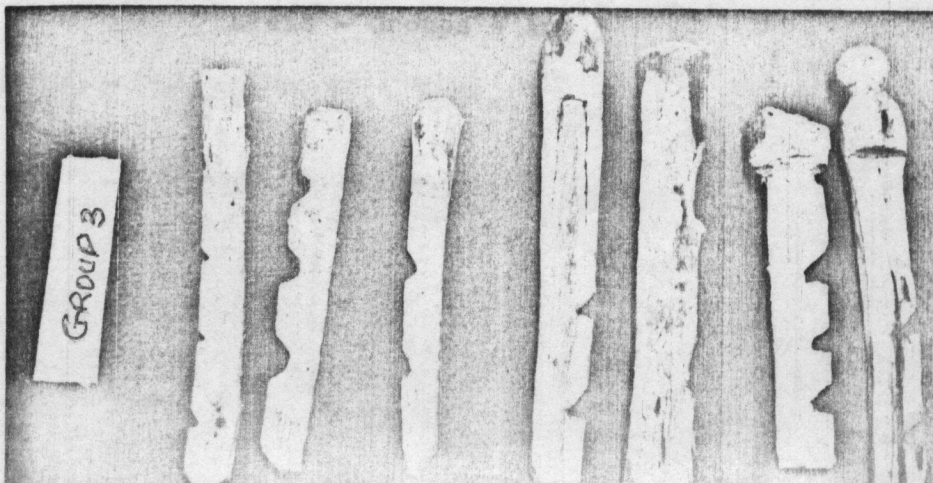
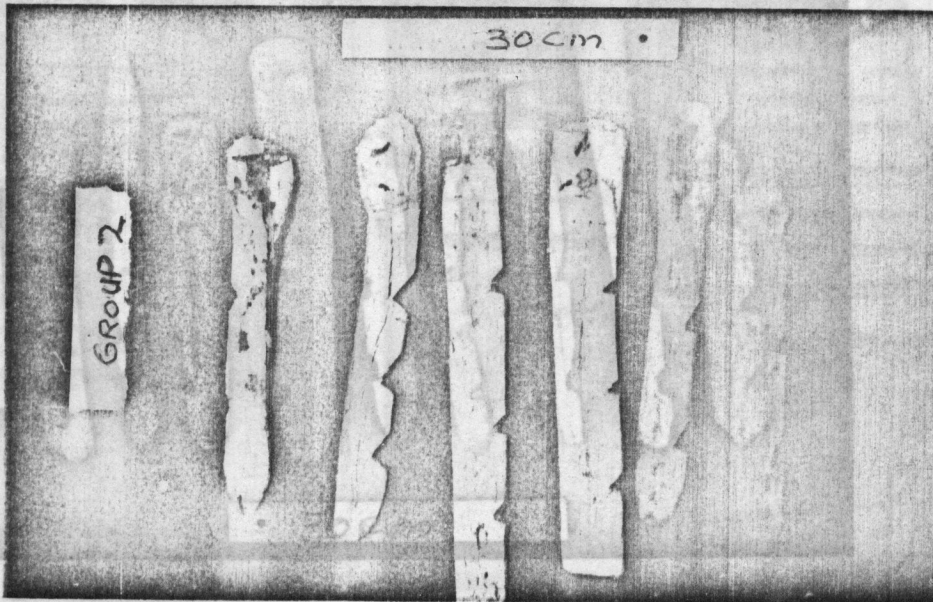
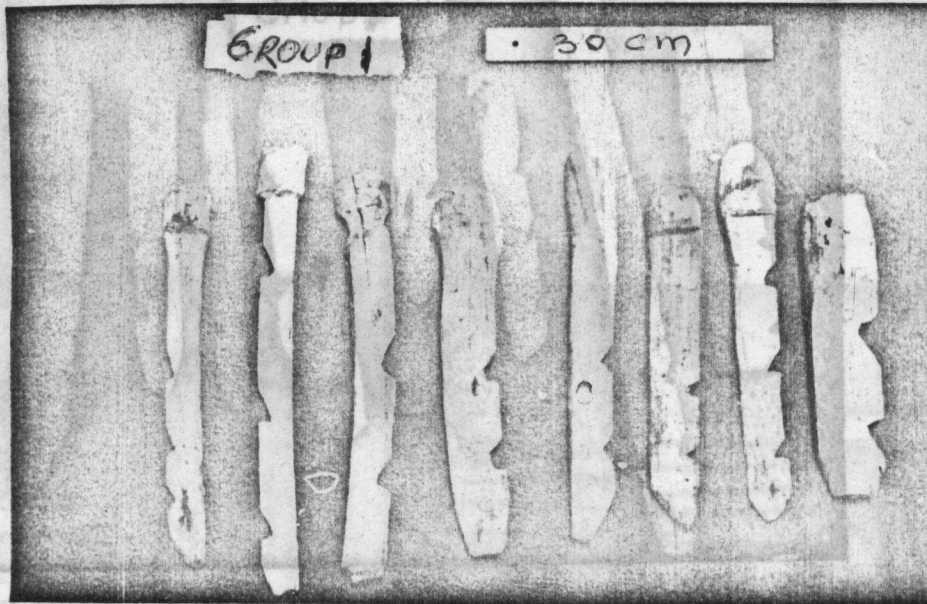
Step 3. TOTAL Score on 5 male peers = A

Step 4. TOTAL Score on 5 female peers = B

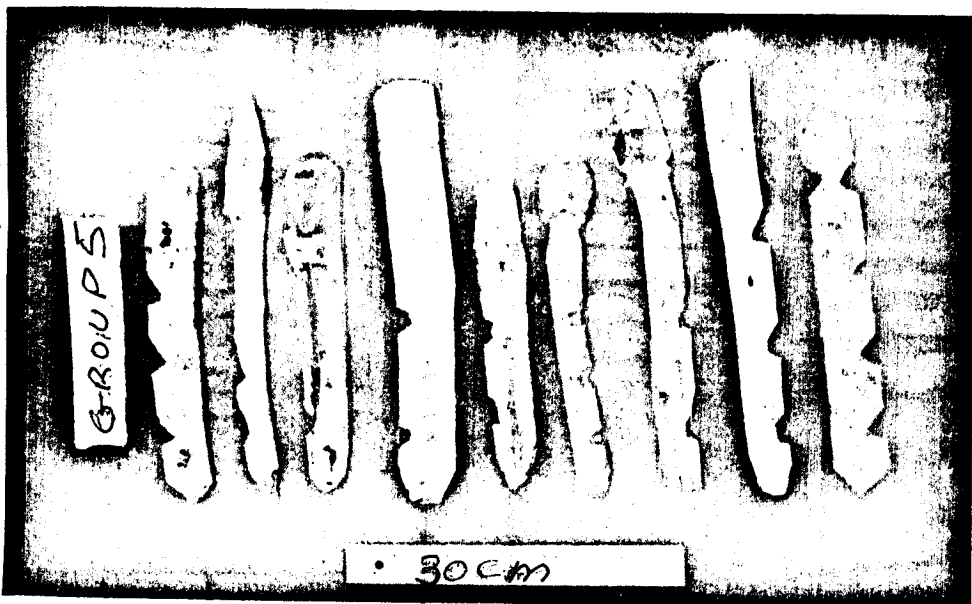
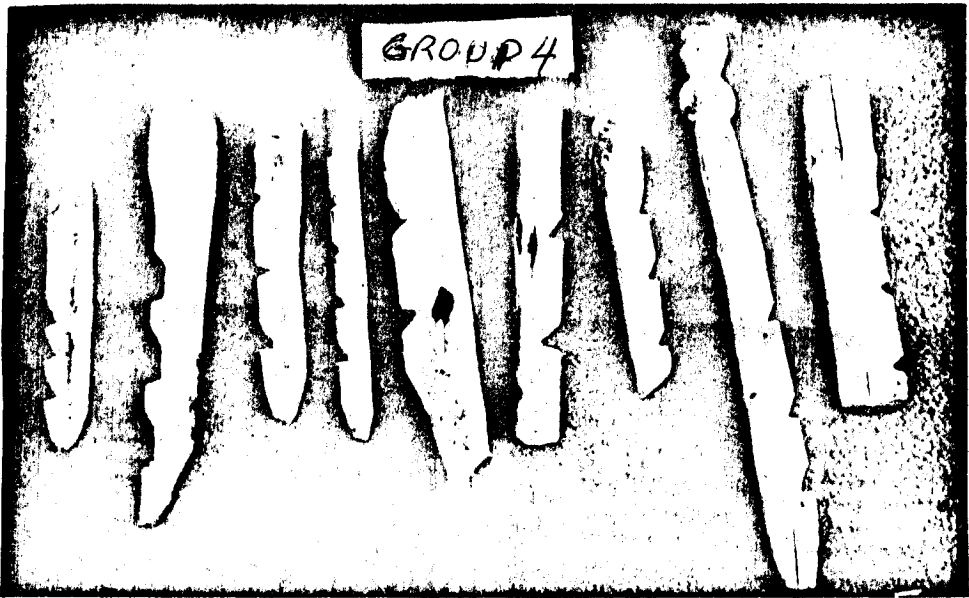
Step 5. Difference Score males Vs. females = A - B
= 30-28 = 2

Appendix A - 1

Skeis - Groups 1, 2 and 3

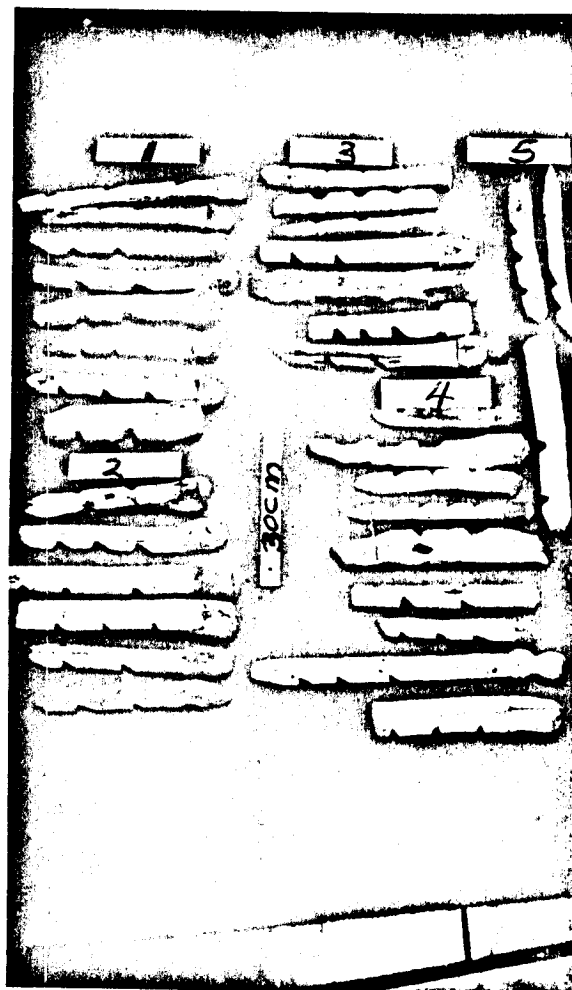
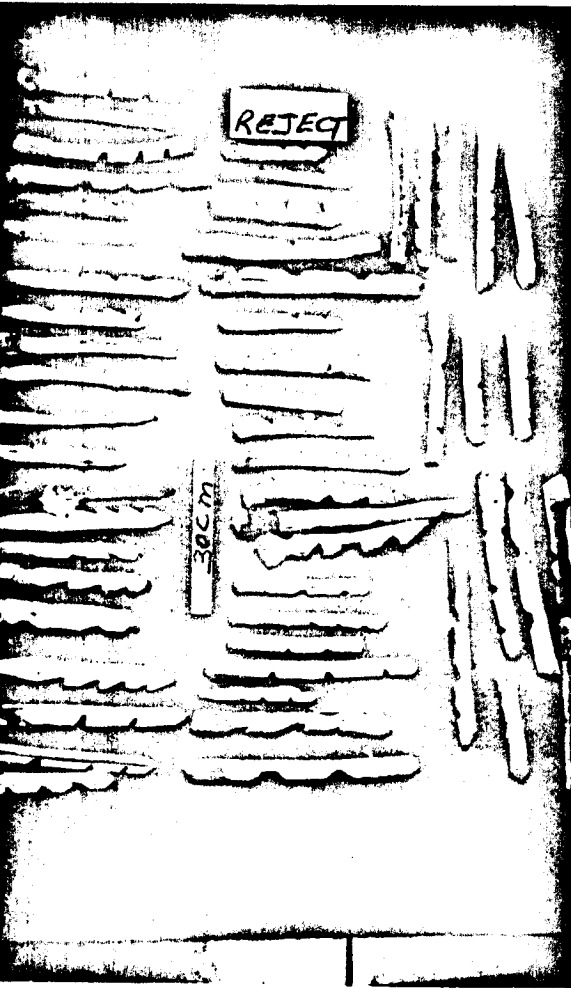


Appendix A - 2



Skeis - Groups 4 and 5

Appendix A - 3



Skeis - Reject Group (left)

- Groups 1 - 5 (right)