

INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms

300 North Zeeb Road
Ann Arbor, Michigan 48106

75-16,860

EDWARDS, Carolyn Pope, 1947-
THE EFFECT OF EXPERIENCE ON MORAL DEVELOPMENT:
RESULTS FROM KENYA.

Harvard University, Ed.D., 1974
Education, psychology

Xerox University Microfilms, Ann Arbor, Michigan 48106

© 1975

CAROLYN POPE EDWARDS

ALL RIGHTS RESERVED

THIS DISSERTATION HAS BEEN MICROFILMED EXACTLY AS RECEIVED.

THE EFFECT OF EXPERIENCE ON MORAL DEVELOPMENT:
RESULTS FROM KENYA

A Thesis
Presented to
the Faculty of the Graduate School of Education of
Harvard University
in partial fulfillment of the requirements for
the degree of Doctor of Education

1974

Carolyn Pope Edwards

ABSTRACT

This study considers the effect of environmental influences upon the development of moral reasoning. In Kenya in 1972 to 1973 the author interviewed 51 Kikuyu secondary students (26 female, 25 male) and 52 University of Nairobi students of assorted ethnic groups (17 female, 35 male), using adapted versions of Lawrence Kohlberg's moral judgment interview. Performance on this interview (as measured by a six stage scale of moral judgment maturity) has been related to specific backgrounds and experience factors. With controls for age, sex, ethnic group, and level of school achievement, four hypotheses concerning the effect of social and intellectual experiences have been tested and confirmed, using a correlational analysis.

First, it is shown that students who have attended secondary schools with multicultural student bodies display higher levels of moral judgment than do students who have attended ethnically homogeneous schools. These findings support the hypothesis that if the interaction between groups takes place in an atmosphere of mutual willingness to learn rather than hostility and avoidance, then the experience of meeting people with different value systems stimulates preconventional (Stages 1 and 2) students to move toward the "adult," conventional perspective of Stages 3 and 4.

Second, it is shown that students who have had the experience of living at boarding schools likewise show more Stages 3 and 4 reasoning than do students living at home, who show more of Stages 1 and 2. This finding supports the hypothesis that moving away from the top-down authority system of the family to the more equalitarian and cooperative world of peers can stimulate moral reasoning by providing an opportunity to engage in extended, free, and reasoned discussions of value questions. Further, this second influence is shown to interact with a third influence, that of coming from a modernized type of family background. The analysis shows that among students still living at home, students from modernized families (where parents favor non-authoritarian child-rearing practices) score higher than students from traditional families (where parents expect unquestioning obedience); but the experience of living at school causes the traditional students to accelerate their developmental pace and catch up to the modernized students (over the course of about five years).

The fourth hypothesis relates to the experience of studying the Social Sciences or Law at the university level. Students majoring in these fields show more Stages 3, 4, and 5 and less Stage 2 than do students in such fields as Engineering and Medicine. In addition, an open-ended

interview found that University subjects themselves considered that the study of such subjects as Sociology and Government had stimulated their moral reasoning.

The study concluded by considering the question of whether only individuals in complex societies manifest Stages 4, 5, and 6. According to this view, Stage 3 represents the appropriate level of mature moral reasoning for responsible and influential adults living in small-scale, village-based societies, such as those of traditional Kenya. The argument is supported by data from 36 "community leaders," interviewed by trained University of Nairobi students in their home areas throughout Kenya. Stage 3 is the highest stage used by the nonschooled village leaders, while Stage 4 appears in the interviews of school teachers, businessmen, and other white-collar workers. Excerpts from the interviews of the traditional adults demonstrate how Stage 3 reasoning agrees with the forms of conflict resolution and social control encountered in traditional village life.

ACKNOWLEDGEMENTS

Every thesis requires the help of many people; in the case of this one most of those people are living in Kenya where I cannot now thank them personally. Especially in their case these acknowledgements must serve to convey my appreciation.

First and foremost I want to thank all of the secondary and university students of Kenya who talked with me about their moral values and concepts. They were un-failingly cordial, hospitable, and willing to help, and interviewing them made my year in Kenya fascinating, valuable, and full of pleasure. In addition, I am most grateful to the headmasters, principals, and teachers at the secondary schools which I visited for making it possible for me to interview so many of their students. I hope that all of these people find this study plausible and informative, and in agreement with some of their own intuitions about how experience directs the moral development of young people in Kenya.

I also wish to express my thanks to Dr. Albert Maleche, Director, and the staff of the Bureau of Educational Research at the University of Nairobi for their assistance in carrying out this study. The research was conducted while I was a Research Associate at the Child

Development Research Unit, now part of the Bureau of Educational Research, and was made possible by a grant from the Carnegie Corporation to C.D.R.U. (John Whiting, Director). At C.D.R.U. my research assistants, especially Salma Gulamali, Ezra arap Maritim, and Runo Elijah, taught me to understand and care for the people and customs of Kenya and gave me a special kind of friendship, that between people with different cultural pasts and hence different styles of appreciating the good things in life. For their steadfast loyalty, good humor, and work beyond the call of duty, my heartfelt thanks. To Michael Wangai Richards, Bela Ghai, Trippy Nyer, Moses Ntembo, and other members of the staff at C.D.R.U., my appreciation for the many great and small ways in which they furthered the study. To my colleague, Richard Sweder, thanks for his help in clarifying intellectual issues and planning research strategies.

Many members of the Moral Education and Research Foundation at Harvard extended to me the benefits of their years of experience with moral development research techniques. In particular, Betsy Speicher and Laura Rogers performed the often difficult task of rating the interviews. Carol Gilligan enthusiastically explored the portions of the data which seemed to reveal Kenyan orientations and styles of moral reasoning and sharpened my focus on the

specific transitions which the data address. Marc Lieberman gave much appreciated advice on statistical problems.

The intellectual debt which I owe to all of my advisors is large. Lawrence Kohlberg's cognitive-developmental view of morality, which I have learned from him at the Laboratory of Human Development, has shaped my basic perspective in fundamental ways. Elliot Turiel's interviewing techniques and insight into the process of change in adolescents have had a primary influence on the design of the study.

Without any doubt, however, the two people who have given me most are my great friends, Beatrice and John Whiting. Year after year these two have earned the thanks and admiration of their students for the intellectual inspiration which they provide. But also the Whitings are remembered for their rare and very special kind of concern in the way that they support others' personal development, especially when their students attempt to construct ideas of their own. The Whitings have shared with me and many others their values of scientific teamwork, non-competitive give and take of ideas, and the importance of making room in life for sociability. Their guidance has been especially meaningful to me because I share their functionalist and "materialist" view of child development, one that bases

accounts of cognition and personality on the description of the everyday lives of human beings.

Finally, many, many thanks to the people without whose help, support, and entertainment I never would have finished this thesis: Dorothy Linick, the indefatigable, accomplished the typing with her usual exceptional competence; the members of our house at Raymond Street made this year one which I wish had not passed so quickly. In particular, Margaret Levi provided such closeness and fellowship as she wrote her own dissertation that neither of us knows whether to be more pleased with our own or the other person's finished work.

And, of course, without my husband, Rick, for his never-failing Nu 02's and Soc 15's, freely given and gratefully received, this thesis would probably never have been written.

TABLE OF CONTENTS

<u>CHAPTER NUMBER</u>	<u>PAGE NUMBER</u>
LIST OF TABLES	xi
1. INTRODUCTION.	1
I. The Cognitive Theory of Moral Development	4
II. The Relation of Moral Stages to Societal Complexity	10
III. Environmental Influences on Individual Moral Development	17
IV. Kenya As The Setting For A Study of Moral Development	24
V. Purposes of A Study of Moral Development in Kenya.	33
2. METHODOLOGY--UNIVERSITY SAMPLE	49
Characteristics of the Sample	45
Recruitment of the Sample	45
The Question of Self-Selection Bias	47
Interview on Background Information	48
The Moral Judgment Interview.	48
Coding and Reliability	55
Interview on Past Experiences in School	56
Operationalizing the Variables	57
The Measure of Moral Judgment	57
Measures of Background Information, the Independent Variables	61
3. METHODOLOGY--HIGH SCHOOL SAMPLE	70
The Sample	70
The Question of Selection Bias	78
Interviewing the Students	79
The Interview on Background Information	80
The Moral Judgment Interview.	80
Coding and Reliability	81
Operationalizing the Variables	81
The Measure of Moral Judgment	86
Measures of Background Information, the Independent Variables	89

<u>CHAPTER NUMBER</u>		<u>PAGE NUMBER</u>
4.	METHODOLOGY--COMMUNITY SAMPLE	92
	The Method of Data Collection	93
	The Sample	96
	The Interview on Background Information	102
	The Moral Judgment Interview	103
	Coding	103
	Operationalizing the Variables	103
	The Measure of Moral Judgment	104
	The Measure of Background Information, the Independent Variables.	104
5.	OVERALL RESULTS--THE THREE SAMPLES	111
	Means and Distributions of Moral Stage Scores by Sample	111
	Distribution of Moral Judgment Scores by Education Levels	113
	Distribution of Moral Judgment Scores by Age Levels	115
	Distribution of Moral Judgment Scores by Sex.	115
	Distribution of Moral Judgment Scores by Ethnic Group	115
6.	RESULTS--UNIVERSITY SAMPLE	120
	The Relationship of Moral Judgment to Background Variables	120
	The Multivariate Test of the Independent Variables.	139
7.	THE INTERVIEW ON PAST EXPERIENCES WITH THE UNIVERSITY STUDENTS	144
	Living Independently	146
	Mixing With People from Different Cultural Backgrounds	151
	Studying Sociology, Religion, and Related Fields in School	156
8.	RESULTS--HIGH SCHOOL SAMPLE	160
	The Relationship of Moral Judgment Stage to Background Variables	160

<u>CHAPTER NUMBER</u>	<u>PAGE NUMBER</u>
	The Multivariate Test of the Independent Variables 172
9.	RESULTS--COMMUNITY SAMPLE 178
	The Relationship of Moral Judgment Score to Background Variables, for the Student Portion of the Community Sample. 178
	The Relationship of Moral Judgment Score to Background Variables, for the Adult Portion of the Community Sample. 189
	Stage Three Reasoning in the Interviews of the Traditional African Adults. 199
10.	SUMMARY AND CONCLUSIONS 208
 <u>APPENDICES:</u>	
I.	Means of Contacting and Recruiting Subjects Used with the University Sample (N = 52) 231
II.	The Student Body of the University of Nairobi (As of 20th September, 1972), Broken Down by Major Field of Concentration, Sex, and Year 233
III.	The Scoring of the Moral Judgment Interview 237
IV.	Inter-Rater Reliability for the Moral Judgment Score 250
V.	Categories Used to Classify Subjects' Friendship Choices 252
VI.	Characteristics of the Adults in the Community Sample--Their Ages, Sex, Occupations, and Positions of Community Responsibility. 254
VII.	Characteristics of the Students in the Community Sample--Their Ages, Sex, Year of Secondary School, and Name and Type of School Attended 258
VIII.	The Distribution of African and Asian Students by Faculties at the University of Nairobi. 262
IX.	The Use of Multiple Regression Analysis as a Multivariate Technique for This Thesis 268
X.	Rank Order Intercorrelation of Independent Variables for the University Sample 273
XI.	Ethnic Breakdown of the Form Four Classes, at the Secondary Schools at Which the Author Interviewed 275

CHAPTER
NUMBER

PAGE
NUMBER

BIBLIOGRAPHY 277

VITA 283

LIST OF TABLES

<u>TABLE NUMBER</u>		<u>PAGE NUMBER</u>
1.1	Definition of the Moral Stages	6
1.2	Number of Pupils in Primary School (by Standard) and Number in Secondary School (by Form), in 1968	32
2.1	Characteristics of the University Sample	46
2.2	The University Moral Judgment Interview.	49
2.3	Independent and Dependent Measures for the University Sample	58
2.4	Intercorrelation of Measures Related to Modernization for the University Sample.	68
2.5	Creation of the Index of Modernization, for the University Sample	69
3.1	Size of the Sample--Secondary School Subjects Attending All-Kikuyu Schools .	73
3.2	Size of the Sample--Secondary School Subjects Attending Racially Mixed Schools	76
3.3	Characteristics of the High School Sample	77
3.4	The High School Moral Judgment Interview	82
3.5	Independent and Dependent Measures for the High School Sample	87
3.6	Intercorrelation of Measures Related to Modernization, for the High School Sample	90
3.7	Creation of the Index of Modernization for the High School Sample	91
4.1	The Community Sample	98
4.2	Characteristics of the Community Sample.	99

<u>TABLE NUMBER</u>		<u>PAGE NUMBER</u>
4.3	Independent and Dependent Measures; for the Student Portion of the Community Sample	105
4.4	Independent and Dependent Measures, for the Adult Portion of the Community Sample.	107
4.5	Intercorrelation of Measures Related to Modernization, for the Student Portion of the Community Sample	108
4.6	Creation of the Index of Modernization, for the Student Portion of the Community Sample	109
5.1	Means, Standard Deviations, and Frequency Distributions of the Moral Judgment Score, Broken Down by Sample.	112
5.2	Frequency Distributions of the Moral Judgment Score, Broken Down by Education Levels	114
5.3	Frequency Distributions of the Moral Judgment Score, Broken Down by Age Levels.	116
5.4	Frequency Distributions of the Moral Judgment Score, Broken Down by Sex	117
5.5	Frequency Distribution of the Moral Judgment Score, Broken Down by Ethnic Group.	118
6.1	Group Differences Between the African and Asian Subjects in the University Sample	121
6.2	Pattern of Distribution of Moral Judgment Scores, for Male and Female Subjects (University Sample)	124
6.3	The Relationship Between Age and Moral Judgment Scores, for the University Sample	125

<u>TABLE NUMBER</u>		<u>PAGE NUMBER</u>
6.4	The Relationship of Family Level of Modernization to Moral Judgment Scores, for the University Sample	127
6.5	The Relationship of Time Spent Living Away to Moral Judgment Scores, for the University Sample	128
6.6	The Interaction of Modernization and Time Spent Living Away In Their Effects on Moral Judgment Scores, for the University Sample	130
6.7	Pattern of Distribution of Moral Judgment Scores, for Students in Different Major Fields of Concentration (University Sample)	132
6.8	The Relationship of Moral Judgment Score to Choice of Friends from Other Cultural Groups, for the University Sample	137
6.9	Intercorrelation of Independent Variables, for the University Sample	140
6.10	Multiple Regression Results for the Moral Judgment Score (University Sample).	142
8.1	The Relationship Between Age and Moral Judgment Scores, for the High School Sample	161
8.2	Pattern of Distribution of Moral Judgment Scores, for Male and Female Subjects (High School Sample)	164
8.3	The Relationship of Family Level of Modernization to Moral Judgment Scores, for the High School Sample.	166
8.4	The Interaction of Modernization and Time Spent Living Away.	168
8.5	The Relationship of Moral Judgment Scores to Choice of Friends From Other Cultural Groups, for the High School Sample.	171

<u>TABLE NUMBER</u>		<u>PAGE NUMBER</u>
8.6	Intercorrelation of Independent Variables, for the High School Sample	174
8.7	Multiple Regression Results for the Moral Judgment Score (High School Sample).	175
9.1	Intercorrelation of Background Variables and Moral Judgment Scores, for the Student Portion of the Community Sample.	180
9.2	The Relationship of Moral Judgment Scores to Level of Education, for the Student Portion of the Community Sample.	181
9.3	Pattern of Distribution of Moral Judgment Scores, for Male and Female Subjects (Students, Community Sample)	182
9.4	The Relationship of Age to Moral Judgment Scores and Education, for the Student Portion of the Community Sample.	183
9.5	The Relationship of Family Level of Modernization to Moral Judgment Scores, for the Student Portion of the Community Sample	186
9.6	The Relationship of Modernization to Moral Judgment Scores, After Partialling Out the Effect of Age (Students, Community Sample).	187
9.7	The Interaction of Modernization and Time Spent Living Away In Their Effects on Moral Judgment Scores, for the Student Portion of the Community Sample.	188
9.8	Intercorrelation of Independent and Dependent Variables (Adults, Community Sample)	191
9.9	Ethnic Group Differences (Adults, Community Sample).	192

<u>TABLE NUMBER</u>		<u>PAGE NUMBER</u>
9.10	Racial Differences in Education (Adults, Community Sample)	192
9.11	Distribution of Moral Stages by Educational Levels (Adults, Community Sample)	193
9.12	Distribution of Moral Stages by Occupational Levels (Adults, Community Sample)	195
9.13	Distribution of Moral Stages by Sex (Adults, Community Sample).	197
10.1	Distribution of Subjects by Sample in the Cells of the Analysis of Variance (Table 10.2)	217
10.2	Analysis of Variance Results, for Effect of Father's Education and Time Spent Living Away on Moral Judgment Scores	218

CHAPTER 1

INTRODUCTION

The cognitive theory of moral development provides a new and important orientation to the study of socialization. Each person's moral perspective is seen as more than an idiosyncratic collection of attitudes and values which are derived from the society. Rather, the cognitive theory asserts that all individuals formulate their own moral systems, based on what they perceive about human relations and what others say about moral issues. Using the methodology developed by Lawrence Kohlberg (1958), it is possible to describe a basic and finite set of forms of moral decision-making employed by people and to investigate the way in which they constitute a hierarchical sequence of stages. Many of Kohlberg's papers have addressed these issues (1969, 1971). The description of the stages is important because it provides a framework for understanding a part--and exceedingly orderly and fundamental part--of the change in moral values and ideas which a person undergoes in the process of social and moral development.

However, a complete cognitive theory of moral development requires not only an understanding of the structure of the sequential stages, but also an explanation of

why developmental change occurs and of how adults use their systems of morality in solving problems of everyday life. In other words, the developmental scheme needs to be related to the social contexts in which children grow up and to those in which adults function. To date, discussion of which specific kinds of family or peer experience might facilitate the development of moral reasoning has been largely speculative (Kohlberg, 1969, 1971). Similarly, the most complete theory relating societal organization to moral development is based on holistic anthropological data, not interviews of individual subjects living in different lands or societies (Hobhouse, 1906). In this thesis cross-cultural data from Kenya will be used to test several specific hypotheses about the effect of environmental influences on individual development, and an attempt will be made to show the connection between adult moral judgment and the traditional and modern social contexts in which the people of Kenya live.

Cross-cultural research can be of signal usefulness in studying the social context of moral development. It provides a way of looking at something beyond individual differences among people in our own society. Different patterns of organization and social change in other parts of the world offer an opportunity to pry apart variables

which in our own setting are hopelessly locked together. For example, in the United States there is an inextricable confounding of social class-related life styles, economic power and status, and performance on tests of cognitive ability. It is difficult to find significant numbers of children from poor backgrounds who do well in school and score highly on achievement measures. In contrast, in Kenya there is a different mix of these variables and it is possible to find a large number of high school students who come from traditional rural backgrounds but who score highly on the national standardized examinations.

Cross-cultural data also gives one a perspective on the stages of moral judgment themselves. It provides an organized standpoint from which to interpret the criteria which should be used to study moral development. Of course, people in different cultures conceptualize and regulate their lives in different ways. By comparing and analyzing their performance on the moral judgment interview, a broader sense is gained of what kind of thinking is used for assessment with this particular measure. Rather than simply using the measure to gain insight on people, the people are used to learn about the measure.

I. The Cognitive Theory of Moral Development

The cognitive theory of moral development represents a synthesis of ideas from philosophy and psychology. As proposed by Kohlberg (1958), its major theoretical forefathers are James Mark Baldwin, George Herberg Mead, L. T. Hobhouse, John Dewey and James Tufts, and Jean Piaget. From Baldwin (1902) came the conceptions of the stages, especially the descriptions of the first two stages, and the equilibration theory of transition. Mead (1934) provided the theory of role-taking as central to moral development. From Hobhouse (1906) came an emphasis on concepts of duty, obligation, and rights of the individual and an evolutionary perspective which connects moral development to advance in societal complexity. Dewey and Tufts (1908) propounded a three-tiered conception of pre-customary, customary, and reflective levels of morality, closely analogous to Kohlberg's preconventional, conventional, and postconventional levels. Finally, from Piaget (1932) came the theory of reciprocity and the method of the clinical interview. Hypothetical moral dilemmas, the heart of Kohlberg's method, represent an elaboration of the method of questioning which Piaget used with young children.

Kohlberg's developmental sequence consists of six stages, grouped into three levels. A summary of these stages

is presented below, in Table 1.1. The preconventional moral level, which includes Stages 1 and 2, is the level of most children and some adolescents and adults. Reasoning at this level does not yet reflect a group perspective on moral rules, in which the individual thinks that conduct should be regulated by moral standards for some more or less conscious end involving social justice and the social welfare. Rather, the point of view is simply that of an individual actor in a situation considering his or her own interests and those of other individuals he or she cares for. The person may judge that conduct should be in accord with moral rules, but his or her reasoning is not directed by moral ideals "for their own sake." Rather, it is regulated by an idea of it being right to avoid punishment (Stage 1) or to maximize individual welfare (Stage 2).

In contrast, the conventional and postconventional levels consist of the four stages seen in most adults-- Stages 3 through 6. These four stages should perhaps collectively be known as the ideal level of moral judgment because all are based on the understanding that conduct should be regulated by a standard which is social. This is the "member of society" perspective, at which maintaining the moral expectations of the self or of the individual's group is perceived as a valuable goal in its own right, regardless

Table 1.1: Definition of the Moral Stages

I. Preconventional Level

At this level the child is responsive to cultural rules and labels of good and bad, right or wrong, but interprets these labels in terms of either the physical or the hedonistic consequences of action (punishment, reward, exchange of favors), or in terms of the physical power of those who enunciate the rules and labels. The level is divided into the following two stages:

Stage 1: The punishment and obedience orientation. The physical consequences of action determine its goodness or badness regardless of the human meaning or value of these consequences. Avoidance of punishment and unquestioning deference to power are valued in their own right, not in terms of respect for an underlying moral order supported by punishment and authority (the latter being stage 4).

Stage 2: The instrumental relativist orientation. Right action consists of that which instrumentally satisfies one's own needs and occasionally the needs of others. Human relations are viewed in terms like those of the market place. Elements of fairness, of reciprocity, and of equal sharing are present, but they are always interpreted in a physical pragmatic way. Reciprocity is a matter of "you scratch my back and I'll scratch yours," not of loyalty, gratitude, or justice.

II. Conventional Level

At this level, maintaining the expectations of the individual's family, group, or nation is perceived as valuable in its own right; regardless of immediate and obvious consequences. The attitude is not only one of conformity to personal expectations and social order, but of loyalty to it, of actively maintaining, supporting, and justifying the order, and of identifying with the persons or group involved in it. At this level, there are the following two stages:

Stage 3: The interpersonal concordance or "good boy--nice girl" orientation. Good behavior is that which

Table 1.1: (continued)

pleases or helps others and is approved by them. There is much conformity to stereotypical images of what is majority or "natural" behavior. Behavior is frequently judged by intention--"he means well" becomes important for the first time. One earns approval by being "nice."

Stage 4: The "law and order" orientation. There is orientation toward authority, fixed rules, and the maintenance of the social order. Right behavior consists of doing one's duty, showing respect for authority, and maintaining the given social order for its own sake.

III. Postconventional, Autonomous, or Principled Level

At this level, there is a clear effort to define moral values and principles which have validity and application apart from the authority of the groups or persons holding these principles, and apart from the individual's own identification with these groups. This level again has two stages:

Stage 5: The social-contract legalistic orientation, generally with utilitarian overtones. Right action tends to be defined in terms of general individual rights, and standards which have been critically examined and agreed upon by the whole society. There is a clear awareness of the relativism of personal values and opinions and a corresponding emphasis upon procedural rules for reaching consensus. Aside from what is constitutionally and democratically agreed upon, the right is a matter of personal "values" and "opinion." The result is an emphasis upon the "legal point of view," but with an emphasis upon the possibility of changing law in terms of rational considerations of social utility (rather than freezing it in terms of stage 4 "law and order"). Outside the legal realm, free agreement and contract is the binding element of obligation. This is the "official" morality of the American government and constitution.

Stage 6: The universal ethical principle orientation. Right is defined by the decision of conscience in accord with self-chosen ethical principles appealing to logical

Table 1.1: (continued)

comprehensiveness, universality, and consistency. These principles are abstract and ethical (the Golden Rule, the categorical imperative); they are not concrete moral rules like the Ten Commandments. At heart, these are universal principles of justice, of the reciprocity and equality of human rights, and of respect for the dignity of human beings as individual persons.

From Kohlberg (1971, pp. 164-165).

of immediate and obvious consequences. Although no estimates exist for the frequencies of each of these four stages in any adult population, even the United States, it is likely that Stage 3 is the most common, followed by 4, and that 5 and 6 are exceedingly infrequent. Stages 3 and 4, the conventional level, will be most emphasized in this thesis because they predominate in the adult samples from Kenya.

Individuals at Stages 3 and 4 define morality in terms of the social groups of which they are members. They adhere to these values primarily because they belong to that group and conceive of their welfare and identity as being inseparable from that group. For example, one of the university subjects in this study was a member of the Kikuyu ethnic group and argued that it is obligatory to help a stranger in trouble because of Kikuyu values:

Well, we have got an obligation, in fact, for our people. Our people at least are not happy or do not like seeing other people in danger or something, whether it's a friend or not a friend of mine. Even if it is somebody not from your tribe or somebody you don't know. It's a sort of training from the beginning to extend friendship or kindness to others. This is the training the Kikuyu society has, of extending kindness to others, especially for the people who are in danger. (s. 108, Stage 3)¹

This student also stated that a father should educate his son in preference to another relative "because it's his son. This being his son--there is so much regard in our culture for one's children." This student is so embedded in his own group that he sees the value of kindness to strangers and love of one's children as Kikuyu conceptions and, therefore, right. These two conventional stages differ in that Stage 3 defines morality in terms of the legitimate expectations of the community, assumed to be a kind of homogeneous whole with a unified will, while Stage 4 defines morality from the perspective of an abstract system, with the needs of social institutions and social order taking priority over individuals'

¹Throughout this thesis, quotations from subjects will be followed by their identification number and their moral stage score as determined from their full interview. The following convention for designating moral stages will be followed: the primary, or major, stage is given first followed by the secondary, or minor, stage (if any) placed in parentheses.

isolated interpersonal relationships. Stage 4 includes the conceptions that individuals and groups in society may have conflicting expectations and that, consequently, obligations must be established in terms of legal precedence and contractual agreement.

Whereas at the conventional level right and wrong are defined by the norms of one's group, at the postconventional level ideal conduct is regulated by a standard which is based on rationally examined ethical principles. The moral or legal code of one's society is examined and criticized on the basis of universalizable, and therefore highly abstract and general, ethical principles which all humanity could and should follow.

II. The Relation of Moral Stages to Societal Complexity

In 1906, Hobhouse published his now famous treatise on the evolution of law and society. This book did not argue for a simple, unilinear progression of social, legal and ethical forms, but, rather, for a complex series of historical changes in which different branches of the moral law advanced at different paces, and not necessary in exact step with the growth of civilization:

We have not to deal with one development only, but with many; nor with a uniform evolution, but with a luxuriant diversity; not even with evolution alone, but with dissolution and decay as well. (Hobhouse, 1906, p. 32)

Hobhouse based his ideas on a large mass of anthropological data about the legal, religious, military, political and other customs of a wide range of societies. Because his theory was well-researched for its day and evolutionary without partaking of the oversimplified progressivism of Herbert Spencer (1899), Hobhouse has continued to be influential until recent times (Pospisil, 1971, p. 180).

Hobhouse saw the evolution of law as based on two parallel and closely associated processes:

...the reduction of the method of 'self-redress' to a regularized system for handling conflicts of claims; and the transformation of elders acting on behalf of the community into 'a regularly constituted organ to administer justice'. . . (Carter, 1927, p. 28)

The simplest hunting and gathering societies, characterized by highly dispersed populations and lack of political authority, display the method of self-redress. At the other end of the scale stand the complex constitutional democracies of the West, where law and political organization are thoroughly institutionalized, rationalized, and based (in theory) on universal ethical principles of natural rights and social contract theory. Thus, for Hobhouse, the way in which a society formally conceptualizes notions of obligation, authority, punishment, and human rights is necessarily dependent upon its size and type of organization. This relationship of social organization and

ethical conceptions occurs for two reasons. First, a large-scale society--one with occupational specialization, social classes, and a centralized system of authority--faces more complex problems of social control and, hence, requires more elaborated and rational ethical principles as guides. Hobhouse does not think that the more complex societies are necessarily more just or equitable in practice than the simple societies. Rather, he argues that a legal practice which works reasonably fairly in a small face-to-face community in which everyone knows each other, simply results in severe and widespread abuse in a large-scale society. Hence, over long periods of time it tends to be suppressed in favor of a juridical system which is formally more equitable. For example, the custom of the ordeal (Roberts, 1965) may not involve especially harsh consequences in a small society, but will lead to wholesale torture of minorities and political opponents in a large one. Moreover, formal law becomes necessary with the advent of large-scale societies because such systems involve the growth of urban centers. The development of urban centers dissolves extended kinship ties and makes the individual more independent of his or her relatives. Thus, to solve the problem of social control, a government apparatus becomes necessary and law becomes the primary mechanism for making people

conform (Hoebel, 1954, pp. 330-332). On the basis of these examples, therefore, it can be seen how the large societies have historically developed more rationalized ethical principles in order to deal with new types of inter-societal conflicts.

Second, the large-scale societies have tended to develop more elaborate legal institutions not only because they need them, but also because their greater wealth and security allow them to support certain institutions which would be impossible to maintain in a simpler culture. For example, they can afford a police force, prisons and prison guards and, therefore, need not either banish or execute recalcitrant wrongdoers. Further, with a large state and the growth of written records, a system of courts and written law becomes possible.

Thus, the anthropological evidence clearly supports the notion that people in societies of different levels of complexity have different methods of dealing with the problems of conflict resolution and social control. Therefore, one might also predict that from society to society people would display varying modes of moral reasoning appropriate for the social forms which they know and live under. The most extreme possible version of this hypothesis would be to predict that people in the simplest cultures use only the

lowest stage of moral reasoning, while many individuals in the most complex and stratified cultures use the highest modes. A version of this extreme hypothesis is manifest in the work of Piaget (1932). He argues that individuals in a simple, segmented society become fixated at the level of "heteronomous obedience" (moral Stage 1), while individuals in a complex society may be stimulated to attain the level of "ideal reciprocity and equality" (Stages 4 or 5).¹

In opposition to that simplistically evolutionary a point of view, I take the position that Stage 3 is a culturally universal level of moral decision-making. The adults in any society would be expected to show a distribution of moral stage usage, but Stage 3 thought should be clearly evident in at least some of the adults in every type of culture, including the hunting and gathering societies. Stage 3 represents the taking of the social point of view on the resolution of conflicts of claims and is an appropriate way of thinking for adults in small-scale

¹A more recent statement of this extreme version of the evolutionary hypothesis has been proposed by Donald Elfenbein in a Harvard senior thesis (1973). He argues that the simplest hunting and gathering cultures use only Stage 1 concepts of morality, the horticultural societies use primarily Stages 2 or 3, and civilizations like ancient Mesopotamia display Stage 4 concepts in their legal and religious ideologies.

societies as well as those adults in large-scale societies who do not analyze moral problems from a highly elaborated "systems" perspective embodied in the theory of bureaucratic organization. Only a minority of adults in large-scale societies who have been trained to think formally about the organization of institutions would be more likely to display stages 4 or above, but these latter stages would not be expected to be culturally universal.¹ As will be shown in Chapter 9, higher education seems to be a prerequisite for the emergence of Stage 4 reasoning.

The few available cross-cultural studies of moral judgment tend to support the above position. They favor the view that Stage 3 is the highest of the four "ideal" stages attained in traditional agricultural societies. Adults have been tested in several of the developing countries--Turkey (Turiel, Kohlberg, and Edwards, forthcoming), India (Parikh, forthcoming), and Thailand (Batt, forthcoming). In all of these groups, Stages 4 and 5 appear only in the responses of the most educated and Westernized

¹In fact, in the world today, Stages 5 and 6 may occur regularly only among individuals who have been educated in a particular type of complex state, the constitutional democracy as developed in the West, or who have attended Western-influenced universities in non-Western countries (confer Abraham Edel (1968) and Popsipil's (1968) critique of Hobhouses's top two ethical stages).

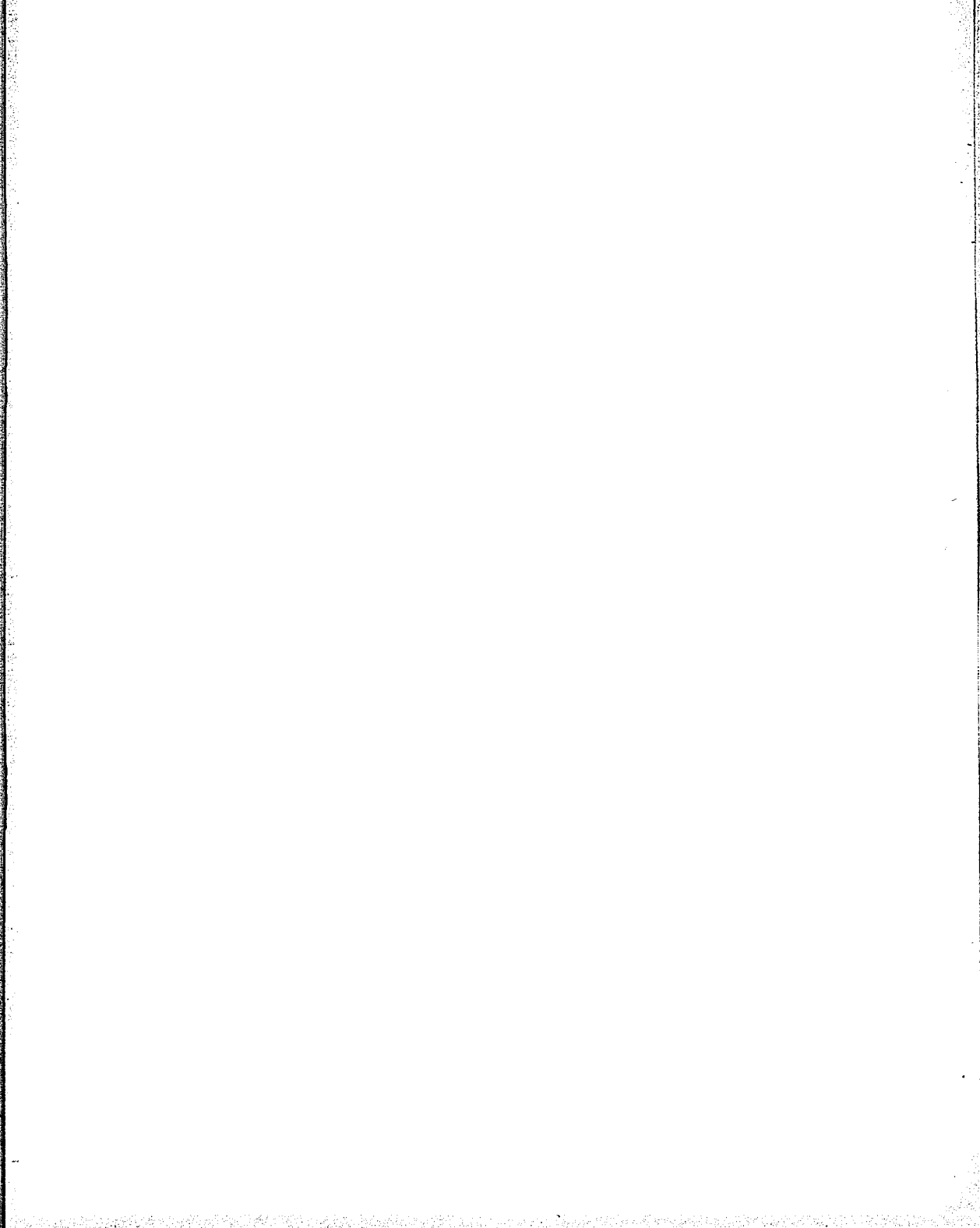
individuals;¹ for example, those who have attended modern universities. Among the more traditional and less educated individuals, Stage 3 is the highest stage attained. The data from Kenya will further support such a point of view. They demonstrate how Stage 3 represents an appropriate level of decision-making in a village community in which disputes are mediated by respected elders, rather than settled in court. This stage of reasoning seems to capture central values of village life--"understanding," "cooperation," and "reasonableness"--which villagers and university students from rural areas mention over and over again in their interviews. Such data certainly cannot prove the contention that Stage 3 is culturally universal and would be found in any type of society, but they can support the argument that this stage makes sense as the "ideal" mode of moral decision-making in agricultural village-based societies such as those of Kenya.

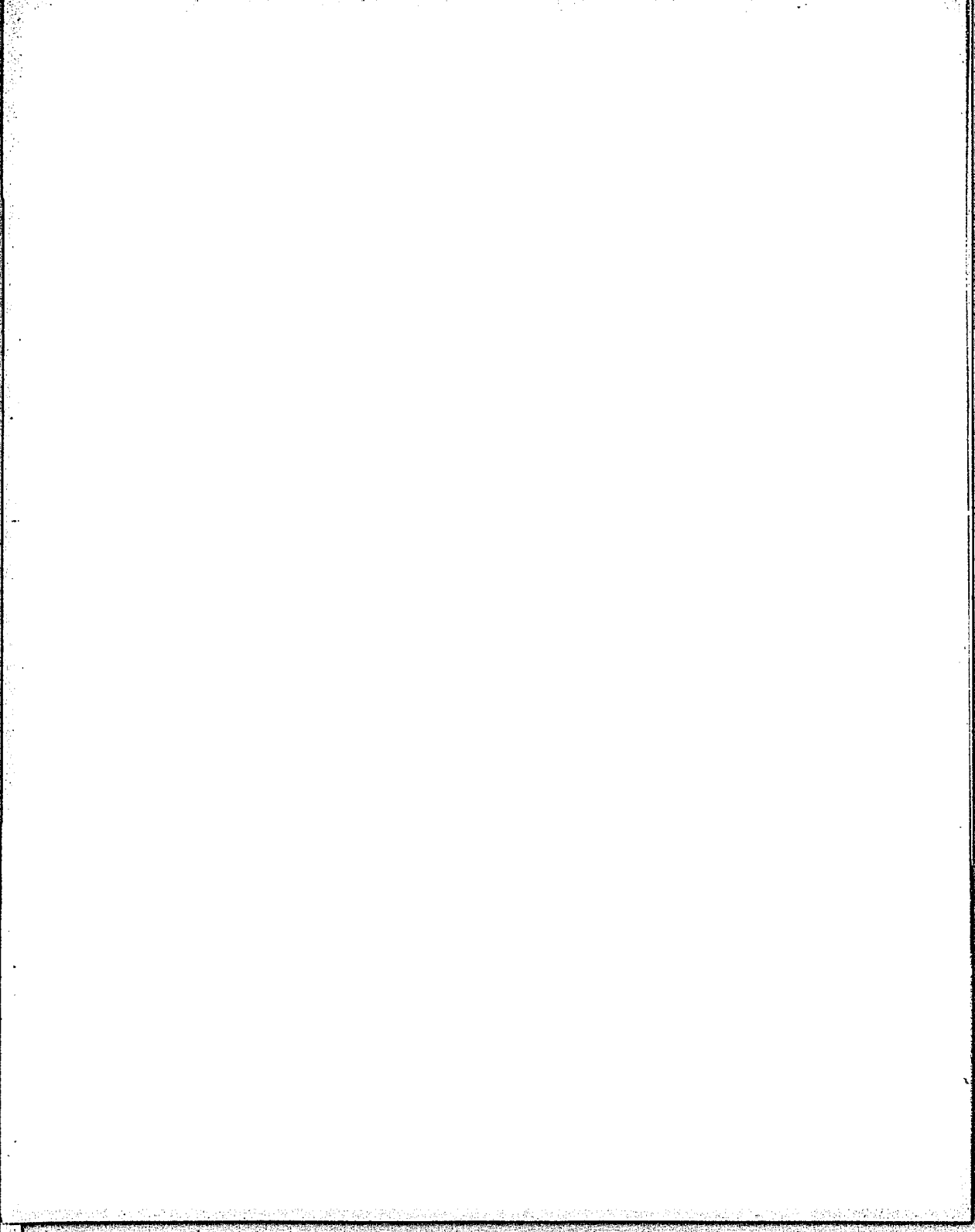
¹In the Turkish sample of 18- to 25-year-old village men, a certain amount of Stage 4 reasoning does appear. However, this finding is based on Kohlberg's old scoring system, now replaced by a newer method. According to the new criteria (used for the data from Kenya, India, and Thailand), the Stage 4 reasoning of the Turkish villagers would be classified Stage 3.

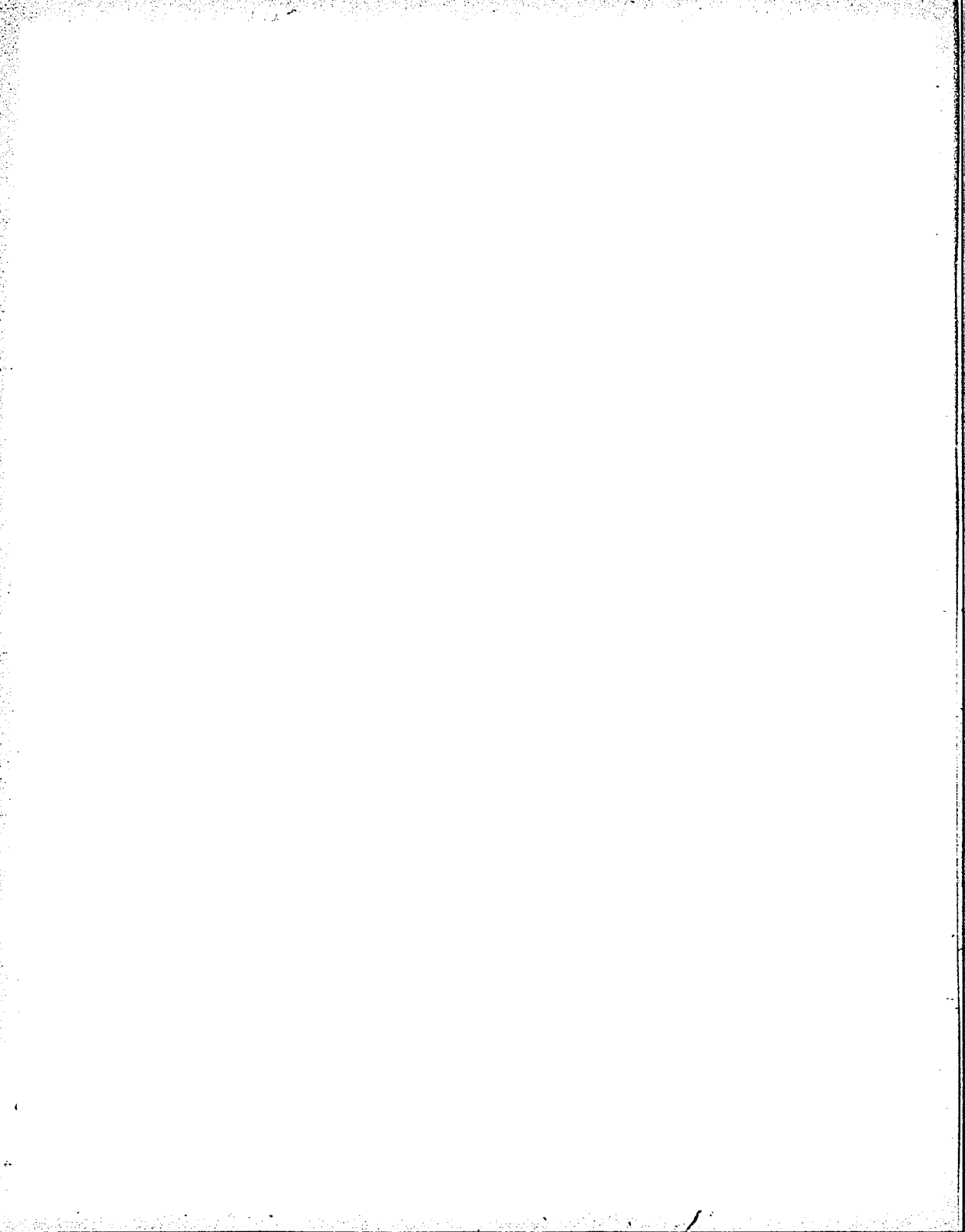
III. Environmental Influences on Individual Moral Development

A small group of studies have tested the effect of environmental influences on moral development. In general, they have found clear relationships between age, social class, and moral judgment stage scores, and little relationship between moral judgment stage and sex; but they have neglected other independent variables. Thus, several of Piaget's and Kohlberg's major hypotheses about the way in which social experiences stimulate moral development have not been tested. These hypotheses provided the starting point for the research in Kenya. Before the purpose of the study and the reasons why Kenya proved an interesting place in which to do this research are described, past speculation and research on the effect of environmental influences on moral development should be reviewed.

Piaget looked at moral development in the context of little boys playing the game of marbles. He reasoned that he could study how the younger boys learned the game from the older boys and how the children perfected their mastery of the rules as they grew older. He argued that these processes would be analogous to the way in which younger generations in society learn cultural values from the older generation. Speaking specifically about mastering the rules of marbles, Piaget suggested that three factors









in the decision-making institutions of their society. They expect to have some control over the ruling institutions--the judicial apparatus, industrial firms, and the government. Hence, they are motivated to pay attention to ideas about how these institutions work. They have reason to try to understand how the legal and political system should work in an ideal sense. Such a point of view is an integral part of Stage 3 and Stage 4 reasoning.

... It is abundantly clear that the lower class cannot and does not feel as much sense of power in, and responsibility for, the institutions of government and economy as does the middle class. This, in turn, tends to generate less of a disposition to view these institutions from a generalized, flexible, and organized perspective based on various roles as vantage points. (Kohlberg, 1969, p. 401)

Only one study has attempted to test this notion about the effect on moral judgment of the sense of participation in decision-making institutions. Simpson and Graham (forthcoming) compared the moral judgment stage scores of English working class children attending grammar school (upwardly mobile) versus similar working class children attending secondary modern school (working class oriented). Even with IQ controlled for, there was a significant schools' effect. The authors interpret this result to support the hypothesis. However, the results could just as easily be interpreted as stemming from the different types of education which the children receive at the two types of schools.

While neither the first nor second of Piaget's hypotheses have been tested directly, two American studies are at least relevant to hypothesis two. Moral education intervention projects performed with preadolescents and adolescents (Blatt and Kohlberg, forthcoming) demonstrate that peer group discussions of hypothetical moral dilemmas can result in significant gains in conventional morality (Stages 3 and 4); therefore, the research lends plausibility to the notion that moving away from the family circle to the world of peers could stimulate the development of the conventional perspective. However, these classroom discussions were conducted in the presence of adults and were structured around moral dilemmas like those used in the moral judgment interview. Therefore, the intervention studies do not speak to the possible effect of naturally occurring peer discussions; e.g., those conducted by students in the dormitories of their boarding schools and directed toward moral questions raised by the students themselves. Support for the notion that social participation in peer activities should predict higher levels of moral judgment is also provided by a study of elementary school students (Keasey, forthcoming). In Keasey's sample, stage of moral judgment was positively related to extent of social participation as assessed by self, peers, and teachers. The

weakness of the latter study, in terms of the Piagetian hypothesis, is that extent of involvement with peers is considered by itself; it is not related to extent of detachment from parents.

On the basis of past research, then, little support can be adduced for Piaget's hypotheses. This thesis will attempt to provide empirical support for these hypotheses on the basis of research in Kenya. The approach will not involve experimental manipulation of variables but, rather, will rely on correlations of independent and dependent variables as observed in the sample groups. Of course, correlations cannot be used to infer causation. However, although the approach is weak in terms of proving causation, it is strong in terms of reflecting relationships that can actually be seen in the real world.

IV. Kenya As The Setting For A Study Of Moral Development

This study was conducted in Kenya during the year 1972-1973, under the auspices of the Child Development Research Unit at the University of Nairobi. Subjects were interviewed at this university and at high schools in Nairobi and the town of Nyeri. Furthermore, university students were trained to interview adult leaders and secondary school students in their home communities throughout Kenya.

Kenya is a country of 12.5 million people, politically independent of Great Britain since 1963. Predominantly agricultural, it is a country in which the overwhelming proportion (more than 90 percent) of the population lives in the countryside. Its two large cities are Nairobi, the capital, with a population of 509,000 in 1969, and Mombasa, an old seaport numbering 247,000 people in 1969. Both of these cities and the numerous towns which range in size up to 50,000, are experiencing extremely rapid growth under the impact of a high Kenyan birthrate (three percent per year) and a constant influx of people from the rural areas looking for wage employment.

The people of Kenya belong to three major racial divisions. Ninety-nine percent of the residents are black Africans, belonging to a number of geographically dispersed ethnic groups. The largest group is the Kikuyu (approximately 2.2 million), who for historical reasons are the dominant group politically and economically. The Kikuyus are followed in size by the Luos (1.5 million), the Luyias (1.5 million), and the Kambas (1.2 million). The remaining people belong to a number of smaller groups, such as the Kipsigis, Gusii, Maasai, and Somalis. At the University of Nairobi are found students from all of these cultural groups and, hence, from all the different parts of the country.

The remaining one percent of the residents of Kenya are not of African descent but, rather, are either "Asians" or "Europeans." The Asians (138,000 in 1969) are people of Indo-Pakistani descent who began to arrive in Kenya around 1900. They were brought over in large numbers by the British to work as coolies on the Uganda railway. Indian traders followed in the wake of the railway, and Indian troops were occasionally called in to help with the suppression of African revolts. There was a strong Asian colony of small traders and shop owners by 1905, and it continued to grow until the 1960's. Today, however, the Asian population is on the decline in Kenya, as throughout the rest of East Africa. Asians are emigrating in a continuous stream, primarily to Britain and Canada, as the Africans in Kenya gain the training and capital to take over their businesses. The Asians belong to several different religious groups, the principal groups being the Hindus, Muslims, Ismailis, Sikhs, and Catholic Goans. Together they constitute a highly visible minority (perhaps one-fifth of students)¹ at the University of Nairobi.

¹No official statistics are available on the ethnic breakdown of the University student body. The estimate of one-fifth is based on my own observation of the campus (I occupied an office in the Faculty of Education on the main campus for almost a year).

Finally, the third and smallest racial group in Kenya are the "Europeans," the people of European or American extraction (population 40,000 in 1969). Many of them are not citizens of Kenya but, rather, are expatriates¹ from America, Britain, or other countries giving technical assistance to the Kenyan government or engaging in business. Another portion of the Europeans consist of the White Kenyans, the descendants of the original British settlers who have become citizens of Kenya. Not all of the "Europeans" are white, however. The Kenyans base their racial categories on cultural rather than biological criteria, and they consider black Americans to be Europeans, not Africans. Excepting a very small number of American Blacks and a few others, Europeans do not attend the University of Nairobi. The White Kenyans send their children to Britain for most of their education.

These three racial groups have historically held quite distinct places in the Kenyan economy. The African peoples have traditionally been engaged in rural life based on subsistence farming or herding. Today, under the impact

¹The term "expatriates" is widely used throughout East Africa to refer to foreign citizens living there for either short or extended periods of time.

of the general monetization of the economy, many of the Africans are switching to cash cropping to supplement their subsistence farming. In addition, other Africans are seeking to set up small businesses or gain wage employment in the modern sector. The Asian groups have traditionally dominated Kenya's small commerce, especially the wholesaling and retailing of manufactured goods, imports, and cash crop commodities. These businesses are owned and operated by family units, which provide economic security for each individual who retains close ties to the extended family. The Europeans once owned large ranches and farms throughout Kenya; today, many of these holdings have been sold to Africans and the White Kenyans have shifted their interests to various kinds of business activities. They control the large businesses, especially banking, tourist hotels, and the few large-scale manufacturing concerns which exist.

The three racial groups are culturally distinct in other important ways. The Africans practiced polygyny with a clear separation of the social lives of men and women. Husbands and wives in the traditional system did not work together during the day, eat their meals together, or sleep in the same hut together at night. Young children, both boys and girls, were largely under the authority of their mothers until the age of initiation, at which point the boys

became "men," and moved away from the domestic unit of mothers and children to the world of males. The circumcision rites for initiating young boys into adulthood have always been an extremely important cultural event for most of the African groups. The Luos and Turkana, who do not circumcise their boys, are still regarded with hostility and derision by many men from the groups who do circumcise, such as the Kikuyus and Kambas. Today, under the impact of education, Christianity, and industrialization, the customary lives of the Africans are in rapid transition. Polygyny is fast disappearing and educated husbands and wives dine, sleep, and sometimes spend their evenings together in the fashion of Europeans. Men in Nairobi are often observed strolling along with their wives and carrying a baby--an event never seen among traditional people in the villages and indicative of the increasing social closeness of men and women.

The Asian groups have emphasized the joint household; that is, the multigenerational household formed of people related through the male line. In East Africa the Asian family has been exclusively monogamous and extremely tightly knit, with men strongly involved in the social life of the family and the older generation exercising firm control of the younger generation's activities and conduct.

The majority of Asians have enjoyed a higher level of education and wealth than have the Africans--this is another dimension in which they feel culturally different from the African groups.

The Europeans practice the way of life of middle-class Western Europeans and North Americans. The White Kenyans, for example, remain exclusively British in their culture, outlook, and allegiances. In terms of family life, the Europeans prefer the nuclear family with its high degree of intimacy between the father and both his wife and his children.

Kenyans of all racial groups place a high value on education as the most important route to success for their children. The White Kenyans usually send their children to Britain for schooling, but the Asians and Africans strive to find places for their children in Kenyan schools. In spite of enormous expansion of the school system since independence (1963), there are not enough places to meet the demand. The school system is pyramidal in shape; there are many more primary schools than lower secondary schools, more places in lower secondary (forms one to four) than upper secondary (forms five and six), and very few places at the University.¹ Thus heavy pressure

¹Throughout this thesis, the words "secondary school" and "high school" will be used interchangeably, following American usage.

is placed on school children to perform well enough on the standardized national examinations that they can be advanced to each next higher level. In 1968, approximately 1.3 million children attended Kenyan primary and secondary schools. All but 100,000 were primary pupils. Only 3,000 occupied places in forms five and six of secondary school.

The University of Nairobi opened in 1956 at the Royal Technical College of East Africa. Since then it has expanded rapidly and added new departments and degree programs until, at the present time, it contains over 3,500 students. In 1973-74, the student body consisted of 3,033 men and 528 women. Of the total, 2,881 were residents of Kenya, 579 came from Tanzania and Uganda, and the remaining 101 were from various other nations. The University trains students in all of the major academic disciplines, following the British system in which professional fields like Medicine and Law are undergraduate degrees. All of the programs except Medicine and Veterinary Science require three years of study only; Medicine takes five years and Veterinary Science takes four.

The University of Nairobi is the only university in Kenya, although there also are a number of teacher's colleges and technical training institutions in existence. The steady output since Independence of trained personnel

Table 1.2: Number of Pupils in Primary School (by Standard) and Number in Secondary School (by Form), in 1968

<u>Primary School Enrollment</u>	
Standard 1	250,757
2	207,755
3	178,537
4	158,899
5	132,701
6	134,247
7	146,784
<hr/>	
Total	1,209,680

<u>Secondary School Enrollment</u>	
Form 1	35,621
2	28,467
3	19,547
4	14,565
5	1,769
6	1,389
<hr/>	
Total	101,361

Source of Data: Kenya, Ministry of Education.
Annual Report 1968 (page 80).

from the secondary schools and institutes of higher education has allowed for major strides toward Africanization of the civil services, both at the higher and middle ranks (Ghai, 1969). The political system, in both its elective and bureaucratic aspects, is now thoroughly dominated by Africans. On the other hand, the process of Africanization of jobs in the private sector has tended to lag behind. This is beginning to change as the large multi-national corporations hire African managers and as the Asian businesses are forced to sell out to small African capitalists. The impact of economic development in Kenya has fallen most strongly on the customary life of the African groups, which is changing rapidly. Educated Africans realize that "Westernization" is inevitable given the capitalistic, Western-oriented economic organization of the country, and wonder how many African values will survive in the years to come.

V. Purposes of A Study of Moral Development in Kenya

This study has two central purposes. The first purpose has been to discover how adults in Kenya would perform on the moral judgment interview. This kind of cross-cultural data will give a perspective on the stage sequence of moral judgment. It will yield insight into the way in which the different modes of moral decision-making represented by the stages fit different styles of life and

cultural settings. The focus has been on the moral reasoning of the "good citizen"--the community leader who is successful and respected and who exercises responsibility in the running of the community--situated in a range of life styles and communities across Kenya. For example, if community leaders who are traditional preliterate farmers differ markedly in stage from those who are school teachers, it becomes evident that education has begun to train the people of Kenya to think about moral issues in new ways, ways that may be appropriate or required in modern society but had no function in their former village-based communities. Thus, one purpose of the study has been to use cross-cultural information to formulate a contextual view of the moral judgment stages, a view which relates modes of decision-making to the types of problems people face in their everyday lives. Chapter 9 of the thesis will attempt to formulate this view in focusing on the moral judgment interviews of local leaders in Kenyan communities.

The second purpose of this research has been to study how social and intellectual experiences influence the individual development of moral judgment. Specifically, the three hypotheses of Piaget (1932) and a fourth hypothesis concerning the effect of academic study in certain major fields of concentration at the University of Nairobi, will

be tested. These hypotheses will be considered in Chapters 6 through 9.

Piaget's first hypothesis was that children's moral thinking would be stimulated by exposure to systems of rules which differed from those which they had been taught at home. This hypothesis will be tested by looking at the relationship between moral development and subjects' exposure to cultural diversity at school. Many students in Kenya attend institutions which are extremely diverse ethnically. Especially in the capital city, Nairobi, the leading schools are mixed not only culturally but racially. Students encounter a wide variety of group norms about polygyny, premarital sex, equality between males and females, the necessity of formally initiating boys into adult status, and closeness of fathers to their children--all of those deeply held values which characterize the different peoples of Kenya. Experiencing and coming to terms with this diversity would certainly constitute an excellent analogy to Piaget's picture of young children trying to play marbles with others who have learned different versions of the game. Therefore, students who attend ethnically heterogeneous schools should show more sophisticated understanding of moral ideas in the moral judgement interview than do students who have not experienced exposure to cultural values other than their own.

How do students at the multiracial and multicultural schools experience the morally stimulating contact with the values of other groups? One possibility is that contact is stimulating only in the context of close friendship, in which mutual trust and intimacy allow for exchange of information about deeply held beliefs and feelings. On the other hand, another possibility is that the exchange of ideas in classroom discussions and casual conversation can allow students to gain an understanding of others' customs and values. In that case, simply attending a school in which the different groups interact in an atmosphere of mutual respect and willingness to learn from one another, would be sufficient for the hypothesized changes to occur in moral understanding. With samples of secondary and university students, the correlation of moral judgment level with extent of experience with these two types of interaction will be compared.

Kenyan schools constitute an especially likely place in which to test the hypothesis about cultural diversity because of the widely prevalent attitudes in that country toward group differences. In Kenya all groups are intensely loyal to their own customs and conscious of the many great and small ways in which the beliefs and practices of the different groups are supposed to vary. In the United States,

group differences are played down perhaps because any interaction between different cultural groups takes place in the context of their being different status groups. In Kenya, however, no groups feel inferior to others in this way. The Africans have a sense of being part of the politically dominant race in the country, while the Asians and Europeans derive pride from their relatively high economic status. All groups are proud of their cultural heritage and, if anything, inclined to exaggerate the differences rather than similarities between groups. Thus, group differences in Kenya are salient in people's minds and accepted as a normal part of interpersonal interaction. Students certainly feel free to discuss cultural practices with each other and find out how other people regard deeply held beliefs about moral values.

The second of Piaget's hypotheses is the assertion that children's moral judgment is stimulated by moving away from the family circle with its atmosphere of obligatory constraint. Such a change involves the child in a more reciprocal and cooperative type of interaction with peers, in which the children exchange viewpoints and arrive at an understanding based upon mutual agreement and consent. This hypothesis will be tested by investigating the relationship of moral reasoning to the experience of going away to

boarding school. Many young people in Kenya attend boarding schools, and these schools offer a setting in which students can engage in free discussion of moral values. That they do engage in such discussions will be evidenced by interview data from University of Nairobi students, to be discussed in Chapter 7. If the schools were a setting in which discussions of moral topics did not occur, then one would not expect that moving from home to school would be an especially stimulating experience. Furthermore, for students coming from modernized homes, one would not expect moving away to represent the same sort of change which it would for students from traditional families. It is the latter which encourage the unquestioning obedience to adults which Piaget described as fostering obligatory constraint on the part of the child. Therefore, the hypothesis is that for students from traditional rather than modern families, time spent living away at school will correlate positively with stage of moral reasoning, after controlling for age or any other interfering variables.

Piaget's third hypothesis was that parental child-rearing practices should relate to children's moral judgment. Parents who reason inductively about matters of right and wrong with their children should facilitate their rate of development relative to parents who demand unquestioned

obedience. This third hypothesis will be tested by studying how moral judgment scores relate to traditional versus modernized child-rearing practices. Traditional African families from rural families have very different styles of interacting with their children than do educated, modernized families living in town. Beatrice Whiting (1974) has found that educated Kikuyu women married to professional men in Nairobi encourage their children to speak up in the presence of adults and ask questions, and they frequently spend time with their children reading aloud and rehearsing things learned in school. In consequence, they find that their children are less obedient, more likely to interrupt conversations of adults, and harder to handle than children reared the old-fashioned way. These child-rearing patterns are clearly the result of the cluster of lifestyle events surrounding urban life and modernization. Urban mothers are not heavily involved in agricultural work as are the rural women, and, hence, need not assign their children many hours of work each day in running errands, animal tending, infant care, weeding, and household chores (Whiting, 1972; Whiting and Whiting, 1974). The urban mothers do not require responsible cooperation of their children and, therefore, do not give them as firm training in obedience as do the rural mothers. Rather, they see their most

important task as to help their children do well in school. Therefore, they encourage the children to practice verbal skills, such as asking and answering questions, and they take time to go over their school work with them, to show them how important it is. Rural mothers certainly engage in sociable conversation with their children, but much of their interaction time is spent in assigning chores and correcting social etiquette rather than in practicing verbal skills important for school.

A similar view of modernized, urban child-rearing patterns is apparent in the observations of Asian Ismaili children from the Kenyan city of Kisumu (Conrad, forthcoming). Furthermore, findings parallel to those for the Kikuyus have been reported by Robert Levine *et al.* (1967) and Barbara Lloyd (1967), in studies conducted in Abadan, the capital city of Nigeria.

What is especially interesting about this variable of non-authoritarian child-rearing practices is that it is not closely linked to children's grades in school and, hence, their future success in society. Kenya is an emerging country without as yet a very large educated African elite. All over Kenya, school children compete to do well on the standardized tests which determine whether they will be allowed to pass on to advanced study. At the end of primary

U school they sit for the Certificate of Primary Education (C.P.E.'s) that select students for form one to form four of secondary school. At the end of form four they take the "O" (or Ordinary) level examinations that decide who shall complete forms five and six. Finally, they sit for the "A" (or Advanced) level exams, and those who pass go on to the University of Nairobi. These tests are of the utmost importance, but as yet the system is still open and school achievement among African children is not more than minimally related to parents' level of education. For example, in the High School analysis to be presented in Chapter 8, parents' education is negatively related to both C.P.E. and "O" level scores. Most African parents, of course, are not literate, and yet they realize how crucial education is for their children's future and, therefore, they make every sacrifice to pay their children's school fees. To a large extent, how well the children do in school depends on their native ability and their persistence in memorizing the vast amounts of material required to pass the examinations. Thus, children's school achievement and parents' educational status are largely independent variables. This means that child-rearing practices associated with parents' education and family modernization can be investigated separately from children's general academic ability.

A second reason why this variable of modernization is interesting is that it is not confounded with sense of future power in Kenyan society, the factor which Kohlberg believes explains why upper-middle class students score higher than those from the working class. In Kenya, the two racial groups with by far the more modernized life styles--the Asians and the Europeans--are not in political control of the country. The African students have a sure sense that they are the future rulers of the country. The Asians, on the other hand, know that they are on the way out of East Africa and are seeking to gain entry to Britain and Canada with minimal financial loss. This means that among the population of the University of Nairobi--composed primarily of modernized Asians from Nairobi, Kisumu, and other towns, and African students from more traditional rural areas--it is the less modernized group that has the sense of future power in society. Even among the African students alone, modernization and sense of future participation are not closely connected. For example, all of the students in the samples in this study have gone far enough in school to be assured of future middle class status. In particular, all university students, regardless of whether their backgrounds are traditional or modernized, can expect to enter the educated elite in Kenya. Among the student

populations, this factor of sense of future participation has not been investigated explicitly but the student interviews allow considerable assurance in eliminating it as the mechanism by which parents' education predicts children's level of moral judgment. Insofar as parents' level of modernization does predict moral stage, the relationship must be due to child-rearing practices associated with the cluster of lifestyle events surrounding urban life, education, and white-collar employment.

In addition to these three Piagetian hypotheses, the effect of academic studies at the University of Nairobi will be investigated. Stages 3 and 4 of moral judgment define, in comparison with Stages 1 and 2, a "member of society" perspective on morality. The person thinks it is right to uphold and defend the social conventions because they represent the generalized expectations of all and because they maintain the coherence of society. The hypothesis to be tested is that the formation of the "member of society" perspective is facilitated by the study of the social sciences or law. In these fields students learn about the organization and function of the legal system and its relationship to unofficial cultural norms. They learn that the major problems facing every society are social control and the transmission of values to the next generation.

They might study political and social organization cross-culturally and learn how African customary law can be adapted to coexist with Western law. In general, one should expect that the concepts and analytical approaches learned in sociology, history, political science, religious studies, law, and economics would facilitate pre-conventional students in moving to Stages 3 or 4. This hypothesis will be tested by comparing University students in the different major fields of concentration.

These ideas, then, constitute the central hypotheses about the effect of experience on moral development. These hypotheses will be investigated with three samples, always controlling for the effects of age, sex, racial group, and level of school achievement where relevant and possible. These latter variables are interesting in their own right and should be investigated for that reason. In addition, they constitute possibly interfering influences whose effects must be considered and controlled for before it is possible to study the major independent variables.

CHAPTER 2

METHODOLOGY--UNIVERSITY SAMPLECHARACTERISTICS OF THE SAMPLE

From November, 1972 to February, 1973, I interviewed 52 students from the University of Nairobi. These students represent an extremely heterogeneous lot, in terms of age, family background, ethnic group, major field of study at the University, grade point average, and other variables which will form the basis of the analysis. A summary of the descriptive characteristics, appearing in Table 2.1, gives a sense of this sample. It can be seen that the subjects are somewhat older than American college students, come from much larger families, and have parents who have had many fewer years of education.

RECRUITMENT OF THE SAMPLE

These subjects were recruited through my own or my research associates' personal contacts and hence they do not constitute a random sample of the University population (cf. Appendix I, for a description of the way in which each subject was enlisted). In general, students were informed that the purpose of the work was to understand their ideas of right and wrong by having them discuss some hypothetical

Table 2.1: Characteristics of the University Sample,
N = 52

Mean Age	22.7 Years
Sex	35 Male, 17 Female
Mean Father's Education	6.4 Years
Mean Mother's Education	3.9 Years
Father's Occupation	29 Peasant Farmers, Manual Laborers, or Semi-skilled Craftsmen; 20 White-collar (owners of small shops, teachers, etc.) but not High Level Professionals 3 High Level Professionals
Ethnic Group	Assorted (35 of African Race, 17 of Asian Race)
Mean Family Size (No. of Children in Family)	6.6
Percent Firstborns	19%
Religion	34 Christian, 10 Muslim, 8 Hindu
Percent Polygynous Parents	25%
Major Field of Concentration	19 Arts, 12 Education, 12 Medicine, 5 Commerce, 2 Engineering, 1 Law, 1 Science
Year in School (University of Nairobi)	11 First Year, 18 Second Year, 21 Third Year, 2 Fourth Year
Mean Number of Years Living Away From Close Adult Relatives	6.4 Years
Mean Number of Years at Racially Heterogeneous Secondary Schools	3.5 Years
Mean Number of Years Living In Urban Environments	9.0 Years

stories. Each subject received seven shillings for the interview (one U. S. dollar). Since students in Kenya have very few ways to earn spending money and their families usually do not have the means to supply them, this proved to be an amount sufficient to motivate most of the students whom I approached.

THE QUESTION OF SELF-SELECTION BIAS

In what ways is this sample biased? Comparison of the sample with data provided by the University Registrar indicate that the proportion of women in the sample is clearly higher than at the University as a whole. The sample is also skewed in terms of number of students in each major field of study; the proportions of students in Medicine, Arts and Education are higher in the sample than would be expected on the basis of chance, and the proportions of students in such fields as Agriculture, Architecture, Law, and Engineering are lower (cf. Appendix II).

There is no reason, however, to suspect the sample of serious self-selection biases. Twice I recruited before groups of students in class or study hall and every student volunteered. From the Education classes I taught, I obtained as subjects the total number of subjects who remained in town after the end of the term. From their records it was evident that they did not represent only the students

with the best grades. Finally, a third year Hindu student recruited the fourth large network of subjects. He arranged for me to interview almost all of his Asian classmates at the School of Medicine.

INTERVIEW ON BACKGROUND INFORMATION

To begin the interview, subjects were asked a series of questions about their personal histories. In this way the necessary information was obtained on each student's age, sex, family background, ethnic group, year and major field of concentration at the University, residence history, secondary school history, and current friendship patterns. In addition, information was later acquired from the University Registrar on the students' grade records.

THE MORAL JUDGMENT INTERVIEW

The moral judgment interview consisted of four hypothetical dilemmas and a standard set of probes. They are presented in Table 2.2. Three of these are similar to dilemmas which have been employed in much previous American and cross-cultural research on moral development; however, they have been modified to suit the Kenyan context. The fourth dilemma (Story IV) was prepared in Kenya for this research. These stories were developed and pretested in collaboration with a group of University students, a process

Table 2.2: The University Moral Judgment InterviewSTORY I

In a rural area of Kenya, a woman was near death from a special kind of heart disease. There was one kind of medicine that the doctors at the government hospital thought might save her. It was a form of medicine that a chemist in Nairobi had recently invented. The drug was expensive to make, but the chemist was charging ten times what the drug cost him to make. He paid 80 shillings for the drug, and then charged 800 shillings for a small dose of the drug. The sick woman's husband, Joseph, went to everyone he knew to borrow the money, but he could only get together 400 shillings, which was half of what it cost. He told the chemist that his wife was dying, and asked him to sell it cheaper or let him pay the rest later. But the chemist said, "No, I'm the one who invented this medicine, and I'm going to make money from it." So Joseph got desperate and broke into the store to steal the drug for his wife.

1. Should Joseph have done that, broken into the store to take the drug?
2. Was it actually wrong or right? Why? What was wrong about it? What was right?
3. Was it his moral duty or obligation to steal the drug for his wife if he could not get it in a legal way? Why?
4. Would a good husband, a man who takes good care of his family, do it? Why?
5. If Joseph does not feel very close or affectionate to his wife, should he still steal the drug? Why? (Note: Not just would he, but should he?)
6. Suppose it wasn't Joseph's wife who was dying of heart disease, but it was Joseph's best friend. His friend did not have any money, and there was no one in his family willing to steal the drug. Should Joseph steal the drug for his friend in that case? Why? Would you blame or condemn a man who did such a deed, or would you feel he had done a good deed, worthy of some praise?

Table 2.2: (continued)

(Story I, continued)

7. (Note: If the person has spoken of the importance of a life being at stake, ask:) Why is it so important that a human life is at stake? Or, what is so important about this one life; after all, Joseph can find another wife? Or, why is life more important than property? Or whatever seems appropriate.
8. (Note: If the person has answered that Joseph should not steal the drug, ask:) Would you steal the drug, do you think, if you were caught in Joseph's situation? Why?
9. Did the chemist have the right to charge that much when there was no law in that country actually setting a limit to the price? Why? Would you blame or condemn him for doing it?
10. Do you think there should have been some kind of government control over the price of the drug? Why?
11. Joseph broke into the store and stole the drug and gave it to his wife. He was caught by the police and brought before the judge. Should the judge send Joseph to jail for stealing, or let him go free, or what? Would it be fair to send Joseph to jail in this case? Why? (Note: If the person seems to be answering in terms of what the judge would do, or what judges in fact do do, try to get him to say what the judge should do, if he were to do the best possible thing. For example, you might ask, if the judge were to do what he himself thought was best for society, what would he do about Joseph? Or, if you knew about a case like Joseph's would you think Joseph deserved to be punished by the law?)
12. What function does punishment serve for society?

STORY II

James is a 14-year-old boy who wanted to go to the Nairobi Show very much. His father promised him that he could go if he saved up the money himself. So James worked hard and saved up the shillings it cost to go to the Show,

Table 2.2: (continued)

 (Story II, continued)

and a little more besides in case he saw something at the Show he wanted to eat or drink or buy to take home. But just before the Show was going to start, his father changed his mind. Some of his father's friends decided to go to town to drink beer, and James' father was short of money. So he told James to give him the money he had saved. James did not want to give up going to the Nairobi Show, so he thought of refusing to give his father the money.

1. Should James refuse to give his father the money? Why?
2. What is the best reason you can think of to justify James' refusing to give his father the money?
3. What is the best reason you can think of to justify James' giving his father the money?
4. Who actually has the right to the money, the son or the father? Why? (Note: If the person's answer to this question contradicts his answer to question one, ask about that inconsistency.)
5. Does the father have the authority to tell the son what to do in a case like this? Why? What should be the authority of a father over a son, in general? At what age does this authority grow less? Why at that age? Why is it good for a father to have this authority over a young son?
6. What does a son owe his father in a case like this? Why is it good for a son to obey his father most of the time? Can you think of specific examples where a son does not have to do what his father says?
7. Whose conduct in this story was unfair? (Note: If says that both were unfair, get him to explain why for both, then ask, whose conduct was most unfair?) Why was it unfair?
8. Why should a promise be kept, by anyone? Why is it important for people to keep their promises? (Note: If answer mentioned "faith," "trust," or "respect," ask why it is important that people trust each other, respect each other, etc.) What would the community be like if people did not keep their word?

Table 2.2: (continued)

(Story II, continued)

9. What effect does it have on a son if his father breaks promises to him? In the case of this story, what effect will it have on James?
 10. Would a good father, a respected man in the community, do to his son what James' father did in this story; that is, promise him he could go to the Show if he earned the money, and then change his mind? What effect does it have on a father if his son breaks a promise to his father?
 11. If a son breaks a promise to his father, is that better or worse or just the same than if a father breaks a promise to a son? Why?
-

STORY III

A man, Daniel, managed to complete his secondary school education (Form IV) on the basis of school fees given him by his brother. Afterwards he married and took his wife to live with his parents in the rural area, while he got a job in the city. Eight years later, when his first son was ready to go to primary school, his mother and father came to him and said, "Your brother who educated you has been in an accident and cannot work, so you must now begin to pay for the education of your brother's child." This child was the same age as his own son. The man, Daniel, did not have enough money to pay school fees for both his own son and his brother's child. His wife said he must put his own son first.

1. What should Daniel do in this situation? Should he put his son or his brother's child first? Why?
2. What obligation does he have to his brother who educated him?
3. What does he owe his son?
4. Should he obey his parents in this case? Do you think a grown son has to obey all of his parents' wishes? Why, or why not?

Table 2.2: (continued)

 (Story III, continued)

5. What should a grown son do for his parents?
 6. Is it more important to maintain harmonious relations with his wife or with his brother and parents? Why?
 7. Would you condemn Daniel if he just moved his wife and children to the city and did not pay for the education of his nephew? Why?
 8. Would you yourself expect your oldest children to help their younger brothers and sisters with school fees? Why, or why not?
-

STORY IV

Twenty years later, Daniel's father had died and his widowed mother was old and sick. She could not work in any way and was in great pain most of the time. Daniel and his wife took her to the mission hospital, and there the doctor told him, "Your mother is extremely sick. You should go out immediately and buy her a certain kind of medicine, and she will live for perhaps one year more. But she will be in pain the whole time. You must go buy her the medicine immediately, and you must give her a dose every week." This medicine was very expensive. It would have cost 50 shillings every week, and Daniel was a poor man. If he bought this medicine every week, he would not have had any money left over for the rest of his family. Daniel's mother asked to speak to him alone, and she said, "Daniel, please do not buy that medicine for me. It would just be wasteful. I can't stand the pain and I ask you to let me die now."

1. Should Daniel and his wife do what the mother asks and not buy for her the medicine that would save her life? Why?
2. Looking at it from the mother's point of view, what would be best for her, to have another year of life, even in pain, or instead to die now? If you were in the position of Daniel's mother, and you asked your son not to buy the medicine, would you want him to go against your words and buy it anyhow?

Table 2.2: (continued)

(Story IV, continued)

3. Is Daniel like a murderer if he does not buy his mother the medicine? Why? Is not buying the medicine a terrible crime, a minor wrong, or an acceptable thing to do?
 4. Is infanticide (the killing of a baby just at the moment of birth) ever justified? Suppose it was a badly deformed baby, for example, one that had no legs and a huge head?
 5. How do you feel about the act of suicide? If Daniel's mother had a drug at home that would have killed her if she took a large enough amount of it, does she have the right to take her own life in this case? Would you blame or condemn her if she did?
-

which will be described in greater detail in the Methodology chapter for the Community sample (Chapter 4).


Thirty-one subjects were presented the entire battery of Stories I to IV. The remaining subjects received only two or three of the dilemmas.¹ All subjects responded to Story I, the dilemma which the scorer found most helpful in reaching a judgment about the global moral stage of a subject.

¹During the final phase of the testing, I consulted with Elliot Turiel about the interview. We decided to interview the students in greater depth about some of their metaethical and political ideas and decrease the moral judgment section of the interview.

CODING AND RELIABILITY

All interviews were taped and later transcribed in Kenya. Then, in the United States, an experienced moral judgment scorer, Betsy Speicher, coded each of the University interviews using the "global method," described in Appendix III. Each interview was considered as a whole and given the stage rating most representative of the overall level of the subject's moral reasoning. Many subjects received a mixed rating, indicating that approximately three-fourths of their discussion lay at one stage and one-fourth at either a higher or lower adjacent stage.

The global method of coding moral judgment interviews has been shown in the past to be reasonably reliable. Inter-rater reliability data for the Kenyan interviews appear in Appendix IV. In all, 36 interviews were rated by a second independent judge, Laura Rogers. She coded 18 interviews from the University sample and 18 from the High School sample. The overall coefficient of reliability (Pearson r) is 0.88. For the University subsample of 18, this coefficient is 0.86, while for the High School subsample it is 0.84. Thus, satisfactory levels of reliability for the global scoring have been achieved. When the two scorers disagreed about the correct rating for an interview, the first scorer's judgment prevailed because her ratings



were used for all of the other interviews not judged for reliability.

In order to deal with the question of whether the moral judgment coding was biased by the variable number of dilemmas which different subjects received, the scorer's ratings have been correlated with the number of stories in the subjects' interviews (two to four). The Kendall rank order correlation is -0.09 , a value close enough to zero to indicate that such a bias is probably not present in the data.

INTERVIEW ON PAST EXPERIENCES IN SCHOOL

At the completion of the moral judgment section of the interview, each student was requested to reflect upon the impact on his or her secondary school experience. I asked:

"Can you think back upon your years in secondary school?"

"Did your moral values or ideas change much during those years?"

"Would you please give a couple of specific examples?"

"What was it about the environment that caused them to change?"

Finally, after asking this series of questions, I repeated the whole sequence with regard to their experiences thus far

at the University of Nairobi. The entire interview usually lasted about one and one-half hours.

OPERATIONALIZING THE VARIABLES

Two sections of the interview have been subjected to a statistical analysis--the background information and the moral judgment interview. Therefore, these data have been converted into numerical form, following the procedures outlined below. The third part of the interview, the questionnaire about past experiences in school, has been analyzed qualitatively rather than quantitatively and will be discussed in a later chapter (Chapter 7).

Table 2.3 presents a summary of the procedure used to operationalize every variable. There are 14 independent variables, based on personal background information, and one dependent variable, the moral judgment score.

THE MEASURE OF MORAL JUDGMENT

To convert the moral judgment ratings into a quantitative scale, the method routinely used by Kohlberg and his associates has been followed. Scores can range from a possible minimum of 100 (Stage 1) to a possible maximum of 600 (Stage 6). Ratings which are unmixed (e.g., Stage 4) are simply multiplied by 100 to yield the moral judgment score; thus, Stage 3 equals 300 while Stage 4 equals 400. Mixed

Table 2.3: Independent and Dependent Measures for the University Sample

<u>Variable</u>	<u>Operational Definition</u>
Moral Judgment Score	Moral stage rating converted to numerical form, so as to range from possible minimum 100 to possible maximum 600
Sex	0 = Male 1 = Female
Age	Chronological age in years
Race	0 = African 1 = Asian
School Achievement	Grade point average at the University (within each year's record, course grades were averaged; then, to obtain overall average, the mean of the yearly averages was computed)
Time Spent Living Away	Number of years spent living independently, away from close adult relatives such as uncles, parents, grandparents, or married adult siblings 0 = 0-4 years 1 = 5-8 years 2 = 9-12 years
Major Field of Concentration	1 = Arts and Law (Includes Government, Sociology, Law, Economics, History, Religious Studies). 0 = Other (Includes Education, Commerce, Medicine, Science, Engineering)
Years Spent at Heterogeneous High School	Number of years spent in secondary schools in which at least ten percent of the students were from racial group different from subject's

Table 2.3: (continued).

Variable	Operational Definition
Friends From Other Groups	0 = No friends from groups other than subject's own or groups very closely related to subject's 1 = At least one friend from a group culturally distinct from subject's, but not from another racial group or foreign country 2 = At least one friend from another racial group or a foreign country
Modernization	Index created by factor analysis of five measures below:
Parents' Marriage Type	0 = Polygynous 1 = Monogamous
Father's Education	Number of years father had attended school (literacy training at Christian Mission calculated as 2, Bachelor's degree calculated as 16, M.D. calculated as 18)
Mother's Education	Number of years mother had attended school
Experience With Urban Life	Number of years subject had lived in towns or cities of population at least 10,000
Father's Occupation	1 = Occupation not requiring literacy (Peasant farmer, manual laborer, semi-skilled craftsman) 2 = Occupation requiring literacy but not professional training (Primary teacher, small businessman, secondary teacher if had not attended teacher's college) 3 = Occupation requiring professional training (Manager of major firm, university professor, doctor, secondary teacher who had attended teacher's college)

scores (e.g., Stage 4(3) or Stage 3(4)) are treated by multiplying the major stage by 75 and the minor stage by 25, and then summing the two products. Thus, Stage 4(3) receives the score 375, while the reverse mixture, Stage 3(4), receives the score 325.

In addition, I expanded the procedures slightly in order to take account of the information contained in a recent feature of the rating. This is the "A," or "B" substage value which is attached to the moral stage. These represent qualitatively different styles of approaching the moral reasoning questions. The "A" stage reflects a Normative Order or Utility Consequences Orientation toward the decisions on the interview, while the "B" substage involves an Ideal Self Orientation or a Justice and Fairness Orientation. What is meant by these different orientations is detailed in the section on the Global Scoring Method in Appendix III. However, in terms of scoring, the important point is that the "B" substage is thought to be slightly more advanced than the "A" substage, in the sense that it is possible for a subject to move from 3A to 3B, for instance, but not from 3B to 3A or from 4B to 4A (Kohlberg, et al., (1974). Often, however, subjects stick exclusively to either the "A" or "B" subtype as they develop, moving, for example, from 2A to 3A without passing through 2B at all, or going from 2B to 3B without going through 3A.

To treat these "A" and "B" values quantitatively, the "B" subtype has been assigned a value of +15 points if it is attached to a subject's major stage and a value of +5 points if it is attached to the minor stage. Thus, a subject who received the rating, Stage 3B(2B), would receive the moral score of 295 (that is, basic score of 275, plus 15 for the first "B" and 5 for the second "B"). The subject would still be scored somewhat below a subject who had received an unmixed rating of Stage 3A (that is, 300), which is correct since, even if it uses the "B" substage, a mixed 2-3 rating is considered to be developmentally less mature than a pure 3. The "A" and "B" substage information actually contributes little information to the process of scaling. The subjects' scores have been calculated including the added points for "B" ratings, and recalculated ignoring the "B" information entirely, and then the two sets of scores have been intercorrelated. The Pearson product-moment correlation is 0.99, indicating that the moral stage rating, rather than the "A" or "B" substage, contributes almost all of the variance.

MEASURES OF BACKGROUND INFORMATION, THE INDEPENDENT VARIABLES

The background data have also been converted into numerical scales. These scales serve as the group of independent variables for the analysis to be presented in the

Results chapter for the University sample (Chapter 6).

Most of the variables require little explanation. Sex is dichotomized into two values, 0 for male versus 1 for female. Major field of concentration has been treated in the same way, with the value of 1 assigned to those fields of study which have been hypothesized to stimulate moral judgment scores, and the value of 0 assigned to the remainder. Race, or ethnic group, is the third dichotomous variable, with the value of 1 assigned to the African subjects and 2 to the Asians. The large number of African cultural groupings and Asian religious groupings represented at the University of Nairobi makes it impossible to consider a finer breakdown of ethnic categories. Time spent living away measures the number of years subjects have lived independently, away from parents or other close adult relatives, such as uncles, grandparents, or married adult siblings. It is an ordinal variable with three categories, 0, 1, and 2, corresponding to "low," "medium," and "high." Group boundaries have been constructed so that equal numbers of students fall into each group; the cutoff points of four and nine years achieve this purpose. School achievement is the student's grade point average at the University of Nairobi. At this institution, all course grades are given in numbers, with a mark of 39 considered to be a failure and 70 to be excellent. Within each year's record, the course grades

have been averaged; then to obtain an overall average, the mean of the yearly averages has been computed. The measure of age is simply the student's chronological age as reported in years.

The table contains two measures of degree of contact with cultural and racial diversity. The first, years spent at heterogeneous high schools, relates to secondary school experience. Students estimated the percentage of each racial group at the secondary schools which they had attended, and from this data the number of years each subject had spent at schools with at least ten percent students of another race than the subject's own was calculated. This figure of ten percent constitutes an arbitrary cutoff point, chosen to fit my idea of "more than an insignificant minority." Subjects had spent as many as six or as few as zero years at racially heterogeneous schools defined in this way.

The second measure, friends from other groups, relates to the student's choice of friends at the University. All of the students had been requested to describe their friendship patterns. The question was asked in this manner: "Think of your five closest friends or associates at the University. What group does each one belong to?" This particular method of questioning may have inclined some students to exaggerate the ethnic diversity of their friends. My

intuitive feeling as the interviewer was that this was especially the case for the Asian students. Throughout East Africa, a major charge levelled at the Asian groups is that they are "exclusive," they supposedly consider themselves above Africans and refuse to socialize with them. Whether or not this criticism is true, Asian students at the University of Nairobi are sensitive to it. Many included one African in their list of five closest friends. Overall, the Asians said that they had many more friends from other racial groups than did the Africans. When subsequently interviewing the High School students, I changed to a different questioning technique in order to minimize this problem of reporting (see below, Chapter 3). Consequently, the friendship data on the High School students are probably more valid than those on the University students. Nevertheless, the University data have been coded to see if they will at least support any findings which might emerge from the High School analysis.

The friendship data have been used to construct an ordinal scale with three values corresponding to "low," "medium," and "high" degree of contact with other groups. The value 0 ("low") has been assigned to subjects whose friends all belonged to their own or else to very closely related ethnic groups. The opposite value, 2 ("high"), has

been assigned to subjects who had one or more friends from another racial group or from a foreign country outside of East Africa. Finally, the middle value, 1, has been assigned to students who had one or more friends from a different ethnic or religious group from their own, but no friends from another racial group or from a foreign country. For example, take the case of three Kikuyu students. The friends of the first student are all Kikuyu or from the closely related Meru group. This student would receive the score of 0 ("low"). The friends of the second student included four Kikuyus and one Samburu (an East African group very distinct from the Kikuyus). This student would receive the score of 1 ("medium"). Last, the friends of the third student include three Kikuyus, one Asian of the Ismaili group, and an American. This student would be scored 2 ("high" on degree of contact). Appendix V presents the complete list of groups considered to be of low, medium, and high degrees of difference from each other, for both the Asian and African subjects.

The six independent variables remaining on the list are conceptually closely related. In fact, the sixth is nothing other than a composite or summary of the previous five. These five measures can best be considered as symptoms of social change in present-day Kenya. As the economy

of the country develops from traditional agricultural and pastoral modes to an industrialized capitalistic organization, the life styles of the people change in rather definite ways. The five measures have been coded to capture this transition. Parents' marriage type is a dichotomous variable, with the value of 1 for monogamy and 0 for polygyny. Father's education and mother's education are simply the subjects' estimates of how many years each parent had attended school. Some parents had not actually attended primary school but had been taught to read at one of the Christian missions; this kind of training has been considered to be equivalent to two years of primary school. Father's occupation has been trichotomized according to what seemed to me to be the natural grouping criteria. In the 0 group ("low") were put jobs requiring no formal education, such as subsistence farming and working as a manual laborer or semiskilled craftsman. In the 1 class ("middle") were placed occupations which require a primary or secondary school level of literacy, such as school teacher or small business man. Finally, the 2 class ("high") includes occupations requiring professional training, such as doctor, lawyer, university professor, and secondary school teacher who has attended teacher's college. Therefore, father's occupation looks at the father's work in terms of the amount

of training required rather than the amount of income earned. Some of the farmers may actually have commanded a fair amount of wealth in terms of land or livestock without altering their traditional style of life. However, father's occupation is primarily of interest for this thesis insofar as it reflects level of modernization and thus overall economic well-being of the family was not investigated. The last measure of the set of five is experience with urban life. This is based on the student's estimate of how many years he or she had spent in urban or town environments. Here, a town has been defined as a settlement of 10,000 or more.

These five variables are intimately associated in present-day Kenya. Educated men tend to marry educated wives, to renounce polygyny, and to move to urban areas where they can find white-collar employment. In Table 2.4 appears the matrix of intercorrelations of these variables, for the University sample. All of the measures are highly related; in the case of father's education and father's occupation they are almost interchangeable.

To create a composite measure or index out of the five variables, the procedure of factor analysis (principal components method with iterations) has been used. As a data reducing technique, factor analysis seems ideally suited

Table 2.4: Intercorrelation (Pearson r's) of Measures Related to Modernization, for the University Sample

	<u>Parents' Marriage</u>	<u>Father's Occupation</u>	<u>Urban Life</u>	<u>Father's Education</u>	<u>Mother's Education</u>
Parents' Marriage Type	1.00	0.40**	0.42**	0.46***	0.39**
Father's Occupation		1.00	0.67***	0.82***	0.52***
Experience With Urban Life			1.00	0.64***	0.56***
Father's Education				1.00	0.63***
Mother's Education					1.00

Note: All tests of significance are two-tailed.

- * p < .05
- ** p < .01
- *** p < .001

to the problem. It operates on a correlation matrix and searches for the smallest possible number of linear combinations of the variables which will account for the greatest amount of the observed interrelations in the data. In the case of the matrix presented above, the factor analysis yields a single strong first factor which by itself accounts for 66 percent of the variance. All five of the independent

variables load highly on this factor, with parents' marriage type being the least related. Therefore, this first factor has been selected to serve as an index of modernization. The results of the factor analysis are presented in Table 2.5, below.

Table 2.5: Creation of the Index of Modernization for the University Sample

FACTOR MATRIX USING PRINCIPAL FACTORING METHOD WITH ITERATIONS				
	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>	<u>Communality</u>
Parents' Marriage Type	0.51363	0.04892	-0.06094	0.26993
Father's Occupation	0.86330	0.09969	-0.29118	0.84001
Father's Education	0.93799	0.31106	0.10658	0.98795
Mother's Education	0.72708	-0.07243	0.20587	0.57628
Experience with Urban Life	0.80294	-0.37368	-0.03684	0.78571
	<u>Factor</u>	<u>Eigenvalue</u>	<u>Percent of Variance Explained</u>	<u>Cumulative Percent</u>
	1	3.30200	66.0	66.0
	2	0.68474	13.7	79.7
	3	0.45652	9.1	88.9
INDEX OF MODERNIZATION = Factor 1				

CHAPTER 3

METHODOLOGY--HIGH SCHOOL SAMPLE

The High School study represents a more highly controlled approach to the study of social experience and moral development than does the University study. In the interview about past experiences, University students repeatedly reported that they had been influenced by living away from home and by meeting students from outside ethnic groups. The High School study was designed to investigate these two hypotheses in schools selected for presence or absence of these two variables. Some students attended boarding schools and the others attended comparable day schools. Some attended culturally and racially heterogeneous schools¹ while the others attended culturally homogeneous schools of equal academic standing. All students came from the same year of school and from the same ethnic group, and they were controlled for sex, with half young men and half young women.

THE SAMPLE

The large size of the Kikuyu population in Nairobi made this a suitable group to sample. The Kikuyus are the

¹The exact ethnic compositions of the schools selected are given in Appendix XI.

most politically powerful ethnic group of Kenya and have valued education as the road to prosperity for several decades. By picking such a group which strongly encourages school achievement in their children, it was possible to locate a sample in which rural students from a traditional area were just as oriented toward academic success as students living in Nairobi. The students living in Nairobi came from more modernized families than did the rural students, but modernization is not confounded with intellectual performance and values about education.

The year in school selected was Form Four of secondary school. This is approximately equivalent to the American tenth grade. During this year the students prepare and then sit for the "O" or Ordinary level examinations. Students who are selected for Form Five go on to study at one of the highly prestigious upper secondary schools in Kenya. All of these upper schools are culturally heterogeneous because all draw students from across the country. Form Four is the last year in which students attend schools whose student bodies are entirely of the same ethnic group.

To find such schools I went 100 miles north of Nairobi to the town of Nyeri. This town, with population 10,000 at the 1969 census, serves an area of extremely fertile countryside. The Kikuyu farmers in this area believe

strongly in Christianity and education. Many of the high schools near Nyeri have fine scholastic reputations. Twenty-one students at three schools were interviewed. These schools were almost exclusively Kikuyu. Ten of the subjects interviewed lived at home and attended a relatively new day school, the Kimathi Government Secondary School. Ten more attended boarding school. The five girls studied at Tumutumu Girls' High School in Karatina, one of the oldest secondary schools in Kenya. The five boys attended Nyeri High School, founded as a Catholic mission school.

The twenty-first subject was also a student at Kimathi Government Secondary School. She was interviewed on the expectation that she had attended Kimathi for four years, as had the other subjects from that school. However, it turned out that her school experiences were radically different from those of the other students in the Kimathi sample. For the previous four years, she had attended Mary Hill High School in Thika, a multiracial girls' boarding school. Because her secondary school experiences had involved heterogeneous boarding school rather than homogeneous day school, she has been counted in among the students interviewed in Nairobi. Meanwhile, an extra female subject was interviewed at Kimathi to insure that the sample contained ten students who had attended that school for four years.

Table 3.1: Size of the Sample--Secondary School Subjects Attending All-Kikuyu Schools

	<u>Living at Home</u>	<u>Living at School</u>
Girls	5	5
Boys	5	5

From Nyeri, the sample contains 20 students fitting a 2 x 2 design. From Nairobi, the sample was originally planned to contain 20 more. The completed design was thus to have been a 2 x 2 x 2 matrix of 40 subjects. This design was amended in two ways. First, as described, an extra female subject was obtained at Kimathi Government Secondary School. Second, the next school at which interviews were conducted, the Aga Khan (H.H.) High School, was not suitable in several ways, and therefore additional interviews were subsequently conducted at other schools of the same type.

Aga Khan (H.H.) High School was a formerly all-Ismaili High School, partially subsidized by contributions from the Aga Khan. The students and teachers at the school fall into two equally balanced racial groups: Asian (primarily Ismaili), and Africans of many cultural groups. During visits to the school, I observed little cross-racial friendliness, among either teachers or students. During

the several hours which I spent in the Teacher's Lounge, it became evident that African and Asian teachers were cordial but somewhat distant to each other. The African teachers would sit and talk together on one side of the room and the Asian teachers on the other side. This pattern contrasted sharply with what I observed at other schools, in which teachers of different races chatted humorously with each other, read interesting sections of the day's newspaper out loud to everyone in the room, and followed no clearcut racial pattern in the way they spaced themselves about the Teachers' Room. The students at Aga Khan seemed to mirror the adult pattern. I never observed students of opposite races walking or sitting together, as I did at several other schools. No African students at Aga Khan reported that they had close Asian friends.

Perhaps because of the atmosphere, Aga Khan High School is not extremely popular among the Africans in Nairobi and many prefer to send their children to other schools. Parents tend to send their children to Aga Khan only if they are unsuccessful in having them accepted at other schools. The Aga Khan subjects in the sample had noticeably lower Certificate of Primary Education scores than did the subjects from the other schools. In fact, the teacher at Aga Khan who helped me select Kikuyu subjects

explicitly warned me that the African students at the school had not had high enough grades to be accepted into other schools. He told me this, not knowing that I was interested in students' C.P.E. scores.

After interviewing at Aga Khan, four more schools were visited. Ten subjects from racially heterogeneous boarding schools were interviewed, and in addition, ten more subjects from racially heterogeneous day school were obtained. The four schools selected were formerly British schools: the Nairobi School, a boys' boarding school; Kenya High School, a girls' boarding school; Upper Hill School, a boys' day school; and State House Road Girls' Secondary School, a girls' day school. All of them were sex-segregated, and had only a small minority of European students in attendance. However, all of these schools contained a large number of Asian students. During visits to these schools, students of different races were frequently noticed sitting on the lawn together or passing between classes together. At one school, Kenya High School, large murals displayed pictures of the religious practices of Christianity, Hinduism, and Islam. Twelve students (ten of them girls) reported that they had one or more close friends who were either foreigners or from non-African races. Teachers came from all three racial groups and seemed to

enjoy talking together. To an outsider, it seemed that racial harmony was the official policy of these schools in a way that had not been true at Aga Khan High School. Perhaps the friendliness of the students simply reflected the institutional structure of the schools. At Aga Khan, all of the administrative staff had been Asian. In the other four schools, the administrative staffs were multi-racial.

Many of the students at the day schools had grown up in rural areas and now lived with relatives in town so that they could attend Nairobi schools. Similarly, many of the students at the boarding schools had families living in places other than Nairobi.

Table 3.2: Size of the Sample--Secondary School Subjects Attending Racially Mixed Schools

	<u>Living at Home</u>	<u>Living at School</u>
Girls	10	6*
Boys	10	5

*These six female subjects include five from Kenya High School in Nairobi and the one from Nyeri who had attended Mary Hill High School in Thika for four years.

A summary of the background characteristics of the High School students is given in Table 3.3, in a form parallel to that presented for the University students.

Table 3.3: Characteristics of the High School Sample,
N = 51

Mean Age	17.5 Years
Sex	26 Female, 25 Male
Mean Father's Education	5.8 Years
Mean Mother's Education	3.7 Years
Father's Occupation	31 Peasant Farmers, Manual Laborers, or Semi-skilled Craftsmen; 19 White-collar (owners of small shops, teachers, etc.) but not High Level Professionals 1 High Level Professional
Ethnic Group	Kikúyu
Mean Family Size (No. of children in family)	7.5
Percent Firstborns	22%
Religion	Christian
Percent Polygynous Parents	20%
Mean No. of Years Living Away From Close Adult Relatives	2.1 Years
Mean No. of Years at Racially Heterogeneous High Schools	2.4 Years
Year in School	Form Four (11 years in school)
Mean No. of Years Living in Urban Environments	5.3 Years

The two samples are different in ways one might expect. The High School students are younger, they have lived away from home less, and they have spent fewer years in urban environments. On the other hand, the two samples are quite similar in several important demographic respects. They have close average values for father's and mother's education, family size, percent firstborns, and percent of polygynous parents. Of course, the High School sample contains Kikuyus only, while the University sample represents a diversity of African and Asian groups.

THE QUESTION OF SELECTION BIAS

The subjects interviewed at the secondary schools were not selected by a truly random process, but serious bias was avoided. They were chosen for the sample in either of two ways: in most of the schools either a teacher or a principal selected subjects after I explained that I wished to talk to the more average students--not the brightest ones in the school but also not those in trouble academically; in two additional schools the classroom teacher asked for volunteers, and, because every student in class raised a hand, the teacher arbitrarily decided for the first row to go.

INTERVIEWING THE STUDENTS

The High School interview, like its University counterpart, took over an hour to administer. It was conducted entirely in English. Because my English pronunciation proved more difficult for the High School students to apprehend than it had been for the University subjects, each student was presented with a typed version of the interview to read as I spoke the questions. Many students, especially in Nyeri, did prefer to read each question quickly and make sure they understood it, before they answered.

The High School students were cordial, cooperative, and interested in the purpose of the study. It was stressed that the questions were not like a test because they did not have a right or wrong answer. Rather, the purpose was to see whether students at different kinds of schools had different viewpoints about moral ideas. After the interview, many students said that they had found the questions very interesting. Only one had any major difficulty in dealing with so many "why" questions; most students answered readily and a few seemed to really enjoy the role of being a person worthy of being asked serious questions. With cross-cultural research one cannot assume that one's test instrument represents a sensible and manageable task. The way in which the High School subjects reacted to the interview gives

confidence that the test instrument was suitable for students of that age living in that social context.

THE INTERVIEW ON BACKGROUND INFORMATION

To begin the interview, subjects were asked a series of questions about their personal histories. In this way the necessary information was obtained on each student's age, sex, family background, residence history, secondary school history, performance on the Certificate of Primary Education (C.P.E.'s), and current friendship patterns. To find out about their choice of friends at school, a more indirect technique was employed than had been used with the University students. The question was asked in this manner: "Who are your five closest friends at this school? Could you please tell me their names?" As the names were listed, they were written down, and then each name was taken in turn and the ethnic group of that person elicited. For example, a subject might be asked, "What about Mary Ngoima, is she a Kikuyu?" If the student replied no, she would be asked, "What is Mary then?"

THE MORAL JUDGMENT INTERVIEW

The High School interview involved a completely different set of moral questions than had the University interview. Three moral dilemmas were used and, in addition,

subjects were asked several questions about the rights and wrongs of suicide and male circumcision. The interview schedule is presented below, in Table 3.4. Story I and its probes were developed in collaboration with Richard Shweder,¹ who adapted the story from an instrument used by M. Hoffman (1970). The remaining stories were developed in consultation with University of Nairobi students.

CODING AND RELIABILITY

As described in the Methodology chapter for the University students (Chapter 2), the interviews were rated in the United States using the Global Scoring Method. Interrater reliability on 18 interviews achieved the satisfactory level of 0.84 (Pearson r).

OPERATIONALIZING THE VARIABLES

Both sections of the interview have been analyzed quantitatively--the background information and the moral judgment interview. Therefore, these data have been converted to numerical form, in relevant cases following the

¹We used this story to elicit a ranking by subjects of "degree of blameability" of all the participants in the Lost Child episode, as well as to provoke moral reasoning. The rank order of blame data will be presented in a forthcoming article by Edwards and Shweder. In this thesis, only the moral reasoning data will be analyzed.

Table 3.4: The High School Moral Judgment InterviewSTORY I

You and your friend Njoroge are on your way to a party given by another friend. You expect your girlfriends to be at the party and you are looking forward to an enjoyable evening of dancing and other things.

On your way you pass a small child who seems to be lost. You suggest to Njoroge that you stop and help the child but Njoroge argues that it will take some time to locate the child's family, that you will miss most of the fun of the party if you arrive late, and that the child's mother will miss him and find him in no time by herself. You are convinced by Njoroge's argument. You go to the party and do not help the child.

The next day you find out that the child after being left alone had wandered into an enclosed field and had been killed by a dangerous cow.

You also find out (1) the child had been left alone by its mother when the mother had been called by a neighbor; (2) the child had been warned by its mother many times never to go into that field; and (3) the dangerous cow had been left unattended by its herdboys.

Who is most responsible for the child's death?
Place in order of blame the following nine choices:

The Mother	God	The Cow
Yourself	The Child	Njoroge
Chance	The Herdboy	The Neighbor

1. You said you were (more/less) responsible for the child's death than (Njoroge/the mother/the herdboy). Why do you think so? (repeat for all three comparisons above).
2. Was it a great wrong what (you/Njoroge/the mother/the herdboy) did, or just a small mistake? Why? Would it have been a great wrong if the child had not been killed, or just a small one? Why? (repeat for all four parties).

Table 3.4: (continued)

(Story I, continued)

3. Should (you/Njoroge/the mother/the herdboys) be punished for what you/he/she did? Who should punish that person? What should they do to that person?
4. You said you did a bad thing by leaving that child. Let's say that nobody ever learns that you were there that night and saw the child and passed by. What will happen to you? How would you feel if nobody learns the secret? Would you feel relieved?

STORY II

There is a woman who has only one child, a girl named Mary Wairimu. Her father drinks too much beer and beats her mother harshly and does not pay school fees for Mary. He acts as if he hates the mother and the girl.

But Mary Wairimu is lucky anyway. When she gets older, she marries an educated boy and goes to live in Nairobi. She takes her mother with her and takes good care of her mother.

Years later, Mary goes to visit a friend in her old village. Her friend tells Mary, "Your father, now an old man, is suffering very much from poverty. There is no one to take care of him. He does not have enough food to eat."

Mary Wairimu says to her friend, "Why should I help him? He was very bad to me when I was young. Let him help himself now."

Her friend says, "No. You must help him anyway."

1. Do you agree with what Mary said or with what her friend said? Why?
2. What is the best reason you can see for Mary to help her father?
3. Is it a must for Mary to help or just her own willingness? Why?

Table 3.4: (continued)

(Story II, continued)

4. Should Mary help because she's his daughter or because of her own good self? Why?
5. If Mary helps, what rewards does she receive?
6. What about the neighbors of the old man? Should they have helped him? Why?
7. What should happen to them for not helping?
8. What will happen to Mary Wairimu if she does not help her father? Would anyone blame her? Who? Would anyone punish her? Who?
9. Can Mary's father make a curse on her for not helping? Will the curse harm Mary?
10. Who would blame the father for what he did to Mary and her mother? Who would punish the father?
11. Which was the greater wrong, Mary not helping her father, or the father not helping Mary? Why?

STORY III

A woman in a village is having her baby at home. There is only one woman helping her, her good friend Esther. When the baby is born, the woman discovers that it is severely deformed. The baby has no arms and no legs at all. The woman just kills the baby and tells everyone it was born dead. Her friend Esther agrees to keep the secret.

1. What caused that baby to be born crippled? Was it the past crime or mistake of the mother, or of the mother's family? (If yes) Why would a baby get crippled for the mistake of the mother?
2. Why do you think the mother killed it?
3. Was killing the baby very bad, a little bad, or was it even a bit good or acceptable to do? Why?

Table 3.4: (continued)

(Story III, continued)

4. What will happen to the mother? What about in later years?
 5. Who should blame her? Who should punish her?
 6. Can she ever have another child?
 7. Did the friend, Esther, do wrong? Why, or why not?
 8. What should happen to Esther?
 9. Should a friend report on a friend?
 10. Can a crippled baby with no arms and legs lead a happy life?
 11. Did the mother show mercy to the baby by killing it?
 12. How do you think the mother will feel after killing the baby?
 13. Can a person punish herself, or himself, if he thinks he has done something wrong? How?
-

CIRCUMCISION

1. Why do the Kikuyus circumcise boys?
 2. Is it really necessary for a boy to be circumcised? Why?
 3. What about the Luos. Why do they think they should not circumcise boys? Are they wrong to think that?
 4. Can a boy become a man without being circumcised?
-

Table 3.4: (continued)

SUICIDE

1. Is it all right for a person to kill himself if he wants to, or is it something wrong? Why?
 2. Does a person have any right to kill himself if he is unhappy and tired of living? Isn't it his own life really?
 3. Would you blame or condemn a person who decided to commit suicide?
-

same procedures outlined for the University sample. Table 3.5 presents a summary of the procedure used to operationalize every variable. There are 12 independent variables, based on background information, and one independent variable, the moral judgment score.

THE MEASURE OF MORAL JUDGMENT

To convert the moral judgment ratings into a quantitative scale, the method described above for the University sample has been followed. However, these ratings were more straightforward to convert because they had no codings for "A" or "B" substages. Therefore, it has been necessary only to calculate the value of the moral stage rating (e.g., State 3(2) or Stage 4) on the 600 point scale.

Table 3.5: Independent and Dependent Measures for the High School Sample

<u>Variable</u>	<u>Operational Definition</u>
Moral Judgment Score	Moral stage rating converted to numerical form, so as to range from possible minimum 100 to possible maximum 600
Sex	0 = Male 1 = Female
Age	Chronological age in years
School Achievement	Sum of Certificate of Primary Education scores, on Mathematics, English, and General Paper subtests
Time Spent Living Away	Number of years spent living independently, away from close adult relatives such as uncles, parents, grandparents, or married adult siblings 0 = 0-1 Years 1 = 4-11 Years
Years Spent at Heterogeneous High School	Number of years spent in secondary schools in which at least ten percent of the students were from racial group different from subject's
Friends From Other Groups	0 = No friends from groups other than subject's own or groups very closely related to subject's 1 = At least one friend from a group culturally distinct from subject's, but not from another racial group or foreign country 2 = At least one friend from another racial group or a foreign country
Modernization	Index created by factor analysis of five measures below:
Parents' Marriage Type	0 = Polygynous 1 = Monogamous

Table 3.5: (continued)

Variable	Operational Definition
Father's Education	Number of years father had attended school (literacy training at Christian Mission calculated as 2, Bachelor's degree calculated as 16, M.D. calculated as 18)
Mother's Education	Number of years mother had attended school
Experience With Urban Life	Number of years subject had lived in towns or cities of population at least 10,000
Father's Occupation	<p>1 = Occupation not requiring literacy (Peasant farmer, manual laborer, semi-skilled craftsman)</p> <p>2 = Occupation requiring literacy but not professional training (Primary teacher, small businessman, secondary teacher if had not attended teacher's college)</p> <p>3 = Occupation requiring professional training (Manager of major firm, university professor, doctor, secondary teacher who had attended teacher's college)</p>

MEASURES OF BACKGROUND INFORMATION,
THE INDEPENDENT VARIABLES

The measures of background information have been treated in a manner identical to that described for the University sample, and therefore need not be discussed in great detail. The measure of school achievement, however, is different, because it is based on the Certificate of Primary Education (C.P.E.) scores rather than on grade point averages. The C.P.E.'s consist of three subtests covering the areas of Mathematics, English, and General Knowledge (General Paper). The highest possible score a student may receive on any one subtest is ten, making the highest possible overall score to be 30. In fact, none of the subjects in the sample scored above 28, and the mean was 21.

Time spent living away has been categorized with different boundaries than was the case with the University students, because the majority of High School subjects still lived at home. Therefore, to split the sample reasonably evenly, only two categories are possible, 0-1 years versus 4 years or more.

An index of modernization also has been created for this sample, employing the procedure of factor analysis. The matrix of intercorrelations upon which the factor analysis is based appears below, in Table 3.6, and the results

Table 3.6: Intercorrelation (Pearson r's) of Measures Related to Modernization, for the High School Sample

	<u>Parents' Marriage</u>	<u>Father's Occupation</u>	<u>Urban Life</u>	<u>Father's Education</u>	<u>Mother's Education</u>
Parents' Marriage Type	1.00	0.10	0.06	0.41**	0.35***
Father's Occupation		1.00	0.23	0.53***	0.51***
Experience With Urban Life			1.00	0.07	0.13
Father's Education				1.00	0.72***
Mother's Education					1.00

Note: All tests of significance are two-tailed.

* $p < .05$

** $p < .01$

*** $p < .001$

of the factor analysis themselves follow, in Table 3.7.

Again, as with the University sample, a strong first factor emerges, and this factor serves as the index.

The list of independent variables for the High School sample is shorter by two than the list for the University sample (12 versus 14). This disparity results from the fact that race and major field of concentration can be omitted from consideration.

Table 3.7: Creation of the Index of Modernization for the High School Sample

FACTOR MATRIX USING PRINCIPAL FACTORING METHOD WITH ITERATIONS				
	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>	<u>Communality</u>
Parents' Marriage Type	0.42582	-0.37681	-0.24981	0.38571
Father's Education	0.89979	-0.16498	0.12789	0.85319
Mother's Education	0.79410	-0.04174	0.02092	0.63277
Father's Occupation	0.66422	0.43657	0.05392	0.63469
Experience with Urban Life	0.18238	0.28548	-0.24981	0.22713
	<u>Factor</u>	<u>Eigenvalue</u>	<u>Percent of Variance Explained</u>	<u>Cumulative Percent</u>
	1	2.41852	48.4	48.4
	2	1.03618	20.7	69.1
	3	0.84667	16.9	86.0
INDEX OF MODERNIZATION = Factor 1				

CHAPTER 4

METHODOLOGY--COMMUNITY SAMPLE

In terms of the hypotheses which they address, the High School and University results represent a single unit of analysis. They make it possible to focus on a specific age group, young adults, in a specific environment, the school, and then investigate the correlation of certain kinds of social and academic experiences with moral judgment scores. The Community sample represents a second, and thoroughly different, approach to the study of social experience and moral development. Here the subjects are individuals who were interviewed in their home communities rather than in schools. They range in age from 16 to 70 and in educational background from non-literate to college graduates. In several new and especially interesting ways, it becomes possible to ask about the effects of education on the moral judgment score. For example, it can be seen whether persons who are responsible leaders in their village communities show as high levels of moral reasoning as comparable adults from town, in spite of the fact that they have not received as much formal schooling, because it was not part of the traditional method of child training. Further, the relationship of years of schooling to moral

reasoning can be measured for a sample in which age and education are exceptionally unrelated and in which a broad range of ages and education levels are represented.

THE METHOD OF DATA COLLECTION

The 68 subjects lived in eight different communities in Kenya. Before the sample is described more fully, the method of data collection should be explained. During the first semester at the University of Nairobi I conducted a training seminar with a small group of third year students who were recruited from an upper level course in Social Psychology. For this seminar, a male and female student were selected from each of four ethnic groups of Kenya-- the Ismailis (an Asian religious group), and the Kikuyus,¹ Luyias, and Kipsigis (three African ethnic groups). In weekly meetings during the term, two tasks were accomplished. First, help was solicited from the students to develop moral judgment stories which would make sense to Kenyan people whether educated or uneducated, whether rural or urban. The two Ismaili students had grown up in Kisumu and Nairobi, while all of the African students had been raised in rural

¹The female was a Kikuyu and the male was a Meru (a small group very closely related to the Kikuyus linguistically, culturally, and politically).

communities. Each week possible moral judgment stories were suggested, and students discussed whether such a dilemma would seem interesting and meaningful to the people among whom they had lived as a child. Students rejected possible stories or suggested modifications to improve them. In this way four stories were developed which were subsequently used with both the University and Community samples. The second primary task of the training seminar was to give the students instruction and practice in moral judgment interviewing. The students were not taught Kohlberg's theory of stages, but, instead, we developed a standard set of probes to go with each story and extensively rehearsed the use of these probes.

The interviewing of subjects took place during the students' Christmas vacation. The plan was for each student to go home to his or her town or village and interview five high school students and five adult members of that community. For the latter group, "community leaders" were to be selected; that is, people who were at least responsible and respected members of their community and, at best, holders of any kind of political office or chairmanship of an important association in the area. It was stressed that the goal was to interview the sort of people to whom others turn for advice and council. On the other hand, with respect

to the high school subjects, the instructions were that any students living nearby would be fine.

Each student was to interview only subjects of his or her own sex. Furthermore, students were instructed to do all of the interviews in their childhood languages (Kikuyu, Kimeru, Baluyia, Kipsigis, or Gujarati) rather than in English.

In spite of this suggestion that the students should interview in their childhood languages, every one of them decided independently to modify this instruction. They chose to interview the secondary students exclusively in English, claiming that the subjects use English all day in school and are better trained to "reason logically" in that language. Furthermore, about a fourth of the adult interviews were also in English. These included the interviews of the Ismailis as well as all of the African primary or secondary teachers. In other words, English was used with those people who used that language frequently in everyday life, while other languages were used with the remaining people.

While the students were away in their home communities, I myself interviewed a group of secondary school students living in a semi-urban community twenty miles outside of Nairobi. This was the village of Ngecha, a Kikuyu community in which the Child Development Research Unit has for

many years maintained a panel community. Ngecha is a rather poor area, with most families engaged in subsistence farming supplemented by cash cropping or wage work. Not many young people in the village go on to secondary school, and those that do are rarely able to attend first class schools. Both male and female subjects were interviewed during their vacation week. None of them attended prestige high schools. The interviews were conducted in English. To ensure that each student thoroughly comprehended the basic line of each moral judgment story, a Kikuyu interpreter first told the subject the story in Kikuyu and answered any questions the subject might have about it. The students in this group were much shyer than those interviewed in Nairobi and in Nyeri and in many cases their English fluency was not as great. One student who had especial problems with English was later reinterviewed in Kikuyu. In terms of both the content and the moral stage of her responses, her two interviews were strikingly similar, suggesting that this group of interviews was of high enough quality to be worthy of further analysis.

THE SAMPLE

Once out in their communities, the students had difficulty in arranging interviews with exactly the number of subjects requested. Therefore, in some cases they came back

with fewer than ten interviews; in other cases they interviewed subjects of the opposite sex as well as those of their own sex. The Kipsigis woman dropped out of the interviewing completely prior to vacation, but the Kipsigis man, who came from the same area of Kenya, covered her by interviewing extra subjects..

As Table 4.1 displays, the resulting sample certainly contains a disparate collection of interviews. Male subjects predominate because many of the female interviewers found it easier to locate males than females to interview. For example, in Ngecha village where I interviewed, there were only two girls attending Form Three or higher.

The descriptive characteristics of the sample appear in Table 4.2, below. The profile of the students differs from that of the High School sample presented in the previous chapter. The latter are younger, have lived away from home less, come from more highly educated families, have fathers more likely to be engaged in white-collar work, and have spent more years living in urban environments. In a word, the High School sample is more modernized and urbanized than this sample of Community students. In spite of that difference, both groups have approximately the same percentage of polygamous parents (20%) and the same large family size (mean of 7.5 children in the family).

Table 4.1: The Community Sample, N = 68

<u>Ethnic Group</u>	<u>Local Area</u>	<u>Subjects</u>	<u>Sex of Interviewer</u>
Kikuyu and Meru	Ngecha Sublocation (20 miles from Nairobi)	7 Students (5 M, 2 F)	Female (myself)
	Githiga Location (25 miles from Nairobi)	3 Adults (Male) 4 Students (4 M, 1 F)	Female
	Meru Mwimbi Location (40 miles from Meru)	5 Adults (Male) 5 Students (Male)	Male
Kipsigis	Sigor Location (50 or more miles from Kericho)	11 Adults (6 M, 5 F) 6 Students (5 M, 1 F)	Male
Luyia	Idakho Location (12 miles from Kakamega)	5 Adults (3 M, 2 F) 3 Students (1 M, 2 F)	Female
	North Wanga Location (50 miles from Kisumu)	5 Adults (Male) 5 Students (Male)	Male
Ismaili	Nairobi	6 Adults (2 M, 4 F)	Female
	Kisumu	1 Adult (Male) 2 Students (Male)	Male

Table 4.2: Characteristics of the Community Sample, N = 68

	<u>Students (N = 32)</u>	<u>Adults (N = 36)</u>
Mean Age	19.7 Years	41.8 Years
Sex	26 Male, 6 Female	25 Male, 11 Female
Mean Education	10.5 Years	6.1 Years
Mean Father's Education	3.4 Years	--
Mean Mother's Education	1.22 Years	--
Father's Occupation	27 Peasant Farmers, Manual Laborers, or Semi-skilled Craftsmen 5 White-collar (owners of small shops, teachers, etc.) 0 High Level Pro- fessionals	--
Subject's Occupation	Students	20 Peasant Farmers, Manual Laborers, or Semi-skilled Craftsmen 13 White-collar (owners of small shops, teachers without profes- sional degrees, clerks) 3 Professional (secondary teachers with professional degree, managers in business firms)
Ethnic Group	16 Kikuyu and Meru 6 Kipsigis 8 Luyia 2 Ismaili	8 Kikuyu and Meru 11 Kipsigis 10 Luyia 7 Ismaili

Table 4.2: (continued)

	Students (N - 32)	Adults (N = 36)
Mean Family Size (No. of Children in Family)	7.4	--
Percent Firstborns	22%	--
Religion	Christian	2 Traditional, 26 Christian, 7 Muslim
Percent Polygynously Married	--	19%
Percent Polygynous Parents	19%	--
Mean Number of Years Living Away From Close Adult Relatives	3.3 Years	--
Mean Number of Years at Racially Heterogeneous Secondary Schools	0.9 Years	--
Mean Number of Years Living In Urban Environments	2.1 Years	--
Participation In Community	--	14 Office Holders in Local Politi- cal Posts or Community Asso- ciations 10 Committee Members

In terms of their educational experience, these Community students attend the full gamut of Kenya's secondary schools. Appendix VI presents a complete listing of the name and type of school each student was attending, as well as his or her year in that school. They range from prestige national boarding schools attended by top students from all over Kenya (e.g., Alliance High School, The Nairobi School, Nairobi Girls' School, and Kagumo High School) to "harambee," or non-government-sponsored, local schools with many fewer resources. Furthermore, these students represent all six forms of secondary school in a way which is randomly distributed with respect to age. There is a Kipsigis male of 27 in Form Two, and at the opposite end of the spectrum, a Kikuyu male of 16 in Form Four, and an Ismaili male of 20 in Form Six.

The adults are described in summary form in Table 4.2 and in full in Appendix VII (where each person's sex, age, occupation, and participation in community affairs are outlined). Most of the African adults are farmers (or "peasants," as the University students called them), primary school teachers, or small traders. They hold a number of political offices in their communities, ranging from Headman of the sublocation on down to Treasurer of the area cattle dip, and they serve on many different kinds of local associations, from school committees to church groups. In

age they range from 23 to over 70. In contrast, the Asian Ismaili subjects are mainly secondary school teachers or business employees. Most of their public service work takes place within the Ismaili communities of the cities--Nairobi and Kisumu--in which they reside. They are much younger than the Africans; the oldest is only 30 years of age. They are also much more highly educated than the Africans. Only five of the 29 Africans have attended one or more years of secondary school, while all seven of the Ismailis have.

THE INTERVIEW ON BACKGROUND INFORMATION

Each interviewer asked the subjects a series of questions about their personal histories. In the case of the students, information was obtained on their age, sex, ethnic group, family background, residence history, and secondary school history. In the case of the adults, attention was directed to their age, sex, educational background, occupation, ethnic group, polygynous versus monogamous marriage, and degree and type of participation in local politics and community associations. No information was collected on their experience with urban life because with a middle-aged sample this would have required lengthy life history interviewing. Furthermore, father's and mother's education have been omitted due to the fact that virtually all Africans of this generation in Kenya have preliterate parents.

THE MORAL JUDGMENT INTERVIEW

The four hypothetical dilemmas presented to the Community subjects are identical to those used with the University students and have been presented in a previous chapter (Chapter 2). Every Community subject responded to all four of the dilemmas.

CODING

As with previous samples, Betsy Speicher rated all of the interviews using the Global Scoring Method. Interrater reliability has not been determined for this data, as it has proved satisfactory for both the High School and University samples.

OPERATIONALIZING THE VARIABLES

The Community sample is neither large nor tightly enough controlled to support a fine-grained analysis with many variables leading to strong conclusions. Rather, its value lies in offering a first look at the moral reasoning of adults in a non-Western society in relation to that of students from the same communities. Therefore, only the most salient background variables will be considered, such as age and educational attainment, in relation to the dependent variables. For example, with the student data it would not be reasonable to try to test the effects of heterogeneity of high school and choice of friends from different

groups. In the first place, there are only 32 of these students. Second, they vary in age from 16 to 27 and in school grade from Form One to Form Six, as well as along the dimensions of modernization, sex, ethnic group, and so on. Third, some students attended excellent "national" schools while others attended much less well-supported local schools. The academic quality of the schools is inextricably confounded with heterogeneity of student body (though not with the factor of living away from home). Without knowing the C.P.E. or "O" Level scores of the students, there is no way to control for the academic quality of the schools. Therefore, the analysis has been kept as simple and straightforward as possible.

The procedures for operationalizing the independent and dependent variables are presented in tabular form below, in Tables 4.3 and 4.4.

THE MEASURE OF MORAL JUDGMENT

The procedure for converting the moral stage ratings into numerical form is identical to that explained for the University students, including the treatment of "A" and "B" substage categories.

THE MEASURES OF BACKGROUND INFORMATION, THE INDEPENDENT VARIABLES

As can be seen in Tables 4.3 and 4.4, the procedures used to convert the independent variables into numerical scales correspond to those applied to the previous samples.

Table 4.3: Independent and Dependent Measures, for the Student Portion of the Community Sample

<u>Variable</u>	<u>Operational Definition</u>
Moral Judgment Score	Moral stage rating converted to numerical form, so as to range from possible minimum 100 to possible maximum 600
Sex	0 = Male 1 = Female
Age	Chronological age in years
Time Spent Living Away	Number of years spent living independently, away from close adult relatives, such as uncles, parents, grandparents, or married siblings 0 = 0-2 Years 1 = 3-4 Years 2 = 5-13 Years
Education	Year in secondary school (1 to 6)
Modernization	Index created by factor analysis of five measures below:
Parents' Marriage Type	0 = Polygynous 1 = Monogamous
Experience With Urban Life	Number of years subject had lived in towns or cities of population at least 10,000
Father's Occupation	1 = Occupation not requiring literacy (Peasant farmer, manual laborer, semi-skilled craftsman) 2 = Occupation requiring literacy but not professional training (Primary teacher, small businessman, secondary teacher if had not attended teacher's college) 3 = Occupation requiring professional training (Manager of major firm, university professor, etc.)

Table 4.3: (continued)

Variable	Operational Definition
Father's Education	Number of years father had attended school (literacy training at Christian Mission calculated as 2, Bachelor's degree calculated as 16)
Mother's Education	Number of years mother had attended school

Time spent living away, an independent variable for the students, has been categorized according to the cut-off points which most evenly split the data. These categories are 0-2 years for the "low" group, 3-4 years for the "middle" group, and 5-13 years for the "high" group. For the students, race is not treated as an independent variable because there are only two Asian subjects. However, differences in degree of modernization have been quantified using five measures to create an index of modernization. The matrix of intercorrelations for the five measures appears below, in Table 4.5, followed by the results of the factor analysis. The search for a strong first factor has been successful for the third time and this Factor One serves as the index of modernization.

With the Community adults, on the other hand, an index of modernization has not been created for two reasons.

Table 4.4: Independent and Dependent Measures, for the Adult Portion of the Community Sample

<u>Variable</u>	<u>Operational Definition</u>
Moral Judgment Score	Moral stage rating converted to numerical form, so as to range from possible minimum 100 to possible maximum 600
Sex	0 = Male 1 = Female
Age	Chronological age in years
Race	0 = African 1 = Asian
Marriage Type	0 = Polygynous 1 = Monogamous
Occupation	1 = Occupation not requiring literacy (Peasant farmer, manual laborer, semi-skilled craftsman) 2 = Occupation requiring literacy but not professional training (Primary teacher, small businessman, secondary teacher if had not attended teacher's college) 3 = Occupation requiring professional training (Manager of major firm, university professor, secondary teacher if had attended teacher's college)

Table 4.5: Intercorrelation (Pearson r's) of Measures Related to Modernization, for the Student Portion of the Community Sample

	<u>Parents' Marriage</u>	<u>Urban Life</u>	<u>Father's Education</u>	<u>Mother's Education</u>	<u>Father's Occupation</u>
Parents' Marriage Type	1.00	-0.08	0.05	-0.02	0.07
Experience With Urban Life		1.00	0.43**	0.47**	0.57***
Father's Education			1.00	0.76***	0.47**
Mother's Education				1.00	0.53***
Father's Occupation					1.00

Note: All tests of significance are two-tailed.

- * p < .05
- ** p < .01
- *** p < .001

In the first place, no information was available on experience with urban life or spouse's level of education. Thus, there would have been only three measures to use to create the index--education, occupation, and monogamous versus polygynous marriage type. Second, the variables have been treated separately because it is useful and interesting to make a direct test of their relative predictive powers. Do

Table 4.6: Creation of the Index of Modernization for the Student Portion of the Community Sample

FACTOR MATRIX USING PRINCIPAL FACTORING METHOD WITH ITERATIONS			
	<u>Factor 1</u>	<u>Factor 2</u>	<u>Communality</u>
Parents' Marriage Type	0.00421	-0.09847	0.00971
Experience With Urban Life	0.71459	0.48961	0.75035
Father's Education	0.80801	-0.32844	0.76076
Mother's Education	0.83619	-0.23283	0.75343
Father's Education	0.67060	0.16496	0.47692

<u>Factor</u>	<u>Eigenvalue</u>	<u>Percent of Variance Explained</u>	<u>Cumulative Percent</u>
1	2.61825	52.4	52.4
2	1.02684	20.5	72.9

INDEX OF MODERNIZATION EQUALS FACTOR ONE

all three correlate equally highly with moral judgment stage scores? Education might be expected to be more highly related because it provides a more finely differentiated scale than do occupation and marriage types, which have only three and two categories each, respectively.

Participation in the community, while an important factor to remember when interpreting the adult data, has not been treated as an independent variable. All of the Community adults were responsible and respected citizens and therefore constitute a homogeneous group with respect to this dimension. Some held more position of authority than did others, but, in the interviewers' judgments, all subjects were highly identified with the value systems of their communities. To find out how participation affects level of moral reasoning, a sample of adults much more differentiated with regard to participation and leadership in community decision-making activities would be needed.

CHAPTER 5

OVERALL RESULTS--THE THREE SAMPLESMEANS AND DISTRIBUTIONS OF
MORAL STAGE SCORES BY SAMPLE

In Table 5.1 are displayed the means, standard deviations, and frequency distributions of the moral stage scores, broken down in terms of the University, High School, and Community samples. The University students have the highest average moral judgment score (303.75, or Stage 3) and the widest distribution (from pure Stage 2 to mixed Stage 4-5). The other adult subsample, the Community adults, has the second highest mean moral judgment stage score (271.11, or Stage 3(2)) and by far the most constricted distribution (from Stage 2 to mixed Stage 3-4 only). Following the Community adults comes the older of the two secondary school samples, the Community students, with a mean moral stage score of 236.41 (Stage 2(3)) and a standard deviation of 51.84. Finally, the group with the lowest average moral judgment score is the younger of the secondary samples, the High School sample. Their mean is only 217.16 (Stage 2), but their standard deviation is large (57.33) because the scores range all of the way from a low of pure Stage 1 to a high of mixed Stage 3-4.

Table 5.1: Means, Standard Deviations, and Frequency Distribution of the Moral Judgment Score, Broken Down by Sample

Sample	FREQUENCIES AND PROPORTIONS OF SUBJECTS BY MORAL STAGE:								TOTAL
	Stage 1	Mixed 1-2	Stage 2	Mixed 2-3	Stage 3	Mixed 3-4	Stage 4	Mixed 4-5	
University	0	0	2 4%	21 40%	13 25%	11 21%	3 6%	2 4%	52 100%
High School	1 2%	13 26%	14 27%	15 29%	4 8%	4 8%	0	0	51 100%
Community Adults	0	0	6 17%	14 39%	12 33%	4 11%	0	0	36 100%
Community Students	0	2 6%	12 37%	13 41%	4 13%	0	1 3%	0	32 100%

<u>Sample</u>	<u>Mean</u>	<u>Standard Deviation</u>
University	203.75	61.75
High School	217.16	57.33
Community Adults	271.11	46.40
Community Students	236.41	51.84

The distribution of moral judgment scores for the Community adults deserves comment because of its narrow range. This range may be so constricted because the sample represents a homogeneous group, "community leaders," and therefore any Stage 1 adults may have been selected out of the sample. On the other hand, there simply may not be many Stage 1 adults in Kenyan villages, where almost everyone is fully embedded in the social life of the community.

DISTRIBUTION OF MORAL JUDGMENT SCORES
BY EDUCATION LEVELS

The relationship of moral judgment scores to level of education will be a major theme of this thesis. An overview of this relationship can be seen in Table 5.2, below. The Stage 4 level of reasoning is clearly concentrated at the advanced levels of education. In contrast, Stages 2 and 3 appear in individuals of all levels of education. Finally, Stage 1 occurs only among secondary level individuals. It is probably absent among the primary level subjects because all of them are adults, whereas many of the secondary level subjects are under 25. In fact, every one of the Stage 1 subjects is a current student in secondary school. As will be seen below, age as well as education is positively related to education, so that many secondary level adolescents score lower than many of the nonschooled or primary level adults.

Table 5.2: Frequency Distributions of the Moral Judgment Score, Broken Down by Education Levels

Education	FREQUENCIES AND PROPORTIONS OF SUBJECTS								TOTAL
	BY MORAL STAGE								
	Stage 1	Mixed 1-2	Stage 2	Mixed 2-3	Stage 3	Mixed 3-4	Stage 4	Mixed 4-5	
Nonschooled (0-1 Years)	0	0	3 27%	5 46%	3 27%	0	0	0	11 100%
Primary (2-8 Years)	0	0	3 25%	6 50%	2 17%	1 8%	0	0	12 100%
Secondary (9-13 Years)	1 1%	15 17%	26 29%	30 33%	13 14%	4 4%	1 1%	0	90 100%
College (14-18 Years)	0	0	2 3%	22 38%	15 26%	14 24%	3 5%	2 3%	58 100%

DISTRIBUTION OF MORAL JUDGMENT
SCORES BY AGE LEVELS

Age is indeed positively related to moral judgment, as can be seen in Table 5.3, below. All of the pure Stage 4 reasoning appears in adults (over 20 years), while all of the Stage 1 or mixed Stage 1-2 reasoning appears in adolescents or adults under 25 years. The Stages 2 and 3 reasoning appear at all four of the age levels.

DISTRIBUTION OF MORAL JUDGMENT
SCORES BY SEX

Table 5.4 presents the frequencies and proportions of each sex at each of the moral judgment stage levels. Sex differences are not striking. The sample of females is smaller than that of the males but covers as wide a range of scores. There are somewhat more pure Stage 2 and Stage 4 males, and more mixed Stage 2-3 and 3-4 females, but these differences are slight. When examined sample by sample, these distributional differences will be seen to be localized in the Community sample and not at all evident in any of the three student samples.

DISTRIBUTION OF MORAL JUDGMENT
SCORES BY ETHNIC GROUP

The ethnic group differences (cf. Table 5.5) cannot be given much weight by themselves because they are so confounded with education and age differences. Only Ismailis,

Table 5.3: Frequency Distribution of the Moral Judgment Score, Broken Down by Age Levels

Age	FREQUENCIES AND PROPORTIONS OF SUBJECTS BY MORAL STAGE								TOTAL
	Stage 1	Mixed 1-2	Stage 2	Mixed 2-3	Stage 3	Mixed 3-4	Stage 4	Mixed 4-5	
16-19 Years	1 2%	11 17%	19 30%	22 35%	6 10%	4 6%	0	0	63 100%
20-25 Years	0	4 6%	9 13%	23 34%	16 24%	11 16%	3 5%	1 2%	67 100%
26-35 Years	0	0	1 5%	7 35%	7 35%	3 15%	1 5%	1 5%	20 100%
36-70 Years	0	0	5 24%	11 52%	4 19%	1 5%	0	0	21 100%

Table 5.4: Frequency Distribution of the Moral Judgment Score, Broken Down by Sex

Sex	FREQUENCIES AND PROPORTIONS OF SUBJECTS BY MORAL STAGE								TOTAL
	Stage 1	Mixed 1-2	Stage 2	Mixed 2-3	Stage 3	Mixed 3-4	Stage 4	Mixed 4-5	
Females	1 2%	5 8%	8 13%	24 40%	12 20%	9 15%	0	1 2%	60 100%
Males	0	10 9%	26 23%	39 35%	21 19%	10 9%	4 4%	1 1%	111 100%

Table 5.5: Frequency Distributions of the Moral Judgment Score, Broken Down by Ethnic Group

AFRICAN GROUPS	FREQUENCIES OF SUBJECTS BY MORAL STAGE								TOTAL
	Stage 1	Mixed 1-2	Stage 2	Mixed 2-3	Stage 3	Mixed 3-4	Stage 4	Mixed 4-5	
Kikuyu	1	14	23	30	14	11	1	1	95
Luyia	0	0	4	10	5	1	1	0	21
Kipsigis	0	1	6	10	2	0	0	0	19
Luo	0	0	0	0	1	3	0	0	4
Gusii	0	0	0	0	1	0	0	1	2
Coastal	0	0	1	1	0	0	1	0	3
Ugandan	0	0	0	0	1	0	0	0	1
Total	1	15	34	51	24	15	3	2	145
Proportions	1%	10%	24%	35%	17%	10%	2%	1%	100%

ASIAN GROUPS									
Ismaili	0	0	0	7	4	2	0	0	13
Hindu	0	0	0	2	5	0	0	0	7
Muslim	0	0	0	3	0	1	1	0	5
Sikh	0	0	0	0	0	1	0	0	1
Total	0	0	0	12	9	4	1	0	26
Proportions				46%	35%	15%	4%		100%

Kikuyus, Luyias, and Kipsigis are represented by secondary students, university students, and community leaders--and these not in equal proportions. The Africans certainly show a much broader distribution of scores than do the Asians. Both the highest scoring subjects (Stage 4-5) and lowest scoring subjects (Stages 1 and 2) are found exclusively among the Africans.

CHAPTER 6

RESULTS--UNIVERSITY SAMPLETHE RELATIONSHIP OF MORAL JUDGMENT TO
BACKGROUND VARIABLES: RACE

The University sample contains two distinct sub-samples, the Africans and the Asians. These two groups differ sharply on a number of important independent variables--variables which are expected to relate positively to moral judgment scores. For example, the Africans are older and are more likely to be studying in the Faculties of Arts and Law.¹ On the other hand, the Asians come from more modernized and urbanized backgrounds than do the Africans, and therefore are more likely to have attended racially and culturally heterogeneous secondary schools (such as those found in Nairobi) while living at home with their parents. The Asians have spent many fewer years living independently than have the Africans. In Table 6.1, below, are presented the group means for these measures to show just how different the two groups are. Most of the mean differences are statistically significant.

¹In the University sample, Africans are disproportionately frequent in the Faculties of Arts and Education, Asians in the Faculties of Medicine and Engineering. In Appendix VIII are given my speculations as to why this is so.

Table 6.1: Group Differences Between the African and Asian Subjects in the University Sample

<u>Independent Variable</u>	<u>Africans (N = 35)</u>	<u>Asians (N = 17)</u>	<u>Value of F in One-Way Analysis of Variance</u>
Age	23.3 Years	21.5 Years	7.07*
Major Field of Concentration (Percent in Arts or Law)	46%	24%	2.40
Time Spent Living Away	8.1 Years	2.9 Years	43.55**
Years Spent at Heterogeneous High Schools	1.4 Years	3.5 Years	9.67**
Father's Education	4.3 Years	10.8 Years	21.50**
Mother's Education	2.2 Years	7.5 Years	27.78**
Father's Occupation ¹	1.3	2.0	24.89**
Percent Polygynous Parents	37%	0%	9.66**
Experience With Urban Life	4.6 Years	18.1 Years	69.40**
Index of Modernization ¹	9.6	31.3	65.23**

Note: For F test with 50 d.f. within groups, 1 d.f. between groups, $F = 4.03$, $p < .05^*$
 $F = 7.17$, $p < .01^{**}$

¹Confer operational definition in University Chapter on Methodology (Chapter 2).

In spite of all of these differences, or perhaps because they somehow combine to cancel each other out, the Africans and Asians do not differ significantly in moral judgment score. The mean moral judgment score of the 35 African subjects is 309.9, while that for the 17 Asian subjects is somewhat lower, 291.2. This difference is not statistically significant ($t = 1.08$, separate variance estimate, d.f. = 36.6).

The lack of difference by race is of great interest. It suggests that family background is not the only or not the major factor operating on the moral judgment scores. If it were, one would have expected the Asians to outscore the Africans by a wide margin. Instead, the Africans are slightly ahead. This may be one of the first studies of cognitive development in which the more traditional, rural group performs at virtually the same level as the more modernized, urbanized, and wealthy group.

SEX

As with the factor of race, sex is not significantly related to moral judgment scores. The mean score for the 17 female students is 309.4, whereas that for the 35 male students is 301.0. This difference comes nowhere near being statistically significant ($t = 0.44$, separate variance estimate, d.f. = 29.3).

Thus, in spite of the great inequality of status between the sexes in both African and Asian culture, the two groups performed similarly on the moral judgment interview. Not only do they display the same mean scores, but also they show the same range and distribution. This can be seen in Table 6.2. The females show no evidence of being more highly concentrated at Stage 3 than the males, as has been found with Western high school students by Turiel (forthcoming) and Simpson and Graham (forthcoming). In this Kenyan sample, the females manifest as much Stage 2 and Stage 4 reasoning as do the males.

AGE

The University students range in age from 19 to 31. Across this range, age correlates positively but not significantly with the moral judgment scores (Spearman $r_s = 0.21$, $p = \text{non-significant}$). The age trend can be seen in Table 6.3, below, where the sample has been broken down into three age groups. On the basis of research among Turkish young adults (Turiel, Kohlberg, and Edwards, forthcoming), a positive relationship between age and moral judgment stage had been expected; on the basis of this data, it appears that the hypothesis is not confirmed. However, as will be shown at the end of the chapter, the positive

Table 6.2: Pattern of Distribution of Moral Judgment Scores, for Male and Female Subjects (University Sample)

Sex	FREQUENCIES AND PERCENTAGES OF SUBJECTS						MEAN MORAL JUDGMENT SCORE
	Stage	Mixed	Stage	Mixed	Stage	Mixed	
	2	2-3	3	3-4	4	4-5	
Females (N = 17)	1 6%	7 41%	3 18%	5 29%	0 0%	1 6%	309.4
Males (N = 35)	1 3%	14 40%	10 29%	6 17%	3 8%	1 3%	301.0

Table 6.3: The Relationship Between Age and Moral Judgment Scores, for the University Sample

<u>MEAN MORAL JUDGMENT SCORES FOR THREE AGE GROUPS</u>			
	<u>19-21 Years</u>	<u>22-24 Years</u>	<u>25-31 Years</u>
Number of Subjects	15	30	7
Mean Moral Judgment Score	285.0	309.2	320.7

relationship between age and moral judgment does become significant after controlling for other variables.

SCHOOL ACHIEVEMENT

The measure of school achievement for the University students is their grade point average over the years which they had attended the University of Nairobi. These scores show a wide distribution, ranging from a low of 46 (almost failing, by University standards) to a high of 70 (excellent). However, the grades do not correlate at all with moral judgment scores (Spearman $r_s = .08$, $p =$ non-significant). A positive relationship had been expected on the grounds that poor grades might indicate lack of ability to deal with abstract verbal material, such as that in the moral judgment interview. The results do not confirm this hypothesis. It may be that the grade point averages are

a poor measure of cognitive ability. On the other hand, it may be that the selection process for entering the University has been so severe that all students possess high levels of ability to handle abstract verbal material. In that case, all subjects would have had sufficient cognitive ability to deal with the interview but their differences in performance were the result of other factors; for example, their academic or peer experiences. Because the data clearly demonstrate relationships of moral judgment to some of these latter experiences, it seems reasonable to tentatively support the second explanation.

MODERNIZATION

The primary measure of modernization is the index created by the method of factor analysis. This index shows no relationship at all to the moral judgment scores. Nor do any of its component measures show any correlation with moral judgment. These findings appear in Table 6.4, below.

These results do not at first sight support the hypothesis that modernization, considered as a proxy for non-authoritarian child-rearing practices, should be positively related to performance on the moral judgment interview. They are not necessarily negative findings, however. A crucial fact is that all but seven of the University subjects have lived away from home for two years or more.

Table 6.4: The Relationship of Family Level of Modernization to Moral Judgment Scores, for the University Sample

SPEARMAN CORRELATION (r_s) WITH MORAL SCORE	
<u>Independent Measure</u>	
Index of Modernization	-0.01
Father's Education	0.03
Mother's Education	0.08
Parents' Marriage Type	0.10
Experience with Urban Life	-0.03
Father's Occupation	-0.05

The effect of child-rearing practices has been predicted to be most strong for students still embedded in the family; that is, still living at home. Since only a very small minority of the University subjects were still under the authority of their families, it is not surprising that modernization shows so little effect. As will be demonstrated below, modernization and time spent living away interact with each other in the hypothesized way; that is, among subjects living at home, the traditional subjects are behind more modernized ones in moral judgment stage, but the experience of living independently causes them to catch up with the modernized ones and become equal.

TIME SPENT LIVING AWAY

Time spent living away is positively and unequivocally related to the moral judgment score (Spearman $r_s = 0.39$, $p < .01$, two-tailed). In fact, of all the predictor variables, time spent living away shows the highest zero order correlation with the dependent measure. Furthermore, the data manifest a clearcut linear progression, as revealed in Table 6.5. The students who have lived away the least amount (0-4 years) show the lowest mean moral judgment score, the students who have lived away a medium amount (5-8 years) show an intermediate average, and those who have lived away the greatest amount (9-12 years) display the highest average.

Table 6.5: The Relationship of Time Spent Living Away to Moral Judgment Scores, for the University Sample

	<u>TIME SPENT LIVING AWAY</u>		
	<u>0-4 Years</u>	<u>5-8 Years</u>	<u>9-12 Years</u>
Number of Subjects	16	17	19
Mean Moral Judgment Score	277.2	297.4	331.8

Thus, the empirical relationships agree with the hypothesis about the influence of living independently. Furthermore, as the multiple regression analysis at the

end of this chapter will demonstrate, the relationship between moral judgment scores and time spent living away remains significant even after controlling for age and all of the other independent variables. . This is a very robust result, and one of great interest in understanding environmental influences on the development of conventional moral reasoning.

THE INTERACTION OF MODERNIZATION AND LIVING AWAY

According to the theories presented in the Introduction, modernization and time spent living away are not independent factors but, rather, interact with each other. Among students from traditional families, the difference in moral judgment scores between subjects who still live at home and those who have been living away a long time should be great. On the other hand, among students from more modernized families, the difference between the two types of subjects should be relatively small. Living away from home is expected to exert a powerful influence on the traditional subjects and cause them to come to the same level as the more modernized students.

This hypothesis cannot be tested statistically on the University sample because of the distributions of the subjects. Too few traditional subjects fall at the low

end of the living away scale, and too few modernized ones fall at the high end. However, the trends of the data are clear and are presented in Table 6.6, below.

Table 6.6: The Interaction of Modernization and Time Spent Living Away in Their Effects on Moral Judgment Scores, for the University Sample
(Mean moral scores for the sample broken down by three categories of time spent living away and two categories of modernization)

Level of Modernization	TIME SPENT LIVING AWAY		
	0-4 Years	5-8 Years	9-12 Years
<u>Traditional</u> (Subjects below the median on the index)	266.2 N = 4	291.8 N = 11	330.8 N = 13
<u>Modernized</u> (Subjects above the median on the index)	280.8 N = 12	307.5 N = 6	334.2 N = 6

At the low end of the living away scale, the modernized subjects outscore the traditional ones by 14.6 points. At the medium position of the living away scale, this difference is still large, 15.7 points. However, at the high end of the scale, the gap diminishes to 3.4 points.

In later chapters (Chapters 8 and 9), the same trends will be shown to appear in other samples, lending further support to the notion.

MAJOR FIELD OF CONCENTRATION

Students studying sociology, economics, government, law, and related fields (those in the Faculties of Arts and Law) have been hypothesized to show higher moral judgment scores than students in other major fields of concentration. This hypothesis is powerfully supported by the data. The mean moral judgment score of the first group is 334.2, while that of the second group is 284.7, a difference of 49.5 points. The difference is significant at the .01 level, two-tailed ($t = 3.05$, separate variance estimate, $d.f. = 41.1$).

The means suggest an overall difference between the two groups. The actual patterns of distribution of the scores clarify more precisely the sort of difference. For example, it could be that the students in Arts and Law show more Stage 3 reasoning, but not more Stages 4 or 5 thought. Or it could be that they show more of all of the higher stages, and less of all of the lower stages. Table 6.7 reveals that the latter suggestion is the case. The study of Arts and Law is associated with higher proportions of both Stages 3 and 4, and perhaps also Stage 5, levels of reasoning. Therefore, the data suggest that the study of Arts and Law stimulates not only the "ideal social perspective" of Stage 3, but also the more formal and legalistic,

Table 6.7: Pattern of Distribution of Moral Judgment Scores for Students in Different Major Fields of Concentration (University Sample)

Major Field of Concentration	FREQUENCIES AND PERCENTAGES OF SUBJECTS						Mean Moral Judgment Score
	Stage 2	Mixed 2-3	Stage 3	Mixed 3-4	Stage 4	Mixed 4-5	
Faculties of Arts and Law (includes Sociology, History, Law, Economics, Government, Religious Studies)	0	6	4	5	2	2	334.2
	0%	31%	21%	26%	11%	11%	
Other Faculties (includes Medicine, Education, Commerce, Science, Engineering)	2	15	9	6	1	0	284.7
	6%	46%	27%	18%	3%	0%	

"bureaucratic" perspective of the very high stages. As the data in a later chapter (Chapter 9) will demonstrate, Stage 4 reasoning appears almost exclusively in individuals with advanced levels of education (14 years of school or more). The University findings clarify which specific types of things taught in higher education may be conducive to the establishment of the Stage 4 perspective.

A weakness of this argument is that it is based on cross-sectional data. One might interpret the findings as suggesting that higher stage students choose to enter Arts and Law rather than that the material considered in these courses accelerates the development of their thinking. Without longitudinal data it cannot conclusively be proven that the study of Arts and Law is the cause rather than the effect of higher moral judgment scores. However, as will be seen in the next chapter, from the point of view of the University students themselves, the study of sociology and the other related fields was a stimulus to their thinking. The testimony of the students will add to the evidence that major field of concentration influences the development of moral reasoning.

YEARS SPENT AT HETEROGENEOUS HIGH SCHOOLS

Many University subjects had frequent opportunity during the secondary school years to meet people from racial

or cultural backgrounds different from their own. Students who attended multiracial and multicultural secondary schools certainly had more opportunity to meet such people than did those who attended culturally homogeneous schools, and accordingly the operational definition of amount of contact is number of years spent at multiracial and multicultural secondary schools. This is an imperfect measure because the homogeneous schools often have teachers from Western countries and the students at these schools often meet students from other groups while travelling for debates or sporting events. However, the students at the multiracial and multicultural schools have more frequent exposure to people from a wide variety of different groups and undoubtedly encounter them in a broader range of contexts than do the students at the homogeneous schools.

This independent measure is not significantly related to moral judgment scores on the zero order level (Spearman $r_s = 0.06$). The mean moral score for the 24 students who spent 0-2 years in multiracial secondary schools is 296.0, while that for the 28 students who spent 3-6 years is slightly higher, 310.0, but the difference is not significant ($t = 0.85$, separate variance estimate, d.f. = 49.68).

However, due to the vicissitudes of the sample, the measure of years spent at heterogeneous high schools

is somewhat negatively correlated with both the measures of time spent living away from home and major field of concentration (Pearson $r = 0.26$ and 0.16 , respectively). This suggests that those latter, powerful effects may be masking the effect of years spent at heterogeneous high schools. In other words, if the effects of time spent living away and major field of concentration were controlled for, the hypothesized relationship might emerge.

To test this notion, the partial correlation of moral judgment scores and years spent at heterogeneous high schools has been performed, controlling simultaneously for time spent living away and major fields of concentration. The partial correlation coefficient is $.22$, which closely approaches significance ($p = .066$, two-tailed).

In a multiple regression analysis at the end of this chapter, the same notion will be tested in a slightly different way and the same result will occur. The data provide tentative but not strong support for the hypothesis about the influence of attending multiracial secondary school.

FRIENDS FROM OTHER GROUPS

The last independent variable to be tested is the measure of friendship choices at the University of Nairobi. This measure is based on the students' reports of the ethnic

groups of their closest associates at school. Thirteen subjects claimed to have at least one friend from another racial group or from a foreign country other than Tanzania or Uganda. Twenty-four students did not have friends of that high a degree of difference but did claim to have friends from other cultural groups of their own race. Finally, for 15 students, all of their close associates were from their own or very closely related cultural groups.

This ordinal measure of friendship choices is not significantly related to the moral judgment score (Spearman $r_s = 0.07$). However, the data contain two opposing trends which combine to cancel each other out. For the 35 African subjects, the correlation is positive and approaching significance (Spearman $r_s = 0.30$, $p = .078$, two-tailed), while on the other hand, for the 17 Asians it is non-significantly negative (Spearman $r_s = 0.19$). These findings appear in Table 6.8, together with the mean moral judgment scores of the different friendship groupings. Data for the Africans taken separately, the Asians taken separately, and the total sample combined are provided in the table.

It is clear from the table that the Asians claimed to have many more friends from other races or countries than did the Africans (53 versus 11 percent). In fact, whereas five of the Asians (29 percent) said they had at

Table 6.8: The Relationship of Moral Judgment Scores to Choice of Friends from Other Cultural Groups, for the University Sample

Mean Moral Scores for Students Divided into Three Groups According to Friendship Patterns

	<u>Students with Friends from Their Own or Very Closely Related Groups Only</u>	<u>Students with Friends from Another Asian or African Group</u>	<u>Students with Friends from Another Race or a Foreign Country</u>	<u>Spearman Correlation (r_s) with Moral Judgment Scores</u>
African Students	293.9 N = 14	307.4 N = 17	376.2 N = 4	$r_s = 0.30, p = .08$, two-tailed
Asian Students	295.0 N = 1	312.8 N = 7	273.9 N = 9	$r_s = 0.19, p =$ non-significant
Total Sample	294.0 N = 15	309.0 N = 24	305.4 N = 13	$r_s = 0.07, p =$ non-significant

least one African friend, only one African subject (three percent) related having an Asian friend. This disparity may reflect a true difference between the two subsamples or it may simply reflect an understandable tendency for the Asians to exaggerate their degree of cultural mixing. As described in an earlier chapter, the Asian groups in East Africa have received heavy criticism for their social "exclusiveness," and many thoughtful Asians wish to change that stereotype.

In sum, the data provide a certain amount of support for the hypothesis that the measure of friends from other groups should be positively related to moral judgment scores. However, the findings are not clearcut, probably for two reasons. First, the measure of friendship choices is much more subject to errors of reporting than the measure of time spent at heterogeneous schools. Second, friendship is only one of many contexts in which one can meet and be influenced by the ideas of people from different cultural backgrounds. Hence, it is not surprising to find a somewhat weaker and less definite result for the variable of friends from other groups than for that of years spent at heterogeneous high schools, because the latter variable considers the amount of overall contact with cultural diversity rather than contact in the context of one type of social interaction only.

THE MULTIVARIATE TEST OF
THE INDEPENDENT VARIABLES

Three factors have emerged as relatively important--time spent living away, major field of concentration, and years spent at heterogeneous high schools. A multivariate test of these variables shows that their effects do not disappear even after controlling for all of the other independent variables.

Multiple regression analysis has been used to perform this test.¹ For the analysis, all of the independent variables except race have been used. Race has been omitted because it is not a predictor on the same level as the others. That is, even if race had happened to be a significant predictor, the analysis still would have been continued to find out through what more basic factors (such as modernization or years spent at heterogeneous schools) the racial differences resulted. There is no reason to expect mysterious racial differences which cannot be explained by differences between the experiences of the two groups.

Table 6.9, below, presents the matrix of intercorrelations upon which the regression analysis is based.² To

¹ Confer Appendix IX for a discussion of the reasons why regression analysis is especially suitable for this data.

² Most people base their regression equations upon Pearson product-moment correlations, and that practice has been followed here. However, the results would not have been different if Spearman rank order correlations had been used instead. In Appendix X is displayed the full matrix
(continued)

Table 6.9: Intercorrelation of Independent Variables (Pearson 4), for the University Sample

Sex (0 = M, 1 = F)	Sex	Age	Moderni- zation	School Achieve- ment	Living Away	Field of Concen- tration	Hetero- geneous High Schools	Friends Other Groups
	1.00	-0.28	0.48***	0.41**	0.05	0.04	0.32*	0.09
Age		1.00	-0.43***	-0.26	0.48***	0.27	-0.44***	-0.17
Modernization			1.00	0.47***	-0.41**	-0.22	0.56***	0.28*
School Achievement				1.00	-0.40**	-0.10	0.33*	0.22
Time Spent Living Away					1.00	0.18	-0.26	-0.12
Major Field of Concentration						1.00	-0.16	0.10
Years Spent Heterogeneous High Schools							1.00	0.14
Friends Other Groups								1.00

Note: All tests of significance are two-tailed:

- * p < .05
- ** p < .01
- *** p < .001

put the three factors above to the most conservative possible test, a two-step procedure has been used. On step one the four factors--sex, age, modernization, and school achievement--are allowed to take out or "explain" any variance that they can. The remaining variables are then regressed upon the residual variance. Thus, age is allowed to take off any variance which it can explain before time spent living away is even entered. Similarly, modernization is allowed to take off any variance for which it can account before time spent living away comes in. The primary variables of interest are time spent living away, major field of concentration, years spent at heterogeneous high schools, and friends from other groups. Therefore, all of the variance which can be explained by the other variables has been removed before the latter have been tested.

The results appear in Table 6.10. Of the four variables entered on step one, only age explains a reasonable amount of the variance (five percent) and has a significant beta weight. However, on step two, three variables are significant. Major field of concentration by itself

(Footnote 2 continued from page 139)

of Spearman r_s for the intercorrelation of independent variables, and it can be seen that point for point it agrees with the Pearson table to within one or two hundredths of a decimal place.

Table 6.10: Multiple Regression Results for Moral Judgment Score (University Sample)

<u>Dependent Variable</u>		<u>INDEPENDENT VARIABLES</u>						<u>R Square</u>	<u>Equation F</u>
		<u>Age</u>	<u>Sex</u>	<u>School Achievement</u>	<u>Modernization</u>	<u>Heterogeneous High Schools</u>	<u>Friends Other Groups</u>		
1. Moral Judgment Stage Score	Beta Wt.	0.27*	0.12	0.11	-0.04		0.08	0.98	
	t	1.76	0.70	0.68	0.02				
	Cumulative R ²	0.05	0.07	0.08	0.08				
2. Residual Moral Stage Score	Beta Wt.	0.31*	0.30*	0.24*	0.07		0.22	3.34*	
	t	2.32	2.17	1.79	0.54				
	Cumulative R ²	0.11	0.16	0.22	0.22				

Note: Coefficients are beta weights (standardized B weights). T-statistic associated with each beta weight appears directly underneath. Variables freely entered in the order displayed above, and the R square associated with each regression step is provided under the t-statistic. All tests of significance are one-tailed. With approximately 40 d.f., $t = 1.68$ is significant at the .05 level (*). The residual equation = Moral Judgment Stage Score - 6.86 x Age - 15.04 x Sex - 1.02 x School Achievement + 0.19 x Modernization.

explains 11 percent of the variance; time spent living away then adds an additional five percent and years spent at heterogeneous high schools an additional six percent. The final variable, friends from other groups, is not significant and adds no variance.

As will be seen in the next chapter, these results provide clear support for the three factors which the University students themselves stressed in their interview on past experiences. The interview data will converge with the empirical findings to demonstrate how academic and social experiences have shaped the moral reasoning of the University of Nairobi subjects.

CHAPTER 7

THE INTERVIEW ON PAST EXPERIENCES
WITH THE UNIVERSITY STUDENTS

During the open-ended interview, University students presented their ideas about how school experiences had changed their moral conceptions. In the course of the research, these interviews have served several extremely important functions. The first purpose served by the data relates to the hypothesis about studying sociology, history, and related fields. When in the United States the statistical analysis had been completed and a deeper exploration of the interview material had been begun, it was discovered that this hypothesis corresponds strikingly to the students' own conscious sense of what events had been important in their ethical development. Thus, the interview data lend strong support to the empirical findings. Second, the data provide crucial evidence regarding the hypothesis about living away from home. They demonstrate that in Kenyan schools students commonly discuss value questions with one another, in a mutually respectful, interested, and analytical way. To move away from the authority of the family to the school world of peers would not be expected to stimulate change if peers did not exchange ideas on moral topics.

The interview data confirm that Kenyan schools can and do provide a place in which students analyze and revise their ideas about values. Finally, the data help to clarify how a third type of influence, cultural mixing, creates a climate for change. Students experience the effects of interacting with people from different backgrounds in many different types of social contexts. University students were able to provide examples of many different times when they had felt the effect most strongly. For this third type of experience, and indeed for both of the others, the data offer a more specific understanding of how social and intellectual events may stimulate the development of the conventional level of moral reasoning.

During the course of the interview, students were asked about both secondary and university experiences, but most subjects were much more able to reflect upon their secondary than upon their university experiences. They had more to say about the former period and gave a greater variety of responses. Perhaps their greater distance from high school made it less difficult to describe. Many students said they "couldn't tell yet" how the University of Nairobi had influenced them. Others said it had not influenced them very much because they had already undergone their major changes during high school. For those students,

certain aspects of high school had affected them enormously while the university had not then offered them any fundamentally new experiences. For a third group of students, however, the university had been a very influential place, and they were able to describe some of the reasons why. The reasons which they offered were similar to those which other students had discussed in relation to their secondary schools. This suggests that a common core of events occurs sometime during the higher education of Kenyan students which they perceive to strongly affect their values of right and wrong. To summarize these events, they fall into three major categories: living away from home and having to develop self-discipline about work or other activities, as well as having more opportunity to talk over value questions with peers; meeting people with very different values from one's own;¹ and studying sociology, religion, and related fields in school.

LIVING INDEPENDENTLY

Living independently away from home required many students to face a whole series of problems not met before.

¹ Elliot Turiel (1972) has described this experience as facilitative of the transition from Stage 4 to Stage 5 moral thought. However, he has not connected this experience to the transition from Stage 2 to Stage 3.

The one most crucial to their continued success as students was learning to make themselves study during their free time.

...like keeping time, disciplining yourself, you may find that you are just not capable of doing it now that there is nobody there to tell you to do it. (s. 79, Stage 2(3))¹

...it's according to you to decide what you think, whether you want to read during the weekend or whether you want to go roaming around, it's up to you. (s. 4, Stage 4(3))

The first student saw this as a deeper problem than simply one of scheduling and self-discipline. She felt that choosing among alternative uses of one's time could lead to consciousness of one's values and priorities.

...it's up to you to think what you should be doing, and you know, you sort of have to sit down and decide exactly what you want to do. And I think in this way you sort of come to the conclusion--you actually find what you are like. Sometimes when you are in [high] school you don't bother. You just think you are like everybody else. (s. 79, Stage 2(3))

The issue of responsibility in work was faced equally by men and women students. Another responsibility problem that came with independence was peculiar to the women. Coming from traditional homes with strict supervision of their social lives, many women found themselves under pressure

¹Throughout this chapter, quotations will be followed by subjects' identification numbers and their moral stage scores as based on their responses to the moral judgment interview.

from men to redefine their standards of right and wrong about premarital sex.

...as a girl most of the problems I face are the boys. But whereas when I was in high school I didn't have to meet them, here at the university they have every chance to come and trouble you and bother you. (s. 3, Stage 3(2))

We talked about norms of going out with boys [at the boarding school], and what types of things one did, and what types of things one talked about. And what the reactions of the mothers were. That was sort of the sole topic there, the main topic of discussion. (s. 74, Stage 3)

Given the double standard present in the sexual morays of both the African and Asian groups, such confusion and conflict were not faced by the men. They did, however, report greater difficulty than did the women in learning to look after themselves and attend to their basic day to day needs.

...you learn how to be responsible and do your things yourself instead of depending on your parents all the time. (s. 86, Stage 2(3))

...it's a good experience in that you get to depend on yourself. Washing your clothes. I never washed my clothes before. And here we are given a room and you have got to decorate it and such things, you know-- make it feel homely. I did that myself, you know, I feel proud, you know. Somebody comes into my place, I think that really belongs to me and not to anybody else. But at home nothing belonged to me. (s. 94, Stage 2)

This second student saw a great change in himself as a result of leaving home, especially of leaving his mother.

...I was always with my mother and parents and all that, so coming here was a great change in that I think I was much more free. That's the main thing, much more

free, and I did not have to account to anybody what I was doing.... It made me, I think, grow up really. In fact, I used to consider myself as a young child when I was at home, you know, being scolded all the time. But here there's no one to scold me and I attend my lectures and all that. (s. 94, Stage 2)

The student describes his self-image as changing from that of a child to that of an adult. For him, this happened at the University of Nairobi. For other students it may have been part of the high school experience. Regardless of when it occurs, it is this image of one's self as a responsible decision-maker which may be an important part of the emergence of adult-style conventional moral reasoning. If one views one's self as an immature child whose opinion is not worth anything, then he or she is not likely to exercise a reflective attitude toward moral values. Those are the problems of grown-ups; one's own problem is to find a way to avoid "being scolded all the time."

Moving away from home not only gives one freedom from external control but also immerses one more fully in the world of peers. What kinds of things peers think and talk about when they are living together at school, is probably crucial to the impact of living away from home. If peers do not discuss topics of values and beliefs with one another, but, rather, avoid these questions entirely, then it would not be expected that they would help stimulate one another to take the "adult perspective" on morality

embodied in Stages 3 and 4. If, on the other hand, peer interaction provides the student an opportunity to examine the pros and cons of his or her own moral positions, then it should stimulate the student to understand moral issues in more mature and complex ways.

Quotations from the students indicate that, in Kenyan schools, students do often engage in extended discussions of hypothetical value questions with each other. They provoked each other to think more deeply about moral issues and to argue disagreements logically.

I think I don't remember of any occasion when we talk about things generally and the question of values doesn't come in. It always comes in, when we are talking. At least we find that somebody uses a value judgment, so, you know, that one plunges us into the question of values now. (s. 11, Stage 4(5))

We sit, quite often we sit together and talk about small things, like this matter of selfishness [whether everything any person does is basically selfish or not]. We talked it over for three or four hours and didn't come to a conclusion. But just that brought a new outlook about it. (s. 98, Stage 3)

And in the university you find that people, they are trying to develop their thinking. So that if you say one thing, they ask you, 'But why?' I mean, I don't know how to put it, but you find that there are people there with--who have also developed this kind of thinking and who'll stimulate you to think about it. (s. 10, Stage 4(3))

Freedom from external control facilitates the development of a new self-image, as an independent person and responsible decision-maker. Coupled with the thought-provoking qualities of value discussions with peers, the total experience of

living away from home should be a potentially powerful one for many Kenyan students.

MIXING WITH PEOPLE FROM
DIFFERENT CULTURAL BACKGROUNDS

Living at school involved many students in new moral perspectives and self-images. Other students described that significant outcomes resulted from mixing at school with people whose values seemed very different from their own. For a few students, the new self-definition simply means higher social class aspirations. Coming from a traditional background of subsistence farming, they found themselves among students whose families had a great deal of money. They changed their occupational goals to those which would bring high income and prestige in modern Kenyan society.

You see, when I was in primary school I was just at home. I didn't know anything about these advanced values. [But during high school] I felt somehow now I was better educated. Now I had prospects of let's say living in a city or something.... Living in a good house here; buying better clothing. (s. 108, Stage 3)

Some of those students [at high school] came from rich families and...seeing how some students were brought by their fathers in vehicles and in good clothings and everything else--there was a kind of influence anyway.... You tend to envy what is going on and you wish whether you would get a chance of going further. (s. 76, Stage 2(3))

This kind of change represents a shift in instrumental priorities for the self. It does not, however,

involve the new attitude toward other people and their values which many other students reported to result from their secondary school experiences. The experience happened in different ways for different students, but in the majority of cases the significant exchange of ideas occurred in contexts other than those of close friendship. One woman discovered that other people have different value perspectives when she made a joke which unintentionally hurt a roommate's feelings.

Like I had never lived in Kikuyu, you know.... And like I remember going in the first time, when I was a new pupil. We were just joking about the new girl who slept next to us, and we made a joke and she cried the whole night. They defined it as--you know, we had said something wrong. And we were very sorry. So I mean, I started learning, you know...what the Kikuyu is like, or what other--you know, I said, so that could have different orientations to the same thing. (s. 14, Stage 3(4))

Another student reported that she had been influenced by the exchange of ideas in structured classroom discussions. Her teacher had conducted these discussions to prepare the students for the general knowledge, or "General Paper," section of the "A" Level examinations.

...we used to have this paper [class] called General Paper where we could discuss everything.... In General Paper we could, you could, I could ask an Asian girl--because we were Africans we would ask an Asian girl--ask them about these laws and see their reaction.... Before the teacher came, you could say, 'Let us hear about the Asians,' so that when the teacher came, you could influence her to bring up that topic about the Asian religion. Or we state, 'Why they have so many

religions in Nyanza?' Somebody could show, it is because these people are undecided about religion, they don't know what religion to follow. So by this we started a new discussion on religions. (s. 4, Stage 4(3))

Another student, who had attended an ethnically homogeneous high school, mentioned that he had been influenced by British teachers.

When you live in the village, it's rather difficult to project an opinion of other people or other people's views in other different localities. Let's say, like going to the United States, let's say, coming from a small country, then you go to the United Nations. Then you listen to the other delegates there, then you hear their views, then you have sometimes to modify or even do away with everything that you had thought, then follow other people's ideas, or try and modify them to suit your own ends or needs. So when I came from the village going to school, let's say, meeting other people, not only from Kenya but from other countries--for example, some of my teachers were British, mostly British people. So in the village I couldn't have met them; this interaction makes one's life different. (s. 100, Stage 3)

Finally, a fourth type of student describes that the people who affected him most were close friends. One fellow described how greatly he had been changed by his friendship with white boys who were the sons of poor British farmers.

Now, these sort of fellows influence me to say that you just don't live for the school, there is another part of life that is to be lived at the same time.... Now in the end I found I could go and talk to a girl, I could go and address myself to a girl, one I know, in front of her parents. I could even go and say hello to her parents. Now, this sort of thing I could not imagine having done beforehand. Oh, they influenced me on things like Christianity. They decided all my Christian morals, and this sort of thing!... I started questioning my previous instruction very much, and consequently I think I lost a lot of my traditionally African moral values through the interaction with these white boys. (p. 20, Stage 4(3))

Another African student related how he overcame his long-standing dislike of one of the cultural groups of Kenya through going to school in a different province and making friends with one of the members of that group.

According to me, those two years are the most important in my school life.... I did not have a high regard of this, the Luo community as such. And then I learned they were actually not very bad people from a friend of mine, a Catholic. So that is--after living with them in Homobay is when I actually knew they were not all that bad people. You know, we were biased even from childhood. We even had sayings that you can't eat with one. (s. 105, Stage 3)

These quotations not only illustrate the variety of settings in which significant change could occur, but they also suggest a few of the types of value and attitude change which the students most frequently described. Students recurrently focussed on certain issues--religious beliefs, sexual morality, male and female circumcision, and consumption of alcoholic beverages. They were surprised to find that people from other groups had sensible reasons for believing the way they did about those issues. Reflecting upon these reasons caused some students to question their own beliefs and sometimes even to change them.

...when I heard somebody mentioning that Catholic was not a good religion, or that there was no God, at first I got frightened. I thought this man was getting crazy. But then, some of the things that are usually taught to children when they are learning catechism, I began questioning them. You meet with different and new ideas, so you have to reconcile yourself to the ideas. (s. 19, Stage 2-3)

When I was in primary school, I just used to follow whatever my mother used to tell me as far as religion is concerned. But then as I started developing, I got ideas that maybe my mother's not correct. Maybe these people who have got a different religion, maybe they're correct as well. Because they believe in something else and we believe in something else. (s. 81, Stage 2(3))

In a number of cases, students did not actually doubt or change their own values, but instead they gained increased tolerance and understanding for the ideas of other people.

Actually the most important thing it did for me was that it widened my scope of understanding.... For example, smoking of cigarettes on the part of the women. And the drinking. You see, in my society, I can't stand the sight of a woman smoking in front of me, or a woman being drunk in front of me.... Well, in Dar es Salaam I saw a woman who was very drunk.... You know, after asking why--you know, if it was acceptable in their own society--they said, they told me actually she wasn't unusual, most of them indulge in drink and it's acceptable. So I came to tolerate it. They can be allowed to drink if they want. (s. 105, Stage 3)

Ah, well, I tend to regard people more objectively now than I did before.... These other people that I've met, they talk about their culture, the way they live. Especially the Africans coming from the rural areas, they tell me how they live in rural areas, what sort of things they go through, what is the routine, their daily life and such, and that makes me realize how differently I have been living all this time. I have not been aware of how they have been living until quite recently, and how it sort of affects their everyday life even at the university, how they think and the sort of ideas they come up with. (s. 8, Stage 3(2))

A general theme running through all of these quotations is that cultural mixing represents an intensely thought-provoking experience. It can provide students an opportunity to realize that other people feel as strongly about their

cultural heritage as they themselves do. They may begin to consider whether sensible reasons lie behind many of the moral rules they have always held. They may begin to formulate ideas about the purpose of moral rules for society, and the place of a diversity of cultures in a single society. Above all, they may begin to see the need to develop some kind of more "objective" way to think about moral questions. If they do so, they may move towards the relatively more mature perspective of conventional moral reasoning, Stages 3 and 4.¹

STUDYING SOCIOLOGY, RELIGION, AND RELATED FIELDS IN SCHOOL

Many students spoke about the process of becoming more "objective," "analytical," or "critical" in their thinking as a result of high school or university experiences. In the most extreme cases they seemed to have developed a generalized skeptical and independent attitude towards ideas.

¹In a recent study of Harvard undergraduates, William Perry (1970) has presented interview material which points to the experiences of living independently (pp. 104, 171) and confronting diversity of values (pp. 65-70) as stimulating the development of intellectual relativism. While Perry does not relate this type of development to the development of moral ideas, his interview excerpts suggest that changes in moral orientation may accompany changes in thoughts about the relativity of ideas. Perhaps both are facilitated by the same experiences, such as those discussed in this chapter.

First and foremost they want to think things out for themselves rather than simply accept the rules of right and wrong as laid down by others..

I mean, we are here to seek everything that is, I mean, to analyze things very coldly; and there is no use in keeping some back, and some back, and the other put forward, because then you are getting a very biased sort of conclusions. You have to be exposed to every possible way, all dimensions of a possible problem, to be able to draw conclusions, [to choose] whether you like that or you don't.... Because I don't just take things the way they look. I have to know why it's defined as such and such. (s. 14, Stage 3(4))

At the university, the first thing is that one is made to be oneself.... Here you feel you are rather alone, and you do things the way you think them right. The environment helps one to think deeper and look at things from a different angle altogether and criticise things to start with, look at things critically and analyze them critically. (s. 79, Stage 2(3))

This is an explicitly hypothetical way of approaching value questions and is probably largely the product of higher education itself. In struggling to crystallize their experience and explain the events which had affected their moral attitudes, the students returned over and over again to talk about school books they had read and courses they had taken. However, in discussing these courses, they did not refer to the whole gamut of academic disciplines. Rather, in accord with the hypotheses presented in this thesis, they concentrated their comments on a limited number of fields of study. They referred explicitly to the study of sociology, history, government, and religion as being influential.

Furthermore, the educational system helps you to have some more understanding of the society. Someone who has taken something like Sociology will learn more about the society and see that there is no difference between tribal--I mean, although there are some tribal differences, I think it should not be so much emphasized. (s. 84, Stage 3(2))

I think this discipline of Sociology and Psychology,¹ especially as they relate to how people live, their modes of life, what they do and so on--I think this caused particularly--the major thing that has caused me to change. Maybe if I was taking Engineering, I would have been slightly different. (s. 1, Stage 4)

I would say that through the study of Sociology I've sort of identified the behavior of certain societies, when I learned about these value systems and began to argue them logically. At least I've added some new dimensions to my thinking. (s. 97, Stage 3)

...the books we read in high school; we would read and then read along with the teachers explaining certain things to us. Like say, when the Americans declared themselves independent, although I was doing that as just History, I think it had an effect on me.... It started me thinking, and put me on one side, that, you know, people should be free. (s. 10, Stage 4(3))

When I was in lower school, I could say such sweet things about religion, let's say, 'Picture Moses going to get some of the Ten Commandments, or Jesus going to Heaven.' But by the time I was leaving I couldn't say Christianity because I had read about other religions and I couldn't think whether this is the right religion or that is the right religion. (s. 100, Stage 3)

It was actually when I came to the university that the idea about who was in power and what and what, what is the nature of our government and so on, that is when I learned the whole idea about politics.... Well, particularly I can say in first year, Comparative Political

¹The subject is referring to an upper level course in Social Psychology taken by advanced students in Sociology.

Systems, I can say I learned what is the difference between my government and another government. (s. 6, Stage 3)

From the students' own point of view, therefore, a causal arrow runs from the study of certain academic subjects to new perspectives in moral reasoning. The reading they do for these subjects opens up for them a new set of alternative ways of thinking and believing. One student compared this to being able to talk to people with different ideas from "the past and the present."

Because it all depends on the things you are doing, in fact, the subjects you are taking. Here I think people have got the freedom and the necessary education to read more books and to know the opinions of various people in the past and the present. So you are in a better position to change. (s. 78, Stage 2(3))

Furthermore, in those courses the students learn a new set of categories in which to understand values and value systems. They develop frameworks in which to compare political, religious, and cultural systems and see the underlying dimensions of similarity and difference. The formal knowledge enables them to think abstractly about rules and norms in the terms of a comparative social analysis. It is not surprising that most of the students in the Faculties of Arts and Law have attained the "social perspective" of Stages 3 and 4 moral reasoning, as attested by their moral judgment scores.

CHAPTER 8

RESULTS--HIGH SCHOOL SAMPLE

The results from the High School sample replicate the University findings on two important points. First, they give evidence of an interaction effect between modernization and living away from home. Second, they provide further support for the hypothesis about the experience of meeting people from different cultural backgrounds. Of the two measures of degree of exposure to cultural diversity, it is again the measure of time spent rather than the measure of friendship choices which proves to be a better predictor of moral judgment scores.

In addition, the data confirm the hypothesized relationship between moral judgment scores and level of school achievement--a finding in accord with studies of the relationship of moral reasoning and IQ in high school students from Western countries (e.g., Simpson and Graham, forthcoming; Blatt and Kohlberg, forthcoming).

THE RELATIONSHIP OF MORAL JUDGMENT STAGE
TO BACKGROUND VARIABLES: AGE

In studies of moral development of adolescent groups, one generally expects to find a positive relationship between chronological age and moral judgment scores. Therefore, it

is quite surprising to see that for this High School sample the relationship is clearly negative (Spearman $r_s = -0.20$, $p =$ nonsignificant). Moreover, the data show a downward linear trend, as displayed in Table 8.1, such that the 16-year-olds have the highest mean moral stage score, the 17-year-olds are intermediate, and the 18-21-year-olds have the lowest mean score.

Table 8.1: The Relationship Between Age and Moral Judgment Stage Scores, for the High School Sample

	<u>AGE</u>		
	<u>16 Years</u>	<u>17 Years</u>	<u>18-21 Years</u>
Number of Subjects	10	21	20
Mean Moral Judgment Stage	245.0	213.1	207.5

However, the cause of this anomalous finding is not hard to uncover. In the sample, age is strongly negatively correlated with modernization (Spearman $r_s = -0.38$, $p = .005$, two-tailed), and because modernization is so highly related to moral judgment, age spuriously appears to be inversely related. When age is correlated with moral judgment scores, partialling out the effect of modernization, the negative relationship disappears. In fact, the partial correlation closely approaches zero ($r = 0.05$).

The zero order negative relationship between age and modernization arises from the fact that in Kenya, traditional rural families often have difficulty in collecting the cash income necessary to pay their children's school fees. Thus, they sometimes refrain from starting a child in primary school until the child is somewhat older than are many of the urban children whose parents are more modernized and wealthy. For example, urban children generally begin primary school at age seven whereas many rural children do not begin before they are nine, ten, or even older. As will again be noticed and reaffirmed with the results of the Community sample, Kenya offers a superb setting in which to study the effect of age on cognitive development independent of the effect of increasing years in school. In Western countries, these two factors are so intertwined that they can be treated as surrogates for one another. Therefore, when one finds a positive relationship between age and some measure of cognitive development, there is no way to untangle the effect of more schooling from the effect of other social experiences which children encounter as they grow older. Research in a country like Kenya would make it possible to answer this very interesting question.

SEX

As with the University sample, sex is not a significant predictor of moral judgment scores. The mean moral score for the 25 boys is 207.0, while that for the 26 girls is somewhat higher, 226.9, but this difference is not significant ($t = 1.25$, separate variance estimate, d.f. = 48.51).

Moreover, the distributions of the moral stage scores (Table 8.2) show no evidence of a sex difference, particularly the type of difference found by Turiel (forthcoming) and Simpson and Graham (forthcoming) in the United States and Great Britain, respectively. Those authors found that for certain high school samples, girls use more Stage 3 and less of both Stages 2 and 4, than do boys. This is not at all apparent in the distributions of the High School students.

Thus, so far, sex differences seem to be strikingly absent in this Kenyan data.

SCHOOL ACHIEVEMENT

The measure of school achievement is the overall score on the standardized national examinations, the Certificate of Primary Education (C.P.E.'s). This score shows a broad range, with a minimum of 12 points and a maximum of 28 (perfect score equals 30).

As hypothesized, school achievement is positively related to moral judgment stage (Pearson $r = 0.26$, $p < .06$,

Table 8.2f Pattern of Distribution of Moral Judgment Stage Scores, for Male and Female Subjects (High School Sample)

Sex	FREQUENCIES AND PERCENTAGES BY STAGE						MEAN MORAL JUDGMENT SCORE
	Stage 1	Mixed 1-2	Stage 2	Mixed 2-3	Stage 3	Mixed 3-4	
Females (N = 26)	1 4%	5 19%	5 19%	9 34%	3 12%	3 12%	226.9
Males (N = 25)	0 0%	8 32%	9 36%	6 24%	1 4%	1 4%	207.0

two-tailed). Moreover, this relationship cannot be attributed to the greater modernization of the higher scorers on the C.P.E.'s because modernization and school achievement are inversely related (Spearman $r_s = -0.12$, $p =$ non-significant). As described in the Introduction, the Kenyan school system is still somewhat open in the sense that poor students from rural backgrounds can rise to the top in large numbers. These data support that view, and show that the capacity to do well in school is related to performance on the moral judgment interview in a cultural setting where school achievement is not largely explained by family background.

MODERNIZATION

Modernization is also strongly and unequivocally related to moral judgment scores. The index of modernization, the primary measure, is significantly correlated with moral judgment scores, as are two of its component measures taken by themselves, those relating to parents' education. These findings appear in Table 8.1, below.

Thus, for this younger sample in which over half of the subjects still live at home with their parents or other close adult relatives, the proxy variable for non-authoritarian child-rearing practices shows a definite effect.

Table 8.3: The Relationship of Family Level of Modernization to Moral Judgment Scores, for the High School Sample

SPEARMAN CORRELATION (r_s) WITH MORAL SCORE

<u>Independent Measure</u>	
Index of Modernization	0.35*
Father's Education	0.36**
Mother's Education	0.29*
Father's Occupation	0.09
Parents' Marriage Type	0.23
Experience With Urban Life	0.23

Note: All tests of significance are two-tailed:

- * $p < .05$
 - ** $p < .01$
-

TIME SPENT LIVING AWAY

For the University sample, time spent living away is significantly related on the zero order level to moral judgment, while modernization is not. For the High School sample, the reverse is true. While modernization is significantly correlated on the zero order level, time spent living away shows no such effect. The mean moral score for those 30 students who have lived away for one year or less is 206.7, whereas that for the 21 students who have lived away for four years or more is somewhat but not

significantly higher, 232.1 ($t = 1.55$, separate variance estimate, d.f. = 39.44). The difference is thus in the right direction even though it does not achieve the conventional level of significance.

THE INTERACTION OF MODERNIZATION
AND TIME SPENT LIVING AWAY

Crucial to the theory about the experiences of modernization and time spent living away is that they should work in interaction. This effect appeared for the University sample although it could not be put to a statistical test. The same case applies here. The findings are presented in Table 8.4, below, and show how the experience of living away from home strongly affects the traditional students and causes them to move up to an equal level of moral judgment with the more modernized ones. The difference in average moral judgment score between the two traditional groups at the high and low ends of the living away scale is no less than 45 points. Between the two modernized groups, however, the gap is only 9 points. Because the number of traditional students who have lived away more than four years is very small (only seven), the results can be considered only tentative. Nevertheless, they replicate the University findings, and as will be seen in the next chapter, also correspond to the findings for the

Table 8.4: The Interaction of Modernization and Time Spent Living Away in Their Effects on Moral Judgment Scores, for the High School Sample

Mean Moral Scores for the Sample Broken Down into Two Categories of Time Spent Living Away and Two Categories of Modernization

	<u>TIME SPENT LIVING AWAY</u>	
	<u>0-1 Years</u>	<u>4-11 Years</u>
Level of Modernization:		
<u>Traditional</u> (Subjects below the median on the index)	187.5 N = 14	232.1 N = 7
<u>Modernized</u> (Subjects above the median on the index)	223.4 N = 16	232.1 N = 14

student portion of the Community sample. By the time the result is seen for the third time, fair confidence will have been gained in its truth.

YEARS SPENT AT HETEROGENEOUS HIGH SCHOOLS

Twenty of the High School students had spent only zero or one years in multiracial and multicultural secondary schools. The remaining 31 had spent all four of their secondary years in such schools. The difference in moral judgment scores for these two groups is quite large, supporting the hypothesis about the experience of meeting people from different cultural backgrounds.

The mean moral judgment score of the group with low exposure to cultural diversity is 201.2, whereas the mean of the group with high exposure is 227.4, and this difference is significant at the .10 level, for a two-tailed test ($t = 1.70$, separate variance estimate, d.f. = 46.82). What is more, as will be shown in an upcoming section, this difference remains even after controlling for school achievement and modernization.

FRIENDS FROM OTHER GROUPS

The second measure of exposure to cultural diversity is based on students' friendship choices. This measure, friends from other groups, is quite highly correlated with the moral judgment scores (Spearman $r_s = 0.33$, $p = .02$, two-tailed). Twelve of the subjects claimed to have at least one friend from another race or a foreign country. An additional 13 did not have close friends of that high a degree of difference, but did have friends from one of the other Kenyan cultural groups, such as the Luos or Luyias. Finally, for 26 students, all of their friends were from their own or very closely related groups (the Merus, Embus, and Kambas). Of course, most of the students in the latter category attended the all-Kikuyu schools in Nyeri and had no opportunity to make friends with people from other groups. The measure of friends from other groups is certainly

extremely highly correlated with years spent at heterogeneous high schools (Spearman $r_s = .74$, $p < .001$, two-tailed).

In Table 8.5, below, are presented the mean moral judgment scores of students in each of those three friendship choice categories. The only group which is different from the others is the category of students with friends from another race or a foreign nation. Their average moral judgment score is 262.5, in contrast to the other two categories whose average scores range around 200. In fact, the difference between the first group and both of the second ones is statistically significant ($t = 3.04$, $d.f. = 21.55$, and $t = 3.25$, $d.f. = 22.93$, respectively, both significant at the .01 level, two-tailed). However, the difference between the two latter groups is not large enough to be significant ($t = 0.75$, separate variance estimate, $d.f. = 23.56$). Having friends from another race or country makes a difference, but having friends from another African cultural group does not. The significant correlation between moral judgment scores and friends from other groups, reported above, is carried by the first group--not assisted by the second group as had been hypothesized.

Taking the results of both High School and University samples together, one result seems clear. The stimulating effect of meeting people from other cultural

Table 8.5: The Relationship of Moral Judgment Scores to Choice of Friends from Other Cultural Groups, for the High School Sample

	Students with Friends from Their Own or Very Closely Related Groups Only	Students with Friends from Another African Group	Students with Friends from Another Race or a Foreign Country
Number of Students	26	13	12
Mean Moral Stage	207.7	194.2	262.5

backgrounds can take place in other contexts than that of close association or friendship. This idea was expressed by the University subjects in the interview on past experiences, and it is supported by the empirical data. In both samples the measure of years spent at heterogeneous high schools correlates with moral judgment scores as well as or better than does the measure of friends from other groups. If the context of friendship had been required for the stimulating effect to occur, then the measure of friends from other groups should have been the better predictor, because it would have measured the appropriate type of contact more directly and differentiated those students at multicultural schools who made friends with outside groups from the students who did not. In fact, the measure

of time spent predicts moral judgment scores as well for the High School students and better for the University students. Once again the intuitions and explanations of the University students are corroborated by the empirical data.

THE MULTIVARIATE TEST OF THE INDEPENDENT VARIABLES

On the zero order level, the most effective predictors of the moral judgment score are school achievement, modernization, years spent at heterogeneous high schools, and friends from other groups. Sex and time spent living away are not significantly related to moral judgment, and age appears to be irrelevant once modernization has been controlled for. In the following regression analysis the effects of these variables are tested simultaneously, to show that they remain significant even when competing for the same variance. Age has not been included in this analysis because it seems to have no relationship to moral judgment scores other than a spuriously negative one.

Two of the variables, years spent at heterogeneous high schools and friends from other groups, are highly intercorrelated or confounded. Therefore, the regression has been performed twice, once using all of the variables with the exception of friends from other groups, and then repeating it replacing the latter measure for years spent

at heterogeneous high schools. As will be seen, it makes virtually no difference which one is used.

The matrix of intercorrelations upon which the regressions are based appears below, in Table 8.6. The two regression equations follow, in Table 8.7. In each case, the independent variables have been entered into the equation in a set order, the order which is displayed in the table.

Why has this particular order in which to enter the variables been chosen? The most conservative possible order for the hypotheses in question has been adopted. The order in which the variables enter affects the additional percent of variance, or R square, explained by each variable, but does not change the beta-weights or t-statistics as presented in the table. Those variables which enter early have more opportunity to explain large proportions of the variance than do the variables entering subsequently. School achievement has been allowed to enter first, and is able to explain seven percent of the variance. Step two demonstrates that modernization can contribute a sizeable 15 percent in addition to that already given by school achievement. Next, the question is asked whether sex can account for a reasonable amount of variance beyond that contributed by school achievement and modernization. It has been shown that sex and modernization are positively

Table 8.6: Intercorrelations (Pearson r) of Independent Variables, for the High School Sample

	<u>School Achievement</u>	<u>Modernization</u>	<u>Sex</u>	<u>Heterogeneous High Schools</u>	<u>Friends from Other Groups</u>	<u>Living Away</u>
School Achievement	1.00	-0.11	0.25	-0.31*	-0.16	0.52***
Modernization		1.00	0.26	0.37**	0.39**	0.22
Sex			1.00	0.03	0.34*	0.02
Years Spent at Heterogeneous High Schools				1.00	0.71***	-0.15
Friends from Other Groups					1.00	0.08
Time Spent Living Away						1.00

Note: All tests of significance are two-tailed:

- * p = .05
- ** p = .01
- *** p = .001

Table 0.7: Multiple Regression Results for Moral Judgment Score (High School Samples).
 Equation 1 uses 5 independent variables including years spent at heterogeneous high schools; equation 2 duplicates equation 1 except that friends from other groups replaces years spent at heterogeneous high schools on step 4.

	INDEPENDENT VARIABLES					R Square	Equation F
	School Achievement	Modernization	Sex	Heterogeneous High School	Living Away		
1. Beta Wt.	0.44**	0.26*	0.21	0.27*	-0.08	0.31	3.96
t	2.59	1.76	1.59	1.88	0.51		
Cumulative R ²	0.07	0.22	0.25	0.31	0.31		
	School Achievement	Modernization	Sex	Friends Other Groups	Living Away		
2. Beta Wt.	0.41**	0.29**	0.12	0.25*	-0.08	0.30	3.85
t	2.59	2.07	0.85	1.77	0.51		
Cumulative R ²	0.07	0.22	0.25	0.30	0.30		

Note: Coefficients are beta-weights (standardized B weights). T-statistic associated with each beta-weight appears directly underneath. Variables entered in set order displayed above, and the R square associated with each regression step is provided under the t-statistic. All tests of significance are one-tailed. With approximately 40 degrees of freedom, $t = 1.68$ is significant at the .05 level (*), and $t = 2.42$ is significant at the .01 level (**).

intercorrelated (Spearman $r_s = 0.21$, $p =$ nonsignificant) due to the fact that the modernized families in Kenya are more likely to send their daughters to school than are the traditional families. The equations show that by itself sex adds only three percent. Step four tests whether the cultural mixing variables, years spent at heterogeneous high schools and friends from other groups, can now add anything to the total variance. In spite of their late order of entry, both explain over five percent more. Finally, time spent living away is tested to see whether its entry can increase the cumulative R square. This last variable adds nothing to either equation.

Thus, the results confirm that four variables (school achievement, modernization, years spent at heterogeneous secondary schools, and friends from other groups) remain significant predictors even when all are serving as each others' controls. On the other hand, sex and time spent living away do not have significant beta weights and do not explain much of the total variance. However, it has already been shown that the result with time spent living away is not counter to the hypotheses. The interaction effect between time spent living away and modernization appears clearly. Modernization emerges as the stronger overall predictor in this sample because the majority of the

students are still living at home, just as in the University sample the factor of time spent living away predominated because most of the students were living independently. In sum, then, the High School results confirm the hypothesis about the effects of social experience on moral development and replicate the findings of the University analysis.

CHAPTER 9

RESULTS--COMMUNITY SAMPLE

The principal finding of the Community analysis points to the overwhelming relationship of formal schooling to the moral judgment scores. In both the student and adult sections of the Community sample, educational level is the single strongest correlate of the moral judgment score; furthermore, it seems to set a Stage 3 ceiling on the range of scores found for the nonschooled Community adults, all of whom are responsible leaders in their rural communities.

THE RELATIONSHIP OF MORAL JUDGMENT SCORE
TO BACKGROUND VARIABLES, FOR THE STUDENT
PORTION OF THE COMMUNITY SAMPLE

As will be shown, the analysis of the data for the 32 students in the Community sample yields only one statistically significant correlate of moral judgment score; namely, education. The other major variables show no overall effects, although there is evidence of the interaction between modernization and time spent living away which appeared for the other two student samples. To test the effects of the independent variables, correlations and t-tests only have been used. Too few significant effects emerge to require the overall test of the regressions analysis.

Education

In Table 9.1 is presented the entire matrix of intercorrelations of the independent and dependent variables for the 32 students. Education--that is, year in secondary school (1 to 6)--is the only variable which significantly predicts moral judgment score. This relationship can be seen in greater detail in Table 9.2, which presents the mean moral score of students divided into three education categories, for girls and boys separately, and the total sample combined. Both sexes show the same positive trend, with the exception of the single female subject in the high education group who scored only 230 in moral judgment.

Sex

Sex is not related significantly to any of the other background variables, nor is it related to moral judgment scores. The mean moral score of the six females is 238.3, while that for the 26 males is 236.0. This difference does not even approach significance ($t = 0.12$, separate variance estimate, $d.f. = 9.68$).

Moreover, there are no sex differences in the distributions of the moral judgment scores by sex. These results appear in Table 9.3. The proportions of males and females in each of the stage categories are approximately equal (given the very small number of female subjects).

Table 9.1: Intercorrelation (Spearman r_r) of Background Variables and Moral Judgment Scores, for the Student Portion of the Community Sample

	<u>Moral Judgment Stage Score</u>	<u>Education</u>	<u>Modernization</u>	<u>Living Away</u>	<u>Age</u>	<u>Sex</u>
Moral Judgment Stage Score	1.00	0.35*	0.17	0.24	0.01	0.02
Education		1.00	0.22	0.65***	0.12	0.13
Modernization			1.00	-0.05	-0.65***	0.15
Time Spent Living Away				1.00	0.18	0.11
Age					1.00	0.05
Sex						1.00

Note: All tests of significance are two-tailed:

- * $p < .05$
- ** $p < .01$
- *** $p < .001$

Table 9.2: The Relationship of Moral Judgment Scores to Level of Education,
for the Student Portion of the Community Sample

	<u>LEVEL OF EDUCATION</u>		
	<u>Form 1-2</u>	<u>Form 3-4</u>	<u>Form 5-6</u>
FEMALES			
Number of Subjects	1	4	1
Mean Moral Score	200.0	250.0	230.0
MALES			
Number of Subjects	6	16	4
Mean Moral Score	218.3	226.2	301.2
TOTAL			
Number of Subjects	7	20	5
Mean Moral Score	215.7	231.0	287.0

Table 9.2: Pattern of Distribution of Moral Judgment Stage Scores, for Male and Female Subjects (Students, Community Sample)

Sex	FREQUENCIES AND PERCENTAGES BY STAGE						MEAN MORAL JUDGMENT STAGE
	Mixed 1-2	Stage 2	Mixed 2-3	Stage 3	Mixed 3-4	Stage 4	
Females (N = 6)	0	2 33%	3 50%	1 17%	0	0	238.3
Males (N = 26)	2 8%	10 38%	10 38%	3 12%	0	1 4%	236.0

Thus, for this sample as for both of the previous student data sets, sex differences do not appear. Although all of the samples are small, the findings are completely consistent. Male and female students in Kenya show the same mean and spread of moral judgment level.

Age

The students in the Community sample range in age from 16 to 27. In spite of this 11 year span, the measure of age shows no relationship at all to the moral judgment score (Spearman $r_s = 0.01$). In fact, the relationship is somewhat curvilinear, with a dip in the middle. This can be seen in Table 9.4, below.

Table 9.4: The Relationship of Age to Moral Judgment and Education for the Student Portion of the Community Sample

	<u>THREE AGE CATEGORIES</u>		
	<u>16-18 Years</u>	<u>19-20 Years</u>	<u>21-27 Years</u>
Number of Students	10	14	8
Mean Moral Score	218.5	219.3	263.8
Mean Education (Form 1-6)	3.6	3.1	4.0

The curvilinear trend actually follows the trend in mean education. These findings re-emphasize the close relationship of moral judgment scores and education for this sample, and do nothing to indicate any kind of relationship of moral judgment and age.

One might argue that these negative findings with respect to age are the result of the strong negative relationship of age and modernization. In the High School sample, age and modernization were strongly negatively correlated (Spearman $r_s = -0.38$, $p = .005$, two-tailed). In this second secondary sample, the same relationship pertains. The correlation of age and modernization is -0.65 , significant at the .001 level. However, even partialling out the effect of modernization, the correlation of age and moral judgment does not become significant, although it does increase (partial correlation coefficient = 0.17 , $p =$ nonsignificant).

Thus, for the second secondary aged sample, negative findings for the relationship of age and moral judgment clearly emerge. These findings are provocative and suggest that school-related experiences (whether academic or social) may provide the major source of change in the moral development of Kenyan adolescents.

Modernization

Most of the students in this sample come from traditional rural backgrounds. In comparison to the High School sample, they are less modernized and have spent more years living away from home. For the High School sample, the mean father's education was 5.8 years and 60 percent of the subjects still lived at home. For this student portion of the Community sample, the mean father's education is 3.4 years and only 22 percent of the students still live at home. These contrasts are important in considering the potential impact of the factor of modernization, the proxy variable for non-authoritarian child-rearing practices. Because so few of the Community students still live at home, it would not be surprising if modernization were not a significant predictor of the moral judgment score.

This is indeed the case. The moral judgment score does not correlate highly with the index of modernization, nor with any of its component measures. These findings appear in Table 9.5, below.

However, partialling out the effects of age (with which modernization and its components are negatively related), the correlations increase sizeably for modernization and for several of the component measures. In fact,

Table 9.5: The Relationship of Family Level of Modernization to Moral Judgment Scores, for the Student Portion of the Community Sample

SPEARMAN CORRELATION (r_s) WITH MORAL SCORE

<u>Independent Measure</u>	
Index of Modernization	0.17
Father's Education	0.17
Mother's Education	0.28
Father's Occupation	0.27
Parents' Marriage Type	0.07
Experience with Urban Life	0.10

for two of the measures (mother's education and father's occupation), the partial correlations are significant at the .10 level. These findings appear in Table 9.6, below.

Time Spent Living Away

Given the fact that the majority of the students have been living away from home for two years or more, a positive relationship between the moral judgment score and the measure of time spent living away would be expected. However, the hypothesis is not confirmed. The correlation between time spent living away is positive but nonsignificant (Spearman $r_s = 0.24$). Partialling out the effect of

Table 9.6: The Relationship of Modernization to Moral Judgment Scores, After Partialling Out the Effect of Age (Students, Community Sample)

PARTIAL CORRELATION COEFFICIENT WITH MORAL SCORE

<u>Independent Measure</u>	
Index of Modernization	0.24
Father's Education	0.21
Mother's Education	0.32, p = .08, two-tailed
Father's Occupation	0.31, p = .09, two-tailed
Parents' Marriage Type	0.17
Experience with Urban Life	0.13

education, this correlation becomes even smaller (partial correlation coefficient = 0.01, p = nonsignificant).

The Interaction of Modernization and Time Spent Living Away

In spite of the fact that neither modernization nor time spent living away show significant effects on moral judgment scores by themselves, the interaction effect does appear as hypothesized. Table 9.7, below, presents these results.

The cells in this table contain very low frequencies, but they do suggest the expected trend. For the traditional

Table 9.7: The Interaction of Modernization and Time Spent Living Away in Their Effects on Moral Judgment Scores, for the Student Portion of the Community Sample

Mean Moral Scores for the Sample Broken Down into Three Categories of Time Spent Living Away and Two Categories of Modernization

Level of Modernization	<u>TIME SPENT LIVING AWAY</u>		
	<u>0-2 Years</u>	<u>3-4 Years</u>	<u>5-13 Years</u>
<u>Traditional</u> (Subjects below the median on the index) N = 6	216.7	220.0	288.8
<u>Modernized</u> (Subjects above the median on the index) N = 7	234.3	248.3	220.0

students, the experience of living away strongly affects moral judgment levels, while for the modernized students it has no effect. In the next chapter, Summary and Conclusions, the subjects from all three of the student samples will be combined and the interaction effect tested for statistically. The appropriate test is the analysis of variance and by combining the three samples a big enough population can be gained to perform the test. Because the hypothesized interaction appears in all three samples taken by themselves, collapsing the data will be an acceptable and decisive test for the overall presence of the effect.

Summary of Student Results

For the student portion of the Community sample, the hypothesis concerning the positive effect of education is statistically upheld. However, neither age nor time spent living away show the predicted effects. Modernization also is uncorrelated with moral judgment scores, but the partial correlations of two of its components, controlled for the effects of age, are significant at the .10 level. Further, modernization and time spent living away show the expected interaction effect; as with the previous samples, the frequencies are too low to make a statistical test of this interaction effect, but the mean scores show the hypothesized trends. Finally, no sex differences are apparent, confirming the findings of the previous student samples.

THE RELATIONSHIP OF MORAL JUDGMENT SCORE TO BACKGROUND VARIABLES, FOR THE ADULT PORTION OF THE COMMUNITY SAMPLE

For the Community adults, the independent variables fall into two distinct categories. First, there is the class of variables related to modernization; namely, education, occupation, and monogamous versus polygamous marriage type. Second, there is the group of demographic variables--age, race, and sex. In the following analysis it will be shown how moral judgment scores are strongly

predicted by the first set but not by the second group (after controlling for either education or occupation).

The entire matrix of intercorrelations of these variables appears below, in Table 9.8. Many independent variables are significantly related to each other. The measures of education, occupation, and marriage type are of course intercorrelated because they are implicated in modernization. In addition, many other variables are intercorrelated because of characteristics of the sample. For example, age is inversely related to education because all of the secondary or college graduates, whether Africans or Asians, are younger men and women. Race is related to almost all of the other variables due to the group differences between the Africans and Asians. These can be seen in Tables 9.9 and 9.10, below. Table 9.9 shows the average age, occupational level, education, and marriage type of each of the four ethnic groups. The Kipsigis and Luyias from western Kenya are the least modernized, followed by the Kikuyus and Merus from Central Province and then, most modern by far, the Ismailis from the cities of Kisumu and Nairtbi. Table 9.10 demonstrates that in spite of average education differences between the two racial groups, there are a certain number of highly educated African adults (secondary or college level).

Table 9.8: Intercorrelation (Spearman r_s) of Independent and Dependent Variables
(Adults, Community Sample)

	<u>Moral Score</u>	<u>Age</u>	<u>Sex</u>	<u>Race</u>	<u>Education</u>	<u>Occupation</u>	<u>Marriage</u>
Moral Judgment Score	1.00	-0.51**	0.18	0.36*	0.50**	0.52***	0.35*
Age		1.00	0.31	-0.60***	-0.74***	-0.60***	-0.32
Sex			1.00	0.28	0.03	-0.14	-0.02
Race				1.00	0.67***	0.64***	0.24
Education					1.00	0.78***	0.36*
Occupation						1.00	0.43**
Marriage Type							1.00

Note: All tests of significance are two-tailed:

- * p = .05
- ** p = .01
- *** p = .001

Table 9.9: Ethnic Group Differences (Adults, Community Sample)

	<u>GROUPS</u>			
	<u>Kikuyus and Merus (N = 8)</u>	<u>Kipsigis (N = 11)</u>	<u>Luyias (N = 10)</u>	<u>Ismailis (N = 7)</u>
Mean Age	43.5 yrs.	46.2 yrs.	46.2 yrs.	26.8 yrs.
Mean Education	7.2 yrs.	2.4 yrs.	3.4 yrs.	14.6 yrs.
Percent Polygynous	0%	45%	20%	0%
Mean Occupation	1.6	1.1	1.3	2.3

Table 9.10: Racial Differences in Education (Adults, Community Sample)

	<u>EDUCATIONAL LEVELS</u>				
	<u>Non-Schooled 0-1 Yrs.</u>	<u>Primary 2-8 Yrs.</u>	<u>Secondary 9-13 Yrs.</u>	<u>College 14-17 Yrs.</u>	<u>TOTAL</u>
AFRICANS					
Number of Subjects	11	12	5	1	39
Percentage of Subjects	38%	41%	17%	4%	100%
ASIANS					
Number of Subjects	0	0	2	5	7
Percentage of Subjects	0%	0%	29%	71%	100%

Education

Education is significantly related to the moral judgment score (Spearman $r_s = 0.50$, $p = .002$, two-tailed). This connection can be examined in greater detail in Table 9.11, below, in which appears the distribution of moral stages by educational levels.

Table 9.11: Distribution of Moral Stages by Educational Level (Adults, Community Sample)

<u>Education</u>	<u>MORAL STAGE CATEGORIES</u>			
	<u>Stage 2</u>	<u>Mixed 2-3</u>	<u>Stage 3</u>	<u>Mixed 3-4</u>
Nonschooled	3	5	3	0
Primary	3	6	2	1
Secondary	0	2	5	0
College	0	1	2	3

One of the most important aspects of this table is the distribution of the Stage 4 reasoning. It occurs only among schooled individuals, and in three out of four cases, in college level subjects. Among the nonschooled villagers the maximum moral stage used is Stage 3. The few subjects who show Stage 4 reasoning come from several of the different ethnic groups--two are Ismailis, one is a Kikuyu, and the other is a Luyia. Therefore, while Stage 4 reasoning

is not restricted with regard to ethnic origin, it is restricted with respect to formal schooling. In a later section of this chapter, the question of the appropriateness of Stage 3 reasoning in the village setting will be further discussed. Quotations from the villagers give a sense of the content of their Stage 3 values and how those values fit their environment.

Occupation

Occupational category, like education, is highly related to moral judgment scores (Spearman $r_s = 0.57$, $p < .001$, two-tailed). The frequency distribution of moral stage scores by occupational categories appears below in table 9.12 and demonstrates that the highest moral judgment score shown by the rural farmers and manual laborers is Stage 3. Stage 4 occurs only among the white-collar workers. In fact, one is a primary school teacher, one is an administrative assistant (*chartered secretary*), one is a businessman, and the last is a bank officer.

These data corroborate and underscore the point made with the educational findings. Stage 4 reasoning occurs in subjects involved in the modern world, not in rural villagers engaged in traditional occupations.

Table 9.12: Distribution of Moral Judgment Scores by Occupational Levels (Adults, Community Sample)

Occupation	MORAL STAGE CATEGORIES			
	Stage 2	Mixed 2-3	Stage 3	Mixed 3-4
I. Farmers, Manual Laborers	6	10	4	0
II. White-Collar, Nonprofessional	0	4	7	2
III. White-Collar, Professional	0	0	1	2

Monogamous Versus Polygynous
Marriage Type

The measure of monogamous versus polygynous marriage type is positively correlated with both occupation and education. On the zero-order level, it is significantly related to moral judgment score (Spearman $r_s = 0.35$, $p = .037$, two-tailed). However, this relationship reduces to 0.21 and 0.16, $p =$ nonsignificant, when the effects of education and occupation, respectively, are partialled out. It is probably not an important predictor apart from its relationship to education and occupation.

Race

Because of its relationship to education and occupation, race is positively related to the moral judgment

score (Spearman $r_s = 0.36$, $p = .034$, two-tailed). However, this relationship reduces to zero when the effect of either education or occupation is controlled for (partial correlations coefficients = 0.04 and 0.03, respectively).

Age

Because schooling is something relatively new in Kenya, age is negatively related to education and occupation. This inverse relationship causes age also to be negatively related to moral judgment score (Spearman $r_s = -0.51$, $p = .002$, two-tailed). When the effect of education is partialled out, the relationship between moral judgment and age reduces considerably (Partial correlation coefficient = -0.23 , $p =$ nonsignificant). Similarly, when the effect of occupation is partialled out, the relationship decreases although not quite as much (partial correlation coefficient = -0.28 , $p =$ nonsignificant).

Sex

The mean moral judgment score of the 11 Community adult women is 261.8, somewhat higher than the mean of the 25 men, 266.4. However, this difference is not significant ($F = 1.01$, separate variance estimate, d.f. = 24.39). The distribution of the moral stages by sex is presented in Table 9.13, below.

Table 9.13: Distribution of Moral Stages by Sex
(Adults, Community Sample)

Sex	Stage 2	MORAL STAGE CATEGORIES		MEAN MORAL JUDGMENT SCORE	
		Mixed 2-3	Stage 3		Mixed 3-4
Females	0	5	5	1	281.8
Males	6	9	7	3	266.4

The males and females show approximately the same proportions of Stages 3 and 4 reasoning, but the men show more pure Stage 2. However, the sample of females is so small that this effect could simply be the result of chance.

Summary and Discussion of the Adult Data

The central finding which emerges from the analysis of the Community adult data is the relationship of moral judgment to education and occupation. These differences due to education and occupation are particularly interesting because while they mirror social class effects in the developed Western nations, they really represent something entirely different. When researchers in the complex societies of the West (United States, Great Britain) find social class differences for the moral judgment score, they are comparing the performance of people at the top and the

bottom of the same societal hierarchy. Those without power, university education, and status in society do poorly on the test compared with those who have those things, even after controlling for one standard measure of intelligence, IQ (Kohlberg, 1969; Simpson and Graham, forthcoming). Kohlberg (1969) has speculated that these social class differences are a product of differing degrees of "participation" in the decision-making institutions of the society. The upper classes "participate" most and hence are more likely to acquire a theoretically sophisticated explanation for how these institutions should run. The poor and working classes, who are excluded from participation, are not motivated to develop such formal and elaborate theories.

Whether or not this hypothesis has any merit, it certainly does not describe the dimension along which the traditional and modernized Community adults differ. Only high participating individuals were selected into the sample. The nonschooled adults stand within their traditional societies as the successful leaders and responsible citizens whom others of their own age group respect, just as the modernized individuals represent people whose occupational success and service to their communities command respect by modern criteria.

An alternative hypothesis to explain the difference between the schooled and nonschooled adults is that whereas

the modernized individuals participate in a national system of law and government, the nonschooled ones operate within the context of traditional village systems. Different levels of moral decision-making may be appropriate for these two different kinds of societal units. The formal level of moral decision-making required for a small-scale agricultural society may be different from that required for the organization of a large-scale industrial society like a nation state. This notion was discussed in the Introduction and best explains the Community findings. Stage 3 may represent the level of moral decision-making appropriate in a small preliterate community in which conflicts are resolved through discussion, compromise, and the achievement of consensus rather than by a system of police and courts.

STAGE THREE REASONING IN THE INTERVIEWS OF THE TRADITIONAL AFRICAN ADULTS

Stage 3 moral reasoning is the highest level of judgment evident in the interview of the traditional African villagers; that is, those individuals not involved in modern white-collar occupations such as teaching or working as a clerk. In this section the content of the values of these traditional subjects will be explored, relying primarily on the subjects scored as displaying some Stage 3

thought since I consider these subjects to articulate or represent the "ideal" moral perspective in a small-scale village setting. The traditional Africans from all groups--the Kikuyus, Merus, Luyias, and Kipsigis--share many fundamental values concerning conflict resolution and ideal social interaction. Quotations from the interviews convey a sense of their values and the appropriateness of these values for the task of regulating social life in the rural village.

Customary Law and Authority

The traditional villagers do not look first and foremost to the Kenyan national legal system as the ideal method of resolving an inter-community conflict of claims. Rather, their primary orientation is toward customary African law:

As far as the members of a community are concerned, such an offense (as stealing) should be settled locally. Generally it is better to settle such cases locally and reestablish harmony between the parties than to take matters to the judge. (s. 62, Luyia, Stage 2(3))

About infanticide, nobody should kill babies according to our customary law and even the Bible. (s. 39, Kikuyu, Stage 3(2))

A community where the people don't say the truth is actually bad because people don't understand one another. When the goats run into another person's farm, the only solution is a fine (i.e., legal intervention). (s. 128, Kipsigis, Stage 3)

In such a community whose order and cohesiveness depend on customary mechanisms, respected senior men, or "elders," play a crucial role in social control. They stand for the authority of tradition and step in as official mediators when disputes occur. In such a system, the senior men are not like officials in a modern bureaucratic institution, where roles are strictly defined and in which respect for an order or instruction can be separated from respect for the personal qualities of the person who gives it (a Stage 4 concept). Rather, in the village setting, the roles of authority are largely dependent upon the respect which the senior men can command. A Stage 3 concept of authority accurately fits this description of the village leader. His rights and powers are neither closely defined nor clearly differentiated from his personal knowledge, experience, and virtue.

In a community where people don't keep their word, there is no cooperation. Everybody tries to do his own things. Everybody is a liar. In such a community, there are no leaders. (s. 126, Kipsigis, Stage 2(3))

The responsible jobs in society, for example, village Headman and President, are given to those who are held responsible because they are trusted and are known to keep promises. A person who does not keep a promise is not a grown-up person and will never be respected or chosen for any seat. (s. 39, Kikuyu, Stage 3(2))

The Value of Understanding

In a small village society, peace and order depend not only upon the custom of respect for senior authority but also upon the maintenance of concordant social relations among all of the people. In explaining why people must remain on good terms with one another, the traditional villagers talk repeatedly about the value of "understanding." The interview contexts in which this word appears were often clearly expressive of the Stage 3 moral perspective, which emphasizes the moral value of good interpersonal relationships. As used by the villagers, the word "understanding" does not mean simply the act of sympathizing with people or apprehending their ideas. Individuals with understanding display concern for others' needs and contribute to the long-run welfare of the family unit and the larger community. When such people disagree with others, they take the time both to listen respectfully to the others' arguments and to explain why they hold a different position.

If promises are kept, people will understand each other properly and can live together happily. (s. 117, Layia, Stage 3(3))

If that man is actually his great friend, then he can steal (a drug for him). He wants his friend to recover. People create friendship because of their understandings. (s. 126, Kipsigie, Stage 3(3))

There is a knowledge that the father has and he should pass this knowledge to his children. The children don't

have this type of knowledge, but the son has a portion of knowledge which the father lacks and therefore the father must listen to the son. There should be equal understanding between the son and the father. When there is understanding, there is no word which is small; the son's advice as big as the father's advice, except that the biggest authority is for the father on those matters which are seen as necessary. (s. 119, Kipsigis, Stage 3(2))

If a husband and wife have harmonious relations, then a harmonious chain of good relations can develop among the parents and siblings. The good relationship between husband and wife is a stepping stone to the others. The marriage ties have united the husband and wife as one. The father and mother must be the core of the good relationship. People who are married into the family find that there is a good relationship in existence already. A good and harmonious relationship between a wife and husband causes the two to develop good relations toward their parents. You understand your parents when both of you understand each other. (s. 23, Kipsigis, Stage 3(2))

The Value of Cooperation and Helpfulness

In the village economy, certain forms of cooperation are fundamental. People see themselves as bound to other members of society for their mutual survival and progress. The exchange of goods and services is prescribed by a system of norms surrounding 'helpfulness,' whether for hospitality or for the fulfillment of rote obligations. Many of the villagers in the sample spoke of the value of helping others when describing the worth of human life. To define the worth of human life in terms of social sharing and community is a Stage 3 moral concept the Kipsigis

give the concept a special distinctiveness by emphasizing the importance of cooperation.

What is important about human life is to understand one another, to save one another in critical situations. (s. 23, Kipsigis, Stage 3(2))

It is good for people to live because they help each other. Now when I come to your home, I meet your mother who welcomes me and cooks whatever food there is for me. I feel happy seeing her; she takes care of the home and the children, even when your father is away. Of course, a tree couldn't do that! (s. 135, Luyia, Stage 2(3))

Life carries everything--the life of people--even in a country like this Kenya of ours. It is the lives of these people who are here which make all of the haranbee ['pull together'] schools and the other forms of haranbees. (s. 70, Meru, Stage 2(3))

The Value of Reasonableness

The final value which will be explored is the value of "reasonableness." This concept defines the limits of the powers of elders. One is expected to follow the advice of the older generation except in cases where what they demand is clearly unreasonable. A grown man definitely has the right--given him by his own fully developed powers of reason--to weigh his parents' advice and decide whether it makes sense before he complies.

Not all that the parents say can be taken as correct. A grown up son is able to differentiate what is good and what is bad for him. Therefore, he should obey only those he thinks are good. (s. 136, Luyia, Stage 3)

Relatively mature children need not attend to their parents' words when the suggestions are out of line, as for example, when they ask the children to do any of the following types of things: (1) to violate their religious convictions--

A grown son should obey his parents only on those things which are seen as necessary by the son. He should obey only on things which are possible. Some children are Christians and if their fathers or mothers tell them to do certain things, such as sending them to buy beer, then they can say that they are no longer doing such things because it is not allowed by the Church. (s. 117, Kipsigis, Stage 3(2))

(2) to help their parents financially when the parents simply squander the money--

He should follow what his parents suggest, but he should decide for himself whether what they tell him is reasonable or not.... If he is working he should support them financially and materially. It is only when his parents are uneconomical, i.e., when they spend money brought to them recklessly, that the son can think of refusing to help them. (s. 62, Luyia, Stage 2(3))

(3) to follow instructions which are inappropriate for present times--

Daniel should not obey his parents in this case because their minds are old, and these days one needs to plan for the future when one is young. (s. 38, Kikuyu, Stage 3)

(4) to give up their own money (in violation of a prior agreement) because the father now wants it for his own pleasure--

The father's conduct was unfair. The son wanted to go and learn more things at the Nairobi Show, and the father prevented him from doing so. The father was stupid and unreasonable. (s. 119, Kipsigis, Stage 3(2))

or (5) to do something which is definitely morally wrong--

If you have a cruel man who drinks, and comes home and beats the wife and even tells the son to help him-- or he hates her, and tells the son to do the same--the son should not follow him. This is a stupid thing to do and a wrong thing for a son to do to his mother. (s. 137, Luyia, Stage 2(3))¹

Thus, parents' commands are considered legitimate or illegitimate in terms of the criterion of reasonableness. This concept is more diffuse and unformalized than a Stage 4 or 5 conceptualization in terms of individual "rights," but it serves the same purpose. It provides a general norm to which people can appeal when elders overstep the bounds of acknowledged authority. In complex societies, individuals probably first develop Stage 4 or 5 notions when thinking about the legal system and issues of civil rights (Kohlberg, Issue Scoring Manual), and then they generalize these notions to considerations of interpersonal conflict at the family level. In a small-scale, village-based society, the simpler level of social organization never calls forth Stage 4 or 5 notions, and therefore considerations of interpersonal conflict continue to be resolved in lower stage

¹It may interest the reader to know that the speaker in the above quotation is a 53-year-old man.

terms. Yet, as has been shown throughout this section, the values of the traditional village leaders are appropriate for their environment. They fit the problems of conflict resolution and the system of social control actually encountered in the village setting. Authority is defined in terms accurately descriptive of the role of village elder or senior mediator. The values of understanding and cooperation are given emphasis as the ideal goals of social interaction in a society where people's survival depends on their living and working embedded in kinship groupings. Finally, the value of reasonableness provides a norm on the basis of which the younger generation can withstand the oppressiveness of the older generation, in a society where a theory of natural rights prior to law has not been developed. These examples begin to demonstrate how the cognitive processes involved in moral reasoning are closely related to the social activities which engage these skills. They at least illustrate how a foundation can be laid for understanding cross-cultural differences in moral reasoning by trying to come to terms with the basic experience encountered by people in different kinds of society.

CHAPTER 10

SUMMARY AND CONCLUSIONS

In this thesis three different samples have been used to determine correlates of the moral judgment score. These correlates fall into two categories. First is the category of sex, race, age, and level of school achievement. These variables are always of interest when studying individual differences in performance on a developmental measure, but they have not been central to this thesis because they do not give clear information about why development occurs. The focus here throughout has been on a secondary category of measures, those variables clearly indicative of past social or intellectual experiences which might stimulate the development of moral conceptions. Cognitive-developmental theory asserts that learning involves an organism-environment interaction, such that the change-producing qualities of the environment are called forth by the structuring capacities of the organism and at the same time stimulate the organism to improve its adaptation. Yet at present, little is known about this organism-environment interaction for any specific area of cognitive development. The primary goal of this thesis has been to investigate specific hypotheses about the relationship of the social

context to moral reasoning. The purpose has been to discover experiential correlates of moral judgment scores which give insight into development cross-culturally and account for the effects of the different kinds of social contexts met by people in their daily lives.

The first set of correlates investigated consist of the variables of sex, age, racial group, and level of school achievement. Sex is not a significant correlate of moral judgment score in any of the samples. Moreover, in only one of the samples (the Community adults) is there any tendency toward a distributional difference in stage usage, but this sample contains too few females for the trend to be clearcut. Sex differences are clearly absent in the three student samples, and this constitutes an interesting finding given the great differences in status of the two sexes in both African and Asian culture. One might speculate that this lack of sex differences is due to the fact that the young women in the samples are as occupationally oriented as the young men. The young women expect to marry and have large families, and they expect to show respect and appropriate deference to men, but at the same time they intend to engage in the best full-time careers that their education will allow them. This is the pattern followed by educated women in East Africa (Whiting, 1973), and it leads to the development of self-confident,

independent personalities on the part of young girls. Thus, the difference in status between the sexes may not have implications for differences in cognitive functioning, such as might affect their relative performance on the moral judgment interview.

The factor of age is significantly related to moral judgment only for the University subjects. Age makes no difference for the sample of Community students, the sample of Community adults (after controlling for education or occupation), or the sample of High School subjects (after controlling for modernization). The weak findings of this study with regard to age--especially for the secondary school samples--stand in strong contrast to studies in Western countries, in which age powerfully predicts moral judgment scores (e.g., Kohlberg, 1969; Turiel, forthcoming). However, in the United States studies, age is inextricably confounded with numbers of years spent in school, whereas this is not the case with the Kenyan samples. Perhaps the powerful age trends found in the United States studies reflect in large parts the greater schooling undergone by the older subjects rather than other kinds of non-school-related social experiences that have occurred to them over the course of time. This is a speculative suggestion, but one worthy of further investigation.

The factor of racial group has been investigated with both of the adult samples--the University subjects and the Community adults. In the former it bears no relationship to moral judgment scores, while in the latter its positive relationship (with the Asians scoring higher) disappears when the effect of either education or occupation is partialled out. It explains no variance apart from its straightforward connection to education and occupation.

Finally, the variable of school achievement is correlated positively with moral judgment score for the High School sample (using overall scores on the Certificate of Primary Education), but not for the University sample (using overall grade point averages). This is not an unreasonable finding given the fact that the High School sample probably contained a much wider range of intellectual or academic abilities than did the University sample. In Kenya only a tiny portion of Form Four students are selected for the University system and therefore all University students have been among the highest academic achievers of their age set. In that case, their different levels of performance on the moral judgment interview might have been largely a function of their past social experiences rather than of their cognitive capacity; i.e., their ability to

deal with abstract verbal material. It seems reasonable to conclude that whereas all of the University subjects had superior cognitive ability, only some had been influenced by specific kinds of social or academic experiences which had stimulated their moral reasoning. In contrast, among the High School subjects, a wider range of cognitive abilities was represented, and the effect of school achievement as well as the effects of social experiences could be discerned.

The primary purpose of this thesis has been to specify what particular kinds of environmental influences might affect moral development, and to investigate their empirical relationship to moral judgment scores. The influences considered concern not only the rate of moral development in children, but also its ultimate level or end point.

Four hypotheses have been tested about experiences expected to stimulate the rate of children's and young adults' moral development in Kenya. These focus on the following four influences:

1. meeting people at school who come from racial and cultural backgrounds different from one's own and believe in different moral rules (exposure to cultural diversity);

2. moving away from the constraining world of parents to the cooperative world of peers (living away from home);
3. growing up in a modernized family with parents who encourage their children to think and act in ways which will help them to do well in school (nonauthoritarian child-rearing practices); and
4. formal training at the university in the subject areas of sociology, economics, law, government, history, or religious studies (major field of concentration in the Faculties of Arts or Law).

All four of these influences have been hypothesized to facilitate the emergence of Stages 3 and 4 reasoning out of Stages 1 and 2. In addition, the fourth influence also may bear on the development of Stage 5 thought, but the data are scant on this point.

The first factor, exposure to cultural diversity, has been hypothesized to be a stimulant to moral reasoning for Stages 1 and 2 students, on the condition that the subjects attend schools in which harmony and exchange of ideas rather than hostility and negativism characterize intergroup relations. In general, such a friendly atmosphere

does prevail at Kenyan "national schools," as University of Nairobi students described in their interview on past experiences, and as I saw myself in visiting different schools in Nairobi; only one school visited was an exception. The hypothesis is that such exposure to cultural diversity will be morally stimulating for all of the pre-conventional students, whether modernized or traditional, and whether living at home or living away. Therefore, the hypothesis has been tested without breaking the samples down, on the University and High School subjects. Among the student portion of the Community sample, the factor is too confounded with quality of school to be in any way testable.

The factor of exposure has been measured in two ways, in terms of numbers of years spent at racially and ethnically heterogeneous secondary schools, and in terms of the degree of diversity of groups represented by subjects' closest associates at school. On the basis of the open interview about past experiences with the University students, it has been predicted that the measure of time spent at heterogeneous high schools would correlate positively with moral judgment scores, while the friendship measure might or might not be as strong a correlate. The interview had indicated that students could be influenced

in many contexts other than that of friendship by the exposure to people from other groups. For example, they could be influenced by class discussions, by talks with teachers, or by conversations at the dining hall or in the dormitory, as well as by ideas exchanged in the intimate atmosphere of close friendship.

The hypothesis about the effect of exposure to cultural diversity is confirmed by the data. In both samples, multiple regression analysis shows that time spent at heterogeneous secondary schools is a significant predictor of moral judgment scores. The friendship measure is a slightly less strong predictor, also as predicted. It is significantly related to moral judgment scores for the High School subjects and the African subgroup of the University sample but not for the Asian subgroup of the latter. It is probable that its lack of relationship for the Asian subgroup is the result of reporting errors.

The next two influences which have been tested concern interacting rather than independent factors. These are time spent living away from home and modernization, the proxy variable for nonauthoritarian child-rearing practices. Both factors have been tested with all three of the student samples--the University subjects, High School subjects, and Community students. Considering the variables

separately, it has been shown that the factor of time spent living away shows its strongest influence upon the University students. This is the sample which contains the highest proportion of subjects no longer living with their families. In contrast, modernization shows its strongest influence upon the High School subjects, the group with the greatest proportion of subjects still living at home. Among the Community students, neither factor shows a particularly strong effect, though that of modernization approaches significance when the effect of age is partialled out.

Of most importance, the interaction effect of modernization and time spent living away is evident in all three samples, although each sample is too small and unevenly distributed to test the effect statistically. However, when the three samples are added together, the numbers do become large enough to bear the appropriate test for the interaction, the analysis of variance.

The analysis appears in Tables 10.1 and 10.2, below. As a measure of modernization, the indices composed on five components have not been used, because these indices are somewhat different for each sample. Instead, the single factor of father's education has been chosen to represent modernization since it correlates highly with the index

Table 10.1: Distribution of Subjects by Sample in the Cells of the Analysis of Variance (Table 10.2)

<u>Father's Education</u>		<u>LENGTH OF TIME LIVING AWAY</u>		
		<u>Low</u> <u>(0-1 Years)</u>	<u>Medium</u> <u>(2-4 Years)</u>	<u>High</u> <u>(5+ Years)</u>
Low (0-4 Years)	University	0	5	17
	High School	19	7	0
	Community	4	12	4
High (5+ Years)	University	7	4	19
	High School	11	9	5
	Community	3	6	3

Table 10.2: Analysis of Variance Results, for Effect of Father's Education and Time Spent Living Away on Moral Judgment Scores

<u>Father's Education</u>		<u>LENGTH OF TIME LIVING AWAY</u>		
		<u>Low</u> <u>(0-1 Years)</u>	<u>Medium</u> <u>(2-4 Years)</u>	<u>High</u> <u>(5+ Years)</u>
<u>Low (0-4 Years)</u>	Mean	191.3	238.3	302.4
	N	23	24	21
<u>High</u>	Mean	260.7	237.6	295.4
	N	21	19	27

<u>Source</u>	<u>Sum of Squares</u>	<u>D.F.</u>	<u>Mean Square</u>	<u>F Test</u>
Father's Education	14095.5	1	14095.5	4.021*
Living Away	135689.9	2	67844.9	19.352***
Father's Education X Living Away	39975.6	2	19987.8	5.701**
Unit	452257.9	129	3505.9	NOT TESTED

Note: * p < .05
 ** p < .01
 *** p < .001

within each of the three samples. The median father's education for the total sample of 135 students is five years. This median has been used to split the sample into a traditional versus modernized half. For the factor of time spent living away, the total sample has been divided into three equal groups, corresponding to "low" (0-1 years away), "medium" (2-4 years away), and "high" (five or more years away). Of course, the three student samples do not distribute themselves evenly across the six cells of the table. Table 10.1 shows that the University subjects are over-represented at the high end of the living away scale, while the High School students are over-represented at the low end. Nevertheless, because the interaction has been shown to appear in the trends within each sample taken separately, the overall test cannot be accused of creating a spurious interaction effect.

The F tests for the analysis of variance appear in Table 10.2. The hypothesized interaction effect is significant at the .01 level. This occurs because for the modernized group (father's education high) taken by itself, the factor of time spent living away shows an inconsistent, curvilinear relationship to the moral judgment score. On the other hand, for the traditional group (father's education low), the factor of time spent living away displays

a consistent and powerful positive relationship to the moral judgment score. Another way of stating the results is to say that for those subjects still embedded in their families, the factor of traditional versus modernized family background is a good predictor of moral judgment scores because the traditional type of Kenyan child-rearing involves "authority-oriented" child-training practices, while the modernized type involves less authoritarian styles. On the other hand, for students who are no longer living at home, the factor of family background is not a good predictor of moral judgment scores because it has been buried by other, more recent and more salient influences in the students' lives. At boarding school the students encounter a setting characterized by moral concern coupled with free and mutually respectful discussion of moral values. For the students from the traditional backgrounds, this opportunity to discuss moral issues equally and cooperatively is something new and different, and it stimulates them to catch up to the more modern students in their stage of moral judgment. Thus, the way in which the experience of living independently influences developing individuals depends upon their own structuring processes. Living away from home can be a powerful facilitator of moral development, but the effect works primarily for students from authority-oriented homes, who have a different view of themselves and

of their right to argue about morality than do children from modernized households.

The fourth hypothesis which has been tested concerns the effect of formal academic training in certain major fields of concentration at the University of Nairobi. The prediction has been that the study of sociology, economics, government, history, religious studies, and law will be correlated with higher frequencies of Stage 3, 4, and possibly 5, moral reasoning. These particular major fields of concentration are those explicitly mentioned by University students as experiences which affected their moral values. Only students in the Faculties of Arts and Law take these subjects, because the system at the University of Nairobi involves intense specialization from the first year of study to the time of graduation. Thus, students in such fields as Medicine, Commerce, Engineering, Education, and Science take courses from their own Faculties and few or no courses in the Faculties of Arts or Law.

The hypothesis has been clearly confirmed by the University data. The subjects in the Faculties of Arts or Law show less Stage 2 reasoning and more Stages 3 and 4 reasoning than do the subjects in the other faculties. Moreover, the only two subjects displaying any percentage of Stage 5 thought are students of Sociology.

The major fields of concentration in the Faculties of Arts and Law have been hypothesized to be effective because they require study and analysis of the organization of society and of the theory explaining legal and cultural social control systems. Study of such material would be expected to influence Stage 2 subjects to adopt the "member of society" perspective of Stage 3. Moreover, for students already at Stage 3, training in law or the social sciences would be expected to help them move toward the more abstract and formalized, "bureaucratic" perspective of Stage 4, or even the "social contract" perspective of rights and obligations underlying democratic political theory, characteristic of Stage 5.

Four factors, then, have been demonstrated to relate to higher levels of moral reasoning among young adults in Kenya. These conditions have to do not only with the specific dimensions of the environment (i.e., with specific factors) but also with specific characteristics of the developing individuals (e.g., whether they come from traditional or modernized backgrounds). The positive results indicate that it is possible to build an interactive theory of child development, one which accounts for the stimulating effects of the environment in terms of the expectations and understandings of the individual, and which accounts for the development of the individual in terms of specific dimensions of the environment.

The influences thus far discussed have concerned the rate of children's moral development, not its ultimate level or end point. For example, it is probably that modernized children in Kenya reach Stage 3 sooner than do traditional children but most traditional children will also acquire the capacity for Stage 3 thought. Stage 3 reasoning is certainly evident in the moral judgment responses of peasant farmers in Kenya and of village adults in Turkey (Turiel, Kohlberg, and Edwards, forthcoming). Similarly, study of social or legal theory is not necessary for the emergence of Stage 4 reasoning among University students. Students in the other fields also evidence Stage 4, but simply at a lower frequency. The results thus far summarized show how certain kinds of social experiences can facilitate the emergence of the adult perspective on morality embodied in Stages 3 and above. They do not argue that such experiences are necessary for the emergence of the higher stages.

Besides these four experiences, however, another important category of environmental events in the data chapters has been considered, and it may have effects more complex than simply stimulating the rate of emergence of adult moral reasoning. This is the factor of involvement in a traditional village society rather than a national

state system. All of the adults in the Community sample had been selected as respected and responsible citizens in their towns or villages. Many were local political figures, or officers of community associations. Nevertheless, in spite of the fact that the traditional, non-schooled adults were as deeply involved in community decision-making as were the educated ones (who were primarily school teachers or business people), they scored significantly lower in moral judgment. This result occurred whether level of education or level of occupation was used as the criterion of orientation toward modern Kenyan society. Furthermore, the two groups differed not only in mean level of moral judgment but also in highest stage attained. Stage 4 thought has been seen to be absent in the traditional African farmers who had only minimal formal education. Stage 3 is the highest stage clearly demonstrated by this group.

The data from the student portion of the Community sample underscore the influence of formal education on moral reasoning. For this group, which ranges in education from Form One to Six of secondary school--in a way completely randomly distributed with respect to age--the highest and only significant correlate of moral judgment stage score is level of education. Schooling is certainly a much stronger correlate of moral judgment stage than is age, which shows a negligible effect.

During their interview about past experiences, the University students described the way in which education had changed their moral thinking. They asserted that at school they had learned to think more critically and analytically about issues and to regard moral values as interesting topics for discussion and debate. They had learned an attitude of skepticism toward unreasoned pronouncements. As so many said, they had learned to "think for themselves." such an attitude toward ideas may be one of the most important concomitants of secondary and college education. In terms of the development of moral reasoning, it is likely that patterns of thought acquired at school influence both the rate of change (as with the student portion) and the ultimate level attained (as with the adult portion of the Community sample).

According to this data, then, traditional East African customary instruction and life in the village do not produce Stages 4, 5, or 6 of moral reasoning. These modes of thought do occur among educated populations preparing for or involved in middle and ruling class occupations in the modern economy (although none of these stages, especially Stages 5 and 6, are frequent even in these groups). However, it has been argued that the absence of the upper stages in the interviews of the traditional villagers should

not be considered any kind of problem for the small-scale society. Rather, Stage 3 may serve an analogous, that is, an equivalent function, for the village society that Stages 4 to 6 serve for the complex societies. According to this suggestion, Stage 3 describes a form of thought which corresponds to the form of social organization appropriate for a small-scale system, while Stage 4 corresponds to the form of the complex state.¹

Societies of different size are organized differently because they face different problems of social control. Simply to perform the functions of maintaining public order, resolving civil disputes, and restraining the abuse of power by central authorities, the large-scale society requires a formally more elaborate organization than does the small-scale unit. In the latter, disputes can be mediated with a reasonable amount of equity and dispatch by sessions of debate among disputing parties and respected elders (Gluckman, 1955; Gulliver, 1963; Bohannan, 1957). The mediators have the responsibility of giving justice where justice is due and yet at the same time creating a workable compromise which will be tolerated by both

¹In addition, it has tentatively been suggested that Stages 5 and 6 represent refinements of Stage 4 which correspond to a specific form of organization of the complex state; namely, the constitutional parliamentary democracy.

parties. They must re-establish harmony in the community as well as uphold the moral norms (Snell, 1954; Saltman, 1971). These norms represent a flexible set of guidelines rather than a formal body of laws and precedents. Further, the elders are expected to use whatever knowledge they have about the background of the dispute and the character of the disputants; they do not clearly delimit the relevant and the irrelevant according to standard legalistic criteria. The small-scale society thus does not call forth Stages 4-6 level of thought about legal principles and guidelines because it is not based on the same system of courts and written law as is the complex, stratified state. As the legal anthropologist, E. Adamson Hoebel, declared, "the more civilized man becomes, the greater is man's need for law, and the more law he creates. Law is but a response to social needs" (Hoebel, 1954, p. 293).

Many authorities have explored the evolution of law and its relationship to the evolution of society. However, the question for psychology and psychological anthropology is how this evolution relates to the modes of moral thought and other types of cognition required for life in different types of social contexts. For the traditional village setting of rural Kenya, and perhaps of all peasant societies, Stage 3 may represent a fully appropriate level of moral

decision-making for responsible and successful community leaders. In other words, Stage 3, as used by the village leaders in Kenya, may constitute the functional equivalent of Stages 4, 5, or 6 as used by middle or upper class bureaucrats in the modern sector. The empirical data from the Community sample have supported this position, and the quotations from the traditional adults which are presented in Chapter 9 show how Stage 3 concepts do express the villagers' notions of reasonableness, cooperation, and understanding--three of their most central values about the way people should behave.

The two sets of data--that on the environmental determinants of the end point of moral development and that on the experiences which influence the rate of moral development--work together. Each demonstrates how cognitive structures relate to the social settings in which children learn and adults live and work. More generally, they show how cross-cultural research can aid in formulating a functional or contextual view of moral reasoning. This approach allows us to go beyond the view of cognitive abilities as achievements and milestones, to see them as adaptive structures developed to solve problems encountered by people in their everyday lives.

APPENDICES

A P P E N D I X I

MEANS OF CONTACTING AND RECRUITING SUBJECTS

USED WITH THE UNIVERSITY SAMPLE (N = 52)

APPENDIX I

<u>Number of Subjects</u>	<u>Method of Recruitment</u>	<u>Identification Numbers of Subjects Recruited</u>
12	Volunteers from third year Social Psychology class	1, 3, 4, 6, 8, 9, 11, 14, 16, 17, 105, 125
11	Volunteers from Study Hall next door to Child Development Research Unit	76, 78, 82, 83, 84, 85, 87, 88, 90, 97, 100
7	Met at the Medical School	103, 109, 111, 115, 116, 123, 124
4	Volunteers from first year Education class (Semester 2)	107, 108, 110, 112
4	Friends of Subject No. 98	80, 81, 86, 89
3	Friends of Subject No. 17	94, 113, 114
2	Volunteers from first year Education class (Semester 1)	19, 21
2	Friends of Subject No. 14	77, 79
2	Friends of secretary employed by Child Development Research Unit	95, 98
2	Friends of Subject No. 15	20, 96
2	Employees of Child Development Research Unit	10, 74
1	Met at a lecture	15

A P P E N D I X I I

The Student Body of the University of Nairobi
(As of 20th September, 1972), Broken Down by
Major Field of Concentration, Sex, and Year

APPENDIX II

<u>Faculty</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
<u>Agriculture</u>			
1st Yr.	34	6	40
2nd Yr.	40	2	42
3rd Yr.	37	3	40
Total	111	11	122
<u>Architecture, Design, and Development</u>			
1st Yr.	128	13	141
2nd Yr.	100	6	106
3rd Yr.	65	5	70
Total	293	24	317
<u>Arts</u>			
1st Yr.	130	67	197
2nd Yr.	273	100	373
3rd Yr.	222	61	283
Total	625	228	853
<u>Commerce</u>			
1st Yr.	92	9	101
2nd Yr.	123	8	131
3rd Yr.	90	8	98
Total	305	25	330
<u>Engineering</u>			
1st Yr.	179	3	182
2nd Yr.	176	1	177
3rd Yr.	131	0	131
Total	486	4	490
<u>Law</u>			
1st Yr.	44	8	52
2nd Yr.	43	6	49
3rd Yr.	27	9	36
Total	114	23	137

<u>Faculty</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
<u>Medicine</u>			
1st Yr.	86	12	98
2nd Yr.	81	5	86
3rd Yr.	64	14	78
4th Yr.	41	8	49
5th Yr.	25	7	32
Total	297	46	343
<u>Nursing (Advanced)</u>			
1st Yr.	0	18	18
2nd Yr.	1	19	20
Total	1	37	38
<u>Vetinary Medicine</u>			
1st Yr.	60	8	68
2nd Yr.	72	2	74
3rd Yr.	59	1	60
4th Yr.	55	1	56
Total	246	12	258
<u>Science</u>			
1st Yr.	96	15	111
2nd Yr.	105	23	128
3rd Yr.	77	20	97
Total	278	58	336
<u>Education</u>			
1st Yr.	160	46	206
2nd Yr.	-	-	-
3rd Yr.	-	-	-
Total	160	46	206
<u>Education (Diploma)</u>			
One Year	30	6	36
<u>Journalism</u>			
1st Yr.	19	3	22
2nd Yr.	-	-	-
Total	19	3	22

<u>Faculty</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
<u>Architecture (Master's)</u>			
1st Yr.	19	1	20
2nd Yr.	12	1	13
Total	31	2	33
<u>Meteorology (Diploma)</u>			
One Year	12	0	12
<u>Philosophy (Special progrma open to B.A.'s)</u>			
One Year	15	3	18
 <u>GRAND TOTAL</u>			
Kenya	2419	462	2881
Uganda	290	25	315
Tanzania	247	17	264
Other	77	24	101
TOTAL	3033	528	3561

A P P E N D I X I I I

THE SCORING OF THE MORAL JUDGMENT INTERVIEW

APPENDIX III

I. The Global Method of Determining Moral Judgment Scores

This study has relied upon the "global rating method" for assessing the moral stage of subjects. The scorer reads each interview completely and then assigns to it the stage score which best represents the overall level of moral judgment displayed. A subject can be given a pure stage (i.e., Stage 2 or Stage 3), or a mixed score; for example:

Stage 2(3)--Predominately Stage 2 thought; Approximately one-quarter of interview considered to be Stage 3

Stage 3(2)--Predominately Stage 3 thought; Approximately one-quarter of interview considered to be Stage 2

Stage 2-3--Both Stages 2 and 3 present, but not clear which predominates (This type of scoring is infrequently used; usually one stage or the other is seen as predominating).

If a subject is given a mixed score, the two stages must be adjacent ones (for instance, Stages 2 and 3, or Stages 4 and 5). Other possibilities are excluded for theoretical reasons (Porter and Taylor, Handbook for Assessing Moral Reasoning).

The criteria used for rating moral stages are difficult to summarize briefly. A thorough understanding of the scoring system can be gained by reading the scoring

manuals (the most recent materials available are contained in Kohlberg et al., 1974, and the Standard Form Scoring Guide, 1973).

An excellent outline of the six moral stages is presented in Kohlberg et al., 1974, Tables 2 to 12 (pp. 50-80). Table 3 of this series appears below:

Table 3 - Six Moral Stages

Level 1 - Preconventional Level

Stage 1 - The Heteronomous Stage

Content of Stage:

Right is blind obedience to rules and authority, avoiding punishment, and not doing physical harm.

- a) What is right is to avoid breaking rules backed by punishment, obedience for its own sake, and avoiding physical damage to persons and property.
- b) The reasons for doing right are avoidance of punishment and the superior power of authorities.

Social Perspective of Stage:

Egocentric point of view. Doesn't consider the interests of others or recognize they differ from the actor's. Doesn't relate two points of view. Actions

are considered physically rather than in terms of psychological interests of others. Confusion of authority's perspective with one's own.

Stage 2 - The Stage of Individualism and Instrumental Purpose and Exchange

Content of Stage:

Right is serving one's own or other's needs and making fair deals in terms of concrete exchange.

- a) What is right is following rules but when it is to someone's immediate interest. Right is acting to meet one's own interests and needs and letting others do the same. Right is also what is fair, that is, what is an equal exchange, a deal, an agreement.
- b) The reason for doing right is to serve one's own needs or interests in a world where you have to recognize that other people have their interests, too.

Social Perspective of Stage:

Concrete individualistic perspective. Separates own interests and points of view from those of authorities and others. Aware everybody has their own interest to pursue and these conflict, so that right is relative (in the concrete individualistic sense). Integrates or

relates conflicting individual interests to one another through instrumental exchange of services, through instrumental need for the other and the other's good will, or through fairness as treating each individual's interest as equal.

Level II - Conventional Level

Stage 3 - The State of Mutual Interpersonal Expectations, Relationships, and Interpersonal Conformity

Content of Stage:

The right is playing a good (nice) role, being concerned about other people and their feelings, keeping loyalty and trust with partners, and being motivated to follow rules and expectations.

- a) What is right is living up to what is expected by people close to you or what people generally expect of people in your role as son, sister, friend, etc. "Being good" is important and means having good motives, the showing of concern about others. It also means keeping mutual relationships, maintaining trust, loyalty, respect, and gratitude.
- b) Reasons for doing right are: 1) the need to be good in your own eyes and those of others, 2) your caring for others, and 3) because if

you put yourself in the other guy's place
 you would want good behavior from the self
 (Golden Rule).

Note: The content of Stage 3 appears in two forms,
 Stage 3 L. O. (rules and authority, law and order)
 and Stage 3 G. G. ("good guy," mutual concern and
 sympathy) (see text).

Social Perspective of Stage:

Perspective of the individual in relationships to
 other individuals. Aware of shared feelings, agreements,
 and expectations which take primacy over individual in-
 terests. Relates points of view through the "concrete
 Golden Rule," putting yourself in the other person's
 shoes. Does not consider generalized "system" perspec-
 tive.

Stage 4 - The Social System and Conscience Stage

Content of Stage

The right is doing one's duty in society, upholding
 the social order, and the welfare of society or the
 group.

- a) What is right is fulfilling the actual duties
 to which you have agreed. Laws are to be up-
 held except in extreme cases where they con-
 flict with other fixed social duties. Right

is also contributing to society, the group, or institution.

- b) The reasons for doing right are to keep the institution going as a whole, "what if everyone did it," or self-respect or conscience as meeting one's defined obligations.

(Note: Easily confused with 3 L. O.)

Social Perspective of Stage:

Differentiates societal point of view from interpersonal agreement or motives. Takes the point of view of the system which defines roles and rules. Considers individual relations in terms of place in the system.

Level III - Post-Conventional or Principled Level

Stage 5 - The Stage of Social Contract or Utility and of Individual Rights

Content of Stage:

The right is upholding the basic rights, values, and legal contracts of a society, even when they conflict with the concrete rules and laws of the group.

- a) What is right is being aware of the fact that people hold a variety of values and opinions, that most values and rules are relative to your group. These "relative" rules should

usually be upheld, however, in the interest of impartiality and because they are the social contract. Some non-relative values and rights like life and liberty, however, must be upheld in any society and regardless of majority opinion.

- b) Reasons for doing right are, in general, that Stage 5 individuals feel obligated to obey the law because they have made a social contract to make and abide by laws for the good of all and to protect their own rights and the rights of others. They feel that family, friendship, trust, and work obligations are also commitments or contracts they have freely entered into and entail respect for the rights of others. They are concerned that laws and duties be based on rational calculation of overall utility, "the greatest good for the greatest number."

Social Perspective of Stage:

Prior to society perspective. Perspective of a rational individual aware of values and rights prior to social attachments and contracts. Integrates perspectives by formal mechanisms of agreement, contract,

objective impartiality and due process. Considers "moral point of view," "legal point of view," recognizes they conflict and finds it difficult to integrate them.

Stage 6 - The Stage of Universal Ethical Principles

Content of Stage:

Guidance by universal ethical principles which all humanity should follow.

- a) What is right: Stage 6 is guided by self-chosen ethical principles. Particular laws or social agreements are usually valid because they rest on such principles. When laws violate these principles, one acts in accordance with the principle. Principles are universal principles of justice: the equality of human rights and respect for the dignity of human being as individual persons. These are not merely values which are recognized, they are principles used to generate particular decisions.
- b) The reason for doing right is that, as a rational person, the Stage 6 individual has seen the validity of principles and has become committed to them.

Social Perspective of Stage:

Perspective of a "moral point of view" from which social arrangements derive or on which they are grounded. The perspective is that of any rational individual recognizing the nature of morality or the basic moral premise of respect for other persons as ends, not means.

II. Orientations and Substages

In addition to the six moral stages, interviews may be rated in terms of four moral orientations. At each moral stage, decisions about the right may be approached by any one or combination of the following four orientations (Kohlberg et al., 1973, pp. 23-24):

1. Normative Order Orientation--Orientation to prescribed rules and roles of the social or moral order. The basic considerations in decision center on rules;
2. Utility Orientation--Orientation to the good or bad consequences of action in the situation. Considers consequences to the self and/or to others;
3. Justice or Fairness Orientation--Orientation to what is fair, or to relations of equality, reciprocity, and contract between persons;
4. Ideal Self Orientation--Orientation to an image of actor as a good self, or as someone with virtue, good motives, and conscience (relatively independent of concern for approval from others).

These orientations define four kinds of decision-making strategies, four different ways of talking about the moral elements of a social situation. Each can lead to valuing

either side (pro or con) of a moral dilemma. The first two orientations (rules and utility) focus more on circumstances external to the self--namely laws, norms, and the consequences of choice. Together they constitute the "A" substage. The second two orientations (justice and ideal self) focus not on external elements of a social situation, but rather, on the individual's own self-evaluation (ideal self) or the individual's evaluation of the quality of social interaction (its fairness). These two orientations comprise the "B" substage. The "A" substage is considered to be more commonly used and more clearly representative of the obvious characteristics of each moral stage, but the "B" substage is thought to be a "better balanced" and more advanced position (Kohlberg et al., 1974, p. 26). Longitudinal data have suggested (Ibid., p. 25) that individuals can develop from stage to stage relying upon only the "A" substage, or only the "B" substage, but if they change substages without advancing in moral stage, it is always to move from "A" to "B" rather than from "B" to "A".

III. Converting the Moral Stage Ratings to a 600 Point Scale

The moral stage ratings may be converted to numerical form following a system of stage weighting, such that Stage 1 is weighted 1, Stage 2 is weighted 2, and so on up

to Stage 6 which is weighted 6. The weight of each stage used by a subject is multiplied first by 100 and then by the proportion of scores at that stage. Thus a rating of pure Stage 2 would receive a numerical score of 200 (that is, $2 \times 100 = 200$; $200 \times 1.00 = 200$). The following examples illustrate the procedure:

1. Stage 3 = 300 (that is, $3 \times 100 \times 1.00 = 300$)
2. Stage 2(3) = 225 (that is, $2 \times 100 \times 0.75 = 150$; $3 \times 100 \times 0.25 = 75$; $150 + 75 = 225$)
3. Stage 3(2) = 275 (that is, $3 \times 100 \times 0.75 = 225$; $2 \times 100 \times 0.25 = 50$; $225 + 50 = 275$)
4. Stage 2-3 = 250 (that is, $2 \times 100 \times 0.50 = 100$; $3 \times 100 \times 0.50 = 150$; $100 + 150 = 250$).

The minimum score possible using this method is 100; the maximum is 600.

IV. Converting the "A" and "B" Sub-stages to Numerical Form

Because the "B" substage is considered to be slightly more advanced than the "A" substage, subjects using the "B" substage have received a small number of extra points. The greatest number of points bestowed is 20. Of the 20, 15 are attached to the major stage and five to the minor stage. The following examples illustrate how the extra points are added:

1. 3A--no extra points.
2. 3B--20 extra points (for the B attached to the pure score)
3. 3BA--20 extra points (for the B attached to the pure score and considered predominant to the A there)
4. 3AB--5 extra points (for the small amount of B present attached to the pure score)
5. 3A(2A)--no extra points
6. 3A(2)--5 extra points (for the B attached to minor stage)
7. 3A(2AB)--no extra points (B is present in the minor stage but only secondary to the A)
8. 3A(2BA)--5 extra points (for the B attached to the minor stage and considered predominant to the A there)
9. 3B(2A)--15 extra points (for the B in the major stage)
10. 3B(2B)--20 extra points (15 for the B present in the major stage, and 5 for the B in the minor stage)
11. 3BA(2BA)--20 extra points (15 for the B present and predominant to the A in the major stage, and 5 for the same thing in the minor stage)
12. 3AB(2AB)--5 extra points (for the small amount of B present in the major stage; no points for the small amount of B present in the minor stage)

A P P E N D I X I V

INTER-RATER RELIABILITY FOR THE
MORAL JUDGMENT SCORE

APPENDIX IV

Coefficients of inter-rater reliability:

University Subjects (N = 18)	Pearson r = 0.8614
	Spearman r _s = 0.8258
High School Subjects (N = 18)	Pearson r = 0.8425
	Spearman r _s = 0.8518
Overall (N = 36)	Pearson r = 0.8806
	Spearman r _s = 0.8606

A P P E N D I X V

CATEGORIES USED TO CLASSIFY SUBJECTS'

FRIENDSHIP CHOICES¹

¹Only groups actually mentioned by students have been included in this classification. It is not intended to exhaust all of the cultural groups of Kenya.

APPENDIX VCategories of Asian Groups:

1. Hindu (Gujarati, Punjabi, and Malayan)
2. Muslim
3. Sikh
4. Ismaili
5. Goan (Catholics originally from Goa)

Categories of African Groups:

1. Kikuyu, Kamba, Meru, Embu
2. Taita, Mijikenda, Swahili
3. Kipsigis, Nandi, Samburu
4. Kisii
5. Luyia
6. Luo, and closely associated Western Luyia
(from Mumias)

A P P E N D I X V I

CHARACTERISTICS OF THE ADULTS IN THE
COMMUNITY SAMPLE--THEIR AGES, SEX,
OCCUPATIONS, AND POSITIONS OF
COMMUNITY RESPONSIBILITY

APPENDIX VI

<u>I.D.</u>	<u>Sex</u>	<u>Age</u>	<u>Occupation</u>	<u>Positions of Responsibility</u>
<u>The Kikuyus and Merus:</u>				
39	Male	65	Peasant	Land representative, Kiambu District; Arbitor of local disputes; Chairman many groups
40	Male	53	Peasant; lorry or taxi driver	Committee chairman
38	Male	30	Peasant	Head of athletic team
70	Male	late 40's	Peasant; Owner of small shop	Church elder; Member of <u>harambee</u> school committee and other social projects
71	Male	32	Primary teacher	---
72	Male	28	Primary school headmaster	Secretary of primary school committee
69	Male	60's	Peasant	Church elder; Committee member of local land board
73	Male	27	Bank Officer	---
<u>The Kipsigis:</u>				
126	Female	46	Peasant	Head of women's church group
118	Female	47	Peasant	Member of primary school committee; member of nursery school committee
127	Female	23	Peasant	---
121	Female	40	Peasant	Nursery school committee member
117	Female	33	Peasant	---

<u>I.D.</u>	<u>Sex</u>	<u>Age</u>	<u>Occupation</u>	<u>Position of Responsibility</u>
128	Male	54	Peasant	Primary school committee member
25	Male	32	Mason	Church leader
119	Male	55	Agricultural assistant	Vice-Chairman of primary school committee; treasurer of Sigor Cattle Dip.
23	Male	48	Peasant; owner of small shop	Member of secondary and primary school committees; Chairman of Sigor Cattle Dip
122	Male	75	Peasant	Subchief for ten years; member of school committee
120	Male	45	Manual worker (for a school)	Chairman of nursery school committee

The Luyias

136	Female	30	Peasant	Member of women's church group
134	Female	39	Peasant	Leader of women's church group; head of women's club for location
135	Male	51	Peasant	Headman of sublocation
137	Male	53	Peasant	Member of land consolidation committee
133	Male	72	Peasant	Chairman of primary school committee; member of church committee; member of coffee board
59	Male	36	Primary teacher	---
60	Male	36	Primary teacher	---
61	Male	50	Peasant	Village chairman
62	Male	52	Owner of small shop	---

<u>I.D.</u>	<u>Sex</u>	<u>Age</u>	<u>Occupation</u>	<u>Position of Responsibility</u>
63	Male	43	Peasant	---

The Ismailis

26	Female	27	Chartered secretary (administrative assistant)	Assistant secretary of Aga Khan Sports Club
31	Female	27	Secondary teacher	Member of welfare committee; member of hostel committee
32	Female	30	Senior traffic assistant for SAS	---
129	Female	29	Secondary teacher	Secretary of Aga Khan Group Council; Assistant District Commissioner for Girl Guides; Guide Captain
130	Male	26	Businessman (owner)	Advisor of other businessmen
159	Male	26	Secondary teacher	Member various committees at school
180	Male	23	Manager of travel firm	---

A P P E N D I X V I I

CHARACTERISTICS OF THE STUDENTS IN THE
COMMUNITY SAMPLE--THEIR AGES, SEX,
YEAR OF SECONDARY SCHOOL, AND
NAME AND TYPE OF SCHOOL ATTENDED

APPENDIX VII

<u>I.D.</u>	<u>Sex</u>	<u>Age</u>	<u>Year of Secondary School</u>	<u>Name and Type of School Attended</u>
<u>The Kikuyus and Merus</u>				
41	Female	20	Form 6	Nairobi Girl's School (heterogeneous, boarding)
35	Female	16	Form 2	Naaro Girls' School in Thika (Kikuyu, boarding)
30	Female	22	Form 4	Kagoferi Secondary School in Nyeri (Kikuyu, boarding)
44	Male	16	Form 4	Aga Khan (H.H.) High School in Nairobi (heterogeneous, day ¹)
43	Male	20	Form 4	Githiga Secondary School in Kiambu (Kikuyu, day)
42	Male	18	Form 4	Kijabi Secondary School in Kijabi (Kikuyu, day ¹)
66	Male	18	Form 3	The Nairobi School (heterogeneous, boarding)
67	Male	19	Form 2	Kibirichia Secondary School in Meru (Meru, day ¹)
65	Male	19	Form 3	The Nairobi School (heterogeneous, boarding)
68	Male	22	Form 3	Ikuu Secondary School in Meru (Meru, day ¹)
64	Male	20	Form 4	The Nairobi School (heterogeneous, boarding)
28	Male	19	Form 3	Gichuru High School in Ngecha (Kikuyu, day)

¹Lives at hostel rather than with relatives.

<u>I.D.</u>	<u>Sex</u>	<u>Age</u>	<u>Year of Secondary School</u>	<u>Name and Type of School Attended</u>
24	Male	18	Form 3	Abbey Secondary School in Nairobi (heterogeneous, day ¹)
33	Male	20	Form 2	Kiragan Secondary School in Kabete (Kikuyu, day ¹)
27	Male	24	Form 4	Saint Kevin's School in Kabocha (Kikuyu, boarding)
18	Male	21	Form 6	Bishop Otunga High School in Kisii (heterogeneous, boarding)
<u>The Kipsigis</u>				
13	Female	22	Form 2	Sigor Secondary School in Kericho (Kipsigis, day)
5	Male	20	Form 2	Kabianga Secondary School in Kericho (Kipsigis, boarding)
12	Male	20	Form 1	Sigor Secondary School in Kericho (Kipsigis, day)
2	Male	22	Form 5	Alliance High School in Kikuyu (heterogeneous, boarding)
22	Male	22	Form 5	Kagumo Secondary School in Nyeri (heterogeneous, boarding)
7	Male	27	Form 2	Kitale Secondary School in Kitale location (heterogeneous, boarding)
<u>The Luyias</u>				
138	Female	20	Form 4	Bunyore Girls' High School in Bunyore Location (Luyia, boarding)

<u>I.D.</u>	<u>Sex</u>	<u>Age</u>	<u>Year of Secondary School</u>	<u>Name and Type of School Attended</u>
139	Female	18	Form 4	Alliance High School in Kikuyu (heterogeneous, boarding)
140	Male	20	Form 3	Musingu High School in Idakho Location (Luyia, boarding)
55	Male	17	Form 2	Pehil Secondary School in Homabay (Luo, boarding)
54	Male	17	Form 2	Namulungu Secondary School in North Wanga Location (Luyia, boarding)
56	Male	18	Form 4	Namulungu Secondary School in North Wanga Location Luyia, boarding)
58	Male	18	Form 3	Namulungu Secondary School in North Wangu Location Luyia, boarding)
57	Male	20	Form 4	Saint Peter's Secondary School in Mumias (Luyia, boarding)

The Ismailis

131	Male	17	Form 4	Kisumu High School (heterogeneous, day)
132	Male	18	Form 6	Kisumu High School (heterogeneous, day)

A P P E N D I X V I I I

THE DISTRIBUTION OF AFRICAN AND ASIAN STUDENTS
BY FACULTIES AT THE UNIVERSITY OF NAIROBI

APPENDIX VIII

In the University sample, the large majority of Asian students are in the Faculty of Medicine, whereas for the Africans, the Faculties of Arts and Education are the most frequent. The table below displays the frequencies and percentages of subjects in each of the faculties that are represented by at least one subject.

<u>Faculty</u>	<u>RACIAL GROUP</u>			
	<u>Africans</u>		<u>Asians</u>	
	<u>Frequencies</u>	<u>Percentages</u>	<u>Frequencies</u>	<u>Percentages</u>
Arts	15	42.8%	4	23.5%
Education	11	31.4	1	5.9
Medicine	1	2.8	11	64.7
Commerce	5	14.3	0	0.0
Engineering	1	2.9	1	5.9
Law	1	2.9	0	0.0
Science	1	2.9	0	0.0
TOTAL	35	100.0%	17	100.0%

The factor of race is clearly related in a non-random way to the factor of faculty; however, a strong case can be made that the distributions in the sample relate to overall distributions at the University of Nairobi. This contention

is based upon my academic year of experience at the University. Definite impressions could be formed of the ways in which students are sorted into the different faculties, and they lend informal support to the idea that students do not select themselves into the Faculties of Arts and Law on the basis of "moral idealism" or some other quality which might be directly correlated with the moral judgment score. Rather, strong practical considerations dictate a rank ordering in the students' minds of the faculties by desirability; and the resulting system of evaluation is somewhat different for the African and the Asian students.

It is clear to all students that the different faculties of the University lead to occupations of differing status, income, and amount of opportunity. For both Africans and Asians, the professional faculties--Commerce, Medicine, Engineering, Architecture, and Law--are most attractive because they lead to great opportunity and high income. However, whereas for the Asian students the factor of opportunity results in a great gap in desirability between the professional faculties and the Faculty of Arts and Education, for the African students the gap is smaller. The factor of opportunity is especially crucial for the Asian students because many of them hope to emigrate from Kenya and they believe that it will be much easier for them

to gain admittance to such countries as Great Britain, Canada, and the United States if they possess useful professional skills rather than a bachelor's degree in the liberal arts or in Education. Even if they plan to remain in Kenya, they expect that it will be easier to find work with a professional degree rather than a degree in Arts or in Education. The degree in Arts holds little value for them because they will never be accepted into administrative positions or positions in the Kenyan ministries (the most common employers of the Arts graduates); Africanization of these posts has been one of the major goals of the Kenyan government since Independence in 1963. Similarly, the degree in Education does not open up good prospects for the Asian students because the government is currently striving to Africanize the teaching profession at the secondary level and thus is replacing the Asians and Europeans who have held many of these positions in the past.¹ Further, an Asian student cannot realistically hope someday to gain a position at the Ministry of Education. For the Asian students, the only faculties which are really desirable

¹At the lecture course required during 1972-1973 of all entering students in Education, not a single Asian was seen among the 200 students in attendance.

are Medicine, Commerce, Engineering, Architecture, and Law. Medicine is probably the most attractive given the opportunities for doctors in the United States, Canada, and Great Britain.

For the African students, the professional faculties are exceedingly attractive because of their high degree of opportunity. Kenya presently is striving to change the situation in which there are but few African lawyers, doctors, engineers, architects, and managers in big industrial firms relative to the number of Europeans and Asians; therefore, African graduates with professional degrees can look forward to sure employment, great prestige, and high income. On the other hand, the Bachelor of Arts is no longer the sure ticket to a high paying and prestigious position that it once was. Today, ten years after Independence, administrative positions and positions in the government ministries have been thoroughly Africanized and new openings are becoming scarce. In recent years students in the Arts have begun to worry where they will find employment, although the situation has not yet become desperate. The situation of African students in the Faculty of Education is somewhat different; they do not worry about finding work but they do worry whether they will find work as high paying as that customary for graduates in Arts. The Kenya government

requires graduates in Education to take teaching positions at the secondary school level. These positions are plentiful for African graduates, but salaries are not nearly as high as for positions in government, industry, or the higher status professions. In addition, however, many aim ultimately to work for the Ministry of Education and thus gain more status and income (Sanderud, 1973). In sum, for the African students, the professional faculties are extremely attractive but the Faculties of Arts and Education also offer good prospects.

A P P E N D I X I X

THE USE OF MULTIPLE REGRESSION ANALYSIS AS
A MULTIVARIATE TECHNIQUE FOR THIS THESIS

APPENDIX IX

Multiple regression analysis is a method for studying the effects and the magnitudes of the effects of more than one independent variable on one dependent variable using principles of correlation and regression (Kerlinger, 1973). Although traditionally analysis of variance has been the primary multivariate technique used by psychologists, today multiple regression is beginning to find more and more favor in the field. It is based on the same least square approach as analysis of variance, but in fact possesses certain advantages over that more widely used technique.

In the first place, multiple regression analysis yields results that speak directly not only to the statistical significance of the independent variables but also to the amount of variance which they explain. Many researchers (confer discussion in Hays, 1973, sections 12.34 and 15.7) have become sensitive to the idea that it is only minimally helpful to find an independent variable which is related to their dependent measure at the .001 level of significance if that variable explains only a small percentage of the variance. Whereas the F test provided by analysis of variance gives no estimate of amount of variance explained by

the independent variables, the R square provided by multiple regression in addition to the F and t tests does yield such an estimate.

Second, multiple regression analysis is built to handle continuous independent variables, whereas analysis of variance can only deal with categorized ones. For instance, using multiple regression, one could test whether children's height relates to their weight without imposing an arbitrary dichotomization of "high" versus "low" on the height data. The problem with such a dichotomization is that when the independent variable is linearly related to the dependent variable (as it is in this example), then the procedure causes some of the variance explained to be lost. This point is pertinent to many of the variables used in the High School and University analyses. For example, it seems reasonable to expect a linear relationship between moral judgment scores and such variables as age, level of school achievement, degree of modernization, and years spent at heterogeneous high schools; and it would be unfortunate to choose a statistical technique which cannot capture the full strength of the linear effects.

A third advantage of multiple regression relative to analysis of variance is that it does not require such large sample sizes in order to test simultaneously the effects.

of three or more independent variables. For example, suppose that one planned to perform an analysis of variance and wished to have five subjects in each cell of the table. In order to test three independent variables (which each had two values, "high" and "low"), one would need $5 \times 2 \times 2 \times 2 = 40$ individuals. In order to test four variables, 80 subjects would be required, and so on. In order to test the effects of eight independent variables, as has been done in the University analysis, using multiple regressions, one would need 1,280 cases. Of course, the University sample only contains 52 subjects. Multiple regression analysis does work best when each independent variable displays a wide spread of values, with a reasonable number of subjects distributed at each end of the continuum, but it does not require nearly as large and well-balanced a distribution as does analysis of variance. This difference between the two techniques is due to the fact that multiple regression does not test for interaction effects as does analysis of variance. Rather, multiple regression analysis imposes greater restraints on the data and lets it speak affirmatively only if it has something to say relevant to the question of simple, linear relationships between the independent and dependent variables. For an exploratory study such as this one, to look only for linear effects constitutes a

reasonable approach. Previous research suggests no reason to hypothesize complex interacting relationships between background and experience variables and the moral judgment score. In the one case in which an interaction effect has been predicted (namely, the relationship between modernization and time spent living away from home), the analysis of variance has been used.

A P P E N D I X X

RANK ORDER INTERCORRELATION OF INDEPENDENT VARIABLES

(SPEARMAN r_s) FOR THE UNIVERSITY SAMPLE

APPENDIX X

	<u>Sex</u>	<u>Age</u>	<u>Moderni- zation</u>	<u>School Achievement</u>	<u>Living Away</u>	<u>Field of Concen- tration</u>	<u>Hetero- geneous High School</u>	<u>Friends Other Groups</u>
Sex	1.00	-0.25	0.48***	0.41**	0.05	0.04	0.35*	0.09
Age		1.00	-0.46***	-0.18	0.49**	0.40**	-0.47***	-0.17
Modernization			1.00	0.50***	-0.39**	-0.22	0.55***	0.26
School Achievement				1.00	-0.41**	-0.04	0.30*	0.24
Time Spent Living Away					1.00	0.19	-0.20	-0.12
Major Field of Concentration						1.00	-0.11	0.10
Years Spent Heterogeneous High Schools							1.00	0.14
Friends Other Groups								1.00

Note: All tests of significance are two-tailed:

- * p < .05
- ** p < .01
- *** p < .001

A P P E N D I X X I

ETHNIC BREAKDOWN OF THE FORM FOUR CLASSES,
AT THE SECONDARY SCHOOLS AT
WHICH THE AUTHOR INTERVIEWED

APPENDIX XI¹

SCHOOL	ETHNIC GROUPS				TOTAL
	AFRICAN (Kikuyu, Kamba, Meru, Embu)	AFRICAN (Other Groups)	ASIAN	EUROPEAN	
Timutumu Girls' High School (Center K.212) ²	N = 114 100%	--	--	--	N = 114 100%
Nyeri High School (Center K.201)	N = 76 100%	--	--	--	N = 76 100%
Kimathi Govern- ment Secondary (Center?) ³	N = 80 (approx.) 100%	--	--	00	N = 80? 100%
Aga Khan (H.H.) High School (Center K.441)	N = 28 24.6%	N = 33 28.9%	N = 52 45.6%	N = 1 0.9%	N = 114 100%
State House Road Girls' Sec. (Center K.429)	N = 20 35.1%	N = 17 29.8%	N = 19 33.3%	N = 1 1.8%	N = 57 100%
Upper Hill School (Center K.410)	N = 20 19.6%	N = 47 46.1%	N = 33 32.3%	N = 2 2.0%	N = 102 100%
Kenya High School (Center K.008)	N = 24 17.9%	N = 65 48.5%	N = 33 24.6%	N = 12 9.0%	N = 134 100%
The Nairobi School (Center K.005)	N = 40 27.6%	N = 65 44.8%	N = 36 24.8%	N = 4 2.8%	N = 145 100%

1. These figures are based on the 1973 "O" Level Lists (published 1974). The students were classified into the ethnic categories according to their surnames. Some cases were doubtful, and several errors may have been made in classification; therefore, these figures should be taken to be only approximately correct.
2. The Center numbers are the official numbers used to reference the schools for the "O" Level examinations.
3. Exact data have not been obtained for this school.

B I B L I O G R A P H Y .

BIBLIOGRAPHY

- Baldwin, James Mark. Social and Ethical Interpretations in Mental Development. New York: The MacMillan Company, 1902.
- Batt, H. W. Guilt, Shame and the Bureaucratic Model: With Specific Reference to Thai Public Administration. Ph.D. dissertation, State University of New York, Albany, forthcoming.
- Bar Yam, Miriam, Joseph Reimer and Lawrence Kohlberg. "Development of Moral Reasoning in the Kibbutz." In L. Kohlberg (Ed.), Moralization: The Cognitive-Developmental Approach. New York: Holt, Rinehart, and Winston, forthcoming.
- Blatt, Moshe M. and L. Kohlberg. "The Effect of Classroom Moral Discussion Upon Children's Level of Moral Judgment." To be published in L. Kohlberg (Ed.), Moralization: The Cognitive-Developmental Approach. New York: Holt, Rinehart and Winston, forthcoming.
- Bohannon, Paul. Justice and Judgment Among the Tiv. London: Oxford University Press, 1968.
- Carter, Hugh. The Social Theories of L. T. Hobhouse. Chapel Hill, North Carolina: The University of North Carolina Press, 1927.
- Conrad, Robert. The Effect of City Residence on Egoistic Behavior. Forthcoming Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, Massachusetts.
- Dewey, John and James H. Tufts. Ethics. New York: Henry Holt and Company, 1908.
- Edel, Abraham. "Scientific Research and Moral Judgment." Paper delivered at the Conference on the Acquisition and Development of Values, National Institute of Child Health and Human Development, 1968.
- Elfenbein, Donald. Moral Stages in Societal Evolution. Senior thesis for B.A. degree in Department of Psychology and Social Relations, Harvard University, March, 1973.

- Ghai, D. P. "Contemporary Economic and Social Developments." In B. A. Ogot and J. A. Kieran (Eds.), Zamani: A Survey of East African History. Nairobi, Kenya: East African Publishing House, Ltd., 1969.
- Gluckman, Max. The Ideas in Barotse Jurisprudence. New Haven: Yale University Press, 1955.
- Gorsuch, R. L. and M. L. Barnes. "Ethical Stages and Value Norms of Black Carib Youths." In L. Kohlberg (Ed.), Moralization: The Cognitive-Developmental Approach. New York: Holt, Rinehart, and Winston, forthcoming.
- Gulliver, P. H. Social Control in an African Society. London: Routledge and Kegan Paul, Ltd., 1963.
- Hays, William L. Statistics for the Social Sciences. New York: Holt, Rinehart, and Winston, Inc., 1973.
- Hess, R. D., and V. C. Shipman. "Early Experience and the Socialization of Cognitive Modes in Children," Child Development, 1965, 36, 869-888.
- Hobhouse, L. T. Morals in Evolution: A Study in Comparative Ethics. London: Chapman and Hall, Ltd., 1906.
- Hoebel, E. Adamson. The Law of Primitive Man. Cambridge, Mass.: Harvard University Press, 1954.
- Hoffman, M. L. "Power Assertion by the Parent and Its Impact on the Child," Child Development, 1960, 31, 129-143.
- Holstein, Constance. Parental Determinants of the Development of Moral Judgment. Unpublished doctoral dissertation, University of California, Berkeley, 1968.
- Kamii, C. K. and N. L. Radin. "Class Differences in the Socialization Practices of Negro Mothers," J. Marr. Family, 1967, 29, 302-310.
- Keasey, Charles B. "Social Participation as a Factor in the Moral Development of Preadolescents." Developmental Psychology, in press.
- Kenya, Ministry of Education. Annual Report 1968. Nairobi, Kenya: Government Printing Office, 1969.

Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart, and Winston, Inc., 1973.

Kohlberg, Lawrence. The Development of Modes of Moral Thinking and Choice in the Years 10 to 16. Unpublished doctoral dissertation, University of Chicago. Chicago, Illinois. December, 1958.

_____. "Stage and Sequence: The Cognitive Developmental Approach to Socialization." In D. Goslin (Ed.), Handbook of Socialization. New York: Rand McNally, 1969, pp. 347-480.

_____. "From Is to Ought: How to Commit the Naturalistic Fallacy and Get Away With It in the Study of Moral Development." In T. Mischel (Ed.), Cognitive Development and Epistemology. New York: Academic Press, 1971, pp. 151-235.

_____, K. Kauffman, P. Scharf, and J. Hickey. The Just Community Approach to Corrections: A Manual, Part II. Cambridge, Mass.: Moral Education Research Foundation, 1974.

LeVine, R. A., N. Klein and C. Owen. "Father-Child Relationships and Changing Life Styles in Ibadan, Nigeria." In H. Miner (Ed.), The City in Modern Africa. London: Praeger, 1967.

Lloyd, Barbara. "Education and Family Life in the Development of Class Identification Among the Yoruba." In M. P. C. Lloyd (Ed.), The New Elite of Tropical Africa. Oxford: Oxford University Press for International African Institute, 1967.

Mead, George Herbert. Mind, Self, and Society. Chicago, Illinois: The University of Chicago Press, 1934.

Parikh, Bindu. Untitled forthcoming Ed.D. dissertation, Boston University (Department of Special Education). Boston, Massachusetts.

Perry, William G., Jr. Forms of Intellectual and Ethical Development in the College Years. New York: Holt, Rinehart and Winston, Inc., 1970.

Piaget, Jean. The Moral Judgement of the Child. New York: The Free Press, 1965. (Originally published 1932)

- Pospisil, Leopold. Anthropology of Law: A Comparative Theory. New York: Harper and Row, Publishers, 1971.
- Roberts, John M. "Oaths, Autonomic Ordeals, and Power," American Anthropologist, 1965, 67, 186-212.
- Saltman, Michael. A Restatement of Kipsigis Customary Law. Ph.D. dissertation, Department of Anthropology, Brandeis University, June, 1971.
- Sanderud, R. "Why Teach?," The Kenya Education Review, 1973, 1, 15-28.
- Sears, R. R., E. E. Maccoby and H. Levin. Patterns of Child Rearing. Evanston, Illinois: Row, Peterson, 1957.
- Simpson, A. L. and D. Graham. "The Development of Moral Judgment, Emotion and Behavior in British Adolescents." In L. Kohlberg (Ed.), Moralization: The Cognitive Developmental Approach. New York: Holt, Rinehart, and Winston, forthcoming.
- Snell, G. S. Nandi Customary Law. London: MacMillan and Company, Ltd., 1954.
- Spencer, Herbert. The Principles of Ethics. Volume I. New York: D. Appleton and Company, 1899.
- Turiel, E. "Stage Transition in Moral Development." In R. M. Travers (Ed.), Second Handbook of Research on Teaching. Chicago, Ill.: Rand McNally, 1972.
- _____. "Adolescent Conflict in the Development of Moral Principles." In R. L. Solso (Ed.), Contemporary Issues in Cognitive Psychology: The Loyola Symposium. Washington, D. C.: V. H. Winston and Sons, 1973.
- _____. "A Comparative Analysis of Moral Knowledge and Moral Judgment in Males and Females," forthcoming.
- _____. Lawrence Kohlberg and Carolyn P. Edwards. "A Cross-Cultural Study of Moral Development in Turkey and the United States." In E. Turiel and J. Langer (Eds.), The Structure of Change in Cognitive and Social Development, forthcoming.
- Whiting, Beatrice B. "Work and the Family--Cross-Cultural Perspective." Paper prepared for Women: Resource For A Changing World, an International Conference, Radcliffe Institute, Radcliffe College, Cambridge, Massachusetts, 1972.

- _____. "The Kenyan Career Woman: Traditional and Modern," Annals of the New York Academy of Sciences, 1973, 208, 71-75.
- _____. "The Effect of Modernization on Socialization." Paper presented at Third Annual Meeting of the Society for Cross-Cultural Research, Boston, Massachusetts, 1974.
- _____, and J. W. M. Whiting, in collaboration with R. Longabaugh. Children of Six Cultures: A Psycho-Cultural Analysis. Cambridge, Mass.: Harvard University Press, 1974.

V I T A

VITA

- 1965-1969 Radcliffe College B.A. June, 1969
- 1969-1971 Graduate School of Education,
Harvard University
- 1972 Teaching Fellow
Department of Anthropology,
Harvard University
- 1972-1973 Research Associate,
Child Development Research Unit,
University of Nairobi,
Nairobi, Kenya
- 1973-1974 Research Assistant,
Harvard Graduate School of Education,
Harvard University

1

16