A COMPARATIVE STUDY OF STUDENT TEACHERS IN ENGLAND AND EGYPT INVESTIGATING THE RELATIONSHIP BETWEEN THEIR PERCEPTION OF THE STATUS OF THE TEACHING PROFESSION AND THEIR ATTITUDES TOWARDS EDUCATION

AMIRA M. M. SHAHIN

Submitted in Fulfilment of the Requirements for the Degree of Ph.D.

University of Leeds School of Education



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ABSTRACT

The main aim of the research was to compare student teachers' perceptions of the teaching profession and their attitudes to education, in England and Egypt.

Other aims of the research were: (1) To investigate how teachers perceive the teaching profession at different levels in terms of status, salary, using abilities fully, usefulness to society, as well as public esteem. (2) To assess the value of R.A.C. Oliver's questionnaire "Survey of Opinions about Education", as a measure of teachers' attitudes in terms of three dimensions: Naturalism, Radicalism and Tender-mindedness. (3) To assess the effectiveness of the Oliver Questionnaire as a measure of teacher attitudes to education in Egyptian culture. (4) To compare student teachers' attitudes to education in the light of certain demographic information, viz. sex, age, teaching subject, and subject of course.

The main English sample of respondents consisted of student teachers in colleges of education and P.G.C.E. students at Leeds University and a small number of M.Ed. students and serving teachers.

The main Egyptian sample consisted of student teachers in colleges of education, and a small number of serving teachers and Diploma students.

The instruments used in the study were: (1) the Oliver Questionnaire; (2) a questionnaire on ranking occupations. Data were subjected to factor analysis, analysis of variance and rank correlation.

The main results showed that a relationship between student teachers' perceptions of the status of the teaching profession and their attitudes to education could not be established in England and Egypt. Different factor structures were found for the English and Egyptian groups. Oliver's three-factor pattern was not replicated in the English group results. Relationships between biographical data and attitudes were analysed, and some significant results were found. Some relationship was found between assessments of the status of teaching within the two countries. but assessments for different levels of teaching and for such variables as value to society and personal satisfaction showed significant differences between the two countries. Cross-cultural comparison of similar occupations in the two countries showed considerable differences on several dimensions: status, salary, personal satisfaction, using abilities fully and value to society. These findings tend to support the "culturalist" rather than the "structuralist" view of a society.

INTRODUCTION

In recent years there has been considerable discussion, activity and change in courses of teacher education. Many experimental studies have attempted to investigate motives for entering the teaching profession and teachers' attitudes to education. Motives are of course merely inferences from behaviour. Among the motives for entering teaching for which some evidence has been found are the following: personal satisfaction, using abilities fully, value to society, status, liking for children, liking for a subject, the desire for power.

In Egypt at the present time there is a general desire to improve the quality of education. This stems from the realisation that "the teacher is the corner-stone of the educational process". This trend manifests itself in selective admission policies, the prolongation of courses of study in institutions for teacher education and the imposition of certain standards and requirements which teachers must meet before applying for a teaching post. An attempt is now being made to attract very able students to teaching. A small grant is now made to students entering Faculties of Education. Nevertheless there is a general sense of dissatisfaction with the academic attainments and the work of teachers. This is reflected in the reluctance of students of high academic ability to choose teaching as a career. This can be seen very clearly from the hierarchy of admissions to institutions of higher education.

Admissions to universities and other institutions of higher education follow a pecking order. Those with the highest marks in their secondary school certificates study medicine and engineering,

those with the next highest marks study science, and so on it goes, down to lowly faculties such as Arts, Law and Education. Entry to Education comes last.

Social status and economic pressures ensure that most students accept this hierarchy, in spite of personal preferences. Thus the educational system in Egypt defines a prestige hierarchy of occupations. This hierarchy suggests that the teaching profession is a second rate profession. No empirical studies have so far been made of the perception of the status of the teaching profession or of the status hierarchy of other professions.

The main purpose of this investigation is to throw light on how far student teachers' perceptions of the status of the teaching profession are related to their attitudes to education.

It is essential to investigate the problem stated in the previous paragraph by means of comparisons between countries with different systems of education and different patterns of recruitment to teaching. In this way we may be able to highlight significant resemblances and differences. In this study we compare student teacher opinions in Egypt and England. There is no evidence in the literature that this aspect of the teaching profession has already been investigated.

Thus this study was designed to investigate the relationship between student teachers' perceptions of the status of the teaching profession and their attitudes to education in both Egypt and England.

CHAPTER I

TEACHER EDUCATION IN ENGLAND AND EGYPT

1. Teacher Education in England Today

Teachers in all publicly maintained schools in England and Wales must be qualified. This means they must have successfully completed an initial course of teacher training.

In 1975 there were five types of teacher training establishment. University Departments of Education (U.D.E's.) Colleges of Education (until 1964 called Training Colleges) Colleges of Education (Technical) Polytechnic Departments of Education Art Training Centres (A.T.C's.)(1)

In the last five years this set-up has been modified. Following the publication of the Report of the James Committee of Enquiry into Teacher Education and Training in January 1972, the Government of the day published a White Paper, "Education: A Framework for Expansion". (2) which accepted most of the recommendations of the James Committee. Included among them was the recommendation that the ultimate aim should be to make teaching an all-graduate profession and also the recommendation that "many, if not most, of the training colleges should be incorporated into the 'public' sector of Higher Education by amalgamation with polytechnics or other colleges". (3)

Dent, H.C. (1977), Education in England and Wales. (Hodder and 1. Stoughton), p. 154

D.E.S. (Dec., 1972), Education: A Framework for Expansion, (H.M.S.O.) Dent, H.C. (1977), op. cit., p. 20 2.

^{3.}

colleges had hitherto been monotechnic institutions, i.e. concerned with teacher training only. Now by incorporation into polytechnics, colleges of higher education or colleges of further education, they "would cease to be devoted solely to the training of teachers; they would accept students not committed to teaching and provide for them courses which could lead to other careers". (1) These amalgamations have been taking place during the last four years. In Leeds, for instance, what was the City of Leeds College of Education (one of the largest colleges of education in England) is now merely a part of Leeds Polytechnic.

For non-graduates the course of initial training has normally lasted three years and has led to the Certificate of Education. 1978. however. the Secretary of State for Education, in the light of advice from the Advisory Council on the Supply and Training of Teachers and widespread consultation, decided "that the last entry to nongraduate Certificate in Education courses would be in September. 1979. except for one-year specialist courses in craft design, business studies and music (for which there was evidence of a shortage of nongraduate teachers) for which the last entry would be in 1983". (2) The three-year course for non-graduates leading to the Teacher's Certificate comprises general education and professional training, pursued concurrently. General education includes the study of one or two main subjects and one or two subsidiary subjects for one or more years. Professional training consists of instruction in the principles and practice of education and several periods of supervised practice in schools.

A graduate must have successfully completed the one-year course leading to the Post-Graduate Certificate in Education (P.G.C.E.) before he can teach in a maintained school. This course consists of

Dent, H.C. (1977), op. cit., p. 122
 D.E.S. (1980). Note on the Future of the Teacher Training System, (Dept. of Educ. & Sc., Sept. 1980)

instruction in the principles and practice of education including one or more periods of supervised teaching practice. Twenty-eight university schools and departments of education (U.D.E's.) provide a P.G.C.E. course, but a substantial number of graduates do their P.G.C.E. course in the education department of a polytechnic, college of higher education or college of education. At present graduates in science and mathematics are exempted from having to do a P.G.C.E. course, because there is an acute shortage of teachers of these subjects. Graduates in other subjects who obtained their degrees before 1 January 1974 can teach in secondary schools without having taken a course of professional training, and those who graduated before 1 January 1970 are also eligible to teach in primary schools without such training. (1)

The fact that before 1 January 1974 a graduate was regarded as qualified to teach without having undergone a period of professional training has some bearing on the topic which this dissertation is concerned with. Teachers in England have been, and still are, accorded a status well below that of doctors and lawyers.

One new requirement laid down recently by the Department of Education and Science reflects national concern about the low standards achieved by many pupils in English and Mathematics: All entrants to teaching after 1984 must have a pass in '0' level English and '0' level Mathematics or an equivalent qualification.

^{1.} D.E.S. (1977), op. cit., p. 26

2. Egyptian Education

Geographical, Historical, Economic and Social Factors in the Making of Modern Egypt

Egypt today has a population of about forty million⁽¹⁾ (cf. England with a population at the 1971 census of just over 46 million). The area of Egypt is over 385,000 square miles, but 98% of Egyptians live on a narrow strip of land of less than 14,000 square miles in all, lying along the Nile Valley and Delta, sandwiched between the Libyan desert on the west and the Arabian desert on the east (see map of Egypt in Appendix A).

Egypt's geographical position between Arabia and Africa has not only made her "one of the oldest meeting places of man", (2) but also a target for invaders for a major part of 4,000 years. Before the Romans came in 30 B.C. the country had been invaded by the Hyksos, the Persians and the Greeks. Egypt was a province of the Roman Empire till Two years later came the Arab conquest of the country. This had highly significant effects: it imposed on Christian Egypt a new religion. Islam, and a new language, Arabic, in place of Coptic and Greek. Between the twelfth and the sixteenth centuries came the non-Arab-Islamic conquests, namely Kurdish, Turkish and Ottoman. (3) was not, however, until after Napoleon's unsuccessful campaign in Egypt (1798-1801) that the country began to feel the impact of Western culture. The development of Egypt as a modern state begins with Mohammed Ali the Great (1811-1840). He was the autocratic ruler who emerged from the struggle for power which followed Napoleon's defeat.

^{1.} Whitaker's Almanack (1979). p. 850

^{2.} Vatikiotis, P.J. (1979), The History of Egypt, (Weidenfeld and Nicholson, 2nd edition)

^{3.} Vatikiotis, P.J. op. cit., p. 10

He founded the monarchy which was to last until July 1952. In that year Mohammed Ali's last descendant, King Faruq, was forced to abdicate by a group of influential army, air force and naval officers who engineered a coup. Faruq had to leave the country. From the power struggle within the military group that had overthrown the monarchy General Gamal Abdul Nasser emerged as the strong man and ruler of Egypt. His autocratic rule lasted until his sudden death on 28 September 1970. Egyptians writing about education in their own country consider the revolution of July 1952 a watershed in the history of Egyptian education. (1)

Some Formative Influences on Egyptian Education The European Impact

Vatikiotis⁽²⁾ (1979) shows how European influence did not begin to make itself felt in Egypt until after Napoleon's defeat by the British. During their three-year stay in Egypt, however, the French had introduced an Arabic printing press and published two journals in Arabic. A historian of Egyptian education, M. Radwan (1951) described the impact of the Napoleonic invasion as follows:

"The sweeping changes which ensued brought with them a new system of education which, though conditioned to a great extent by the traditional methods of the old, differed from it sharply in purpose, form and content. It was the new system which represented the first attempt to provide a modern education for the people of Egypt."(3)

The ruler who emerged from the power struggle after Napoleon's defeat was Mohammed Ali. Vatikiotis (1979) calls him "the modernising autocrat" and credits him with giving Egypt "the organisational basis and human cadres" for its emergence as a modern state. (4) He came to

^{1.} Badra, Q., Metwally, M. and El-Mofti, M. (1975), 'The Development of the Egyptian School Curriculum', a paper presented at the Curriculum Conference held at the Egyptian Education Bureau, 25 to 27 April 1975.

2. Vatikiotis, P.J., (1979), op. cit., Chaps, 3 and 4

Vatikiotis, P.J., (1979), op. cit., Chaps. 3 and 4
 Radwan, A.A., (1951), Old and New Forces in Egyptian Education, Teacher College, Columbia University, USA, p. 82

^{4.} Vatikiotis, P.J., (1979), op. cit., Chap. 4

power in 1811 and held the reins of power until 1840. He introduced a modern, European form of education alongside the traditional system which provided mainly religious education in "kuttabs" and El Azhar, the Islamic university. The "Kuttab" was the primary stage of education. It helped children to memorise the Koran; instruction in reading and writing was limited to that end. The teacher in the "kuttab" was knows as "fiqi" or "sayyedena" (our master). He was often assisted by an "arif" (monitor). Neither the 'fiqi' nor the 'arif' had received any training for teaching. The 'fiqi' might previously have been an 'arif' in another 'kuttab' or he might have succeeded his master. The 'arif' used to be a person who finished his education in a 'kuttab'. Most of the teachers in 'kuttabs' had little knowledge beyond a mechanical knowledge of the Koran. (1)

Higher religious education was provided in El Azhar University, which had been established in 359 A.H. (970 A.D.) as well as in certain mosques. Teachers in El Azhar and in mosques providing religious education had to obtain a licence to teach, but this did not involve any professional training. The licence to teach qualified its holder to occupy the position of teacher in any centre of higher learning. Students of El Azhar did not pursue normal programmes of academic study. The subjects studied were mainly religious subjects and the Arabic language. (2) Teachers at El Azhar University enjoyed a higher prestige and public respect since they were known to have mastered Islamic doctrine and had a deep knowledge of the Arabic language, whereas teachers in kuttabs had low prestige and got little respect from the people because of their limited knowledge, lower class origins and very low salaries. (3)

^{1.} Sami, A., (1917), Al-Talim fi Misr (Education in Egypt) Cairo: Dar El Kuttab, Chapter 1

Sami, A., (1917), op. cit., Chapter 1
 Husayn, T., (1938), Mustaqbal al-Thaqafah fi Misr (The Future of Culture in Egypt) Dar el-Ma arif, Cairo, pp. 230-245

Mohammed Ali's plans for putting Egypt on the same footing as Western countries could not be carried out by traditionally trained people, since these teachers had had no training in science and knew no foreign languages. Hence he not only established colleges of higher education which covered most of the subjects of the Western curriculum, but he also sent students on missions abroad and invited teachers from foreign countries to teach in his new schools. (1) Thus he started his educational system at the top level before he realised that he needed schools to supply college entrants and elementary schools to provide pupils for this second level. He therefore established secondary schools and finally primary schools.

Mohammed Ali was unable to turn to teachers in religious institutions to staff his new schools except for teachers of religious subjects and Arabic. His main sources of teachers were: (1) foreign teachers who had taught modern subjects in secondary schools and colleges in Turkey, France and Italy; (2) students who had graduated from his new colleges and graduates who had finished their studies abroad: (3) graduates of El Azhar University who taught Arabic and Islamic subjects in secondary schools. No attempt was made during Mohammed Ali's rule to establish colleges for the professional education of teachers. (2) In those days there were three groups of teachers, and a teacher's social status depended on which group he belonged to. The primary school teachers were neither graduates nor had they secondary education. They had acquired their knowledge by their own efforts from books, through apprenticeships or by attending public lectures. They taught all basic subjects to one particular class. Secondary school teachers were teachers of specialist subjects

Radwan, A.A., (1951), op. cit., pp. 82-88
 Abed al-Karim, A.I., (1938), Tarikh al Talim Fi 'Asr Muhammed Ali, (The History of Education During Mohammed Ali's Rule), Cairo, Al. Nahdan, pp. 159-162

who had graduated from El Azhar University or a college of higher education. Most of them were from foreign countries, particularly Turkey and Iran. Status varied according to subject specialism. Teachers of a foreign language were the most highly respected. After them came teachers of science, and then teachers of Arabic and religious subjects. (1) In general, teachers who taught in secondary schools enjoyed higher social esteem than those who taught in primary schools. College teachers enjoyed the highest status and were also the most highly paid of all teachers. Most of them came from European countries: others were Egyptian graduates who were specialists in one or more subjects of the Western curriculum, e.g. mathematics, science or a foreign language.

The reform movement of Mohammed Ali was ended by Abas and his successors who ruled Egypt despotically from 1847 to 1880. Neither Abas (1848-1854) nor Said Pasha (1854-1863) showed any marked interest in the intellectual progress of Egyptian education. The machinery for administering the state schools was neglected, most of the colleges and secondary schools established by Mohammed Ali were abolished and missions to other countries were stopped. (2)

Mission schools run by foreign benevolent organisations had played an important part in supplying the governments' need for civil servants and administrators. In addition, they were credited with the introduction of female education to Egypt. (3)

During the British occupation of Egypt (1882-1922) the development of education in the country was restricted by a conservative policy of

^{1.}

Husayn, T., (1933), op. cit., pp. 231-240
Abl al-Karim, A.I., (1945), Tarikh al Talim Fi Msr (History of Education in Egypt), Cairo: Al-Nasr Press, Vol. 3 2.

Ibid., Vol. 3 3.

limiting expenditure on education according to a principle of bureaucratic economy. The purpose of education was primarily to provide the country with government officials loyal to the regime. Lack of equality of opportunity in education prevented most people from exercising their right to education. Education was not free at all three stages of education. Children from the lower classes had no chance to climb the educational ladder. The education of women was marked by a conservative policy. (1) This policy continued with little modification even after Egypt achieved independence from Great Britain in 1922.

Until the 1870s there were no systematic efforts to prepare teachers for their responsibilities. As already mentioned, teachers at secondary and higher education levels had to have a licence to teach. This simply meant, however, that they had been recognised as qualified to teach their special subject; it did not mean that they had undergone professional training.

The Revolution of 1952 committed itself to a reappraisal of the educational system as a whole and to the expansion of educational opportunities in accordance with social justice and national development. The main reforms have been: the provision of primary education for all children; the extension of the period of compulsory schooling from four years (1943) to six years in 1953; the increase in provision for technical education, which in 1951 had become a part of the secondary education system; increased attention to the education of women; the reorganisation of private education; the expansion of higher education; and the abolition of fees at all levels of

^{1.} Ali, S.I., (1974), Qadaya al-Ta 'Lim fi 'Ahd al-Ihitilal (The Problems of Education During the Occupation), Cairo Press, Chapter 2, pp. 127-216

education. Ideally, this last reform makes it possible for a boy or a girl from any section of society to climb the educational ladder.

Some idea of the effect upon education of that Revolution may be gauged from the fact that between 1952 and 1972 pupils in primary classes increased from 1,392,741 to 3,740,551. The number of preparatory school pupils more than doubled, the number of pupils in general secondary schools trebled, and the number of students in technical secondary schools went up from 18,838 to 271,339. (1)

The Statutory System of Education in Egypt (see diagram in Appendix A)

The statutory system of education in Egypt is divided into four stages as follows:

- (1) Primary Stage: entry at age 6-8 (6 years)
- (2) Preparatory Stage (3 years)
- (3) Secondary Education (3 years)
- (4) Higher Education

Universities (4, 5 or 6 years)

Higher Institutes (4 or 5 years)

Technical Training (2 years)

At the end of each stage the pupil has to sit a competitive examination. The result determines whether he can proceed to the next stage. As higher education, in particular a university education, is highly regarded by the Egyptian people, who see it as the only worthwhile goal, competition is keen from the primary stage onwards.

^{1.} Badra, O., Metwally, M. and El-Mofti, M., (1975), op. cit., p. 6

(1) Primary Stage

This stage involves a compulsory six years of schooling. Primary schools are coeducational, and the curriculum is uniform and subject-based, the subjects being Arabic, mathematics, general science, hygiene, social studies and citizenship. No foreign languages are taught at this stage of education.

(2) Preparatory Stage

This is a three-year stage. To be admitted to it pupils must have gained their primary education certificate and must be under fifteen years of age. The curriculum is the same in all schools. According to the Ministry of Education, the preparatory school has a dual function: (i) to prepare all children to continue their education at secondary or technical school; (ii) to prepare the less able children for practical work.

(3) Secondary Education

Pupils are admitted to this stage after obtaining their general preparatory education certificate, provided they are not above eighteen years of age. Only 40 per cent of the top holders of the general preparatory education certificate are admitted. Secondary education includes: (a) general secondary schools, (b) technical secondary schools, (c) colleges for training teachers for primary education.

(a) The general secondary schools provide a general course taught to all students in the first year and then give them the option of taking scientific or literary studies in the next two years. In addition to the main courses, provision is made for specialised study in language, science and the humanities, artistic activities and sport.

- (b) The technical secondary schools specialise in industrial, commercial and agricultural studies. The commercial courses are the same in all schools, but industrial and agricultural studies are taught in specialised sections. Cultural subjects are also taught in these schools.
- (c) The teacher training colleges for the professional preparation of primary school teachers are discussed later in this chapter.

(4) Higher Education

Admission to universities and other institutions of higher education is based on the results in secondary school examinations for the current year and is partly determined by the demand for specialists. Since more than 100,000 candidates are involved, acceptances are dealt with in several stages. Minimum marks for admission are announced by the Ministry of Higher Education at each stage. Those who qualify may then submit an application to an admission office. Entry to Faculties of Education is subject to the same regulations.

At the top of the educational ladder are the universities.

Prior to 1966, there were four state universities, Cairo, Alexandria,

Ain Shams and Assiut, and about forty independent state colleges. In

addition, there were the Islamic University of El Azhar and the

American University in Cairo, a private institution. Expansion has

been rapid in the last fifteen years. Egypt now has twelve universities.

The Training of Primary School Teachers in Egypt: Historical Background

Until the beginning of the twentieth century there was no systematic effort to train teachers for 'kuttabs' or primary schools.

The School for Training Women Teachers:

The first institution for training women primary teachers, The School for Women Teachers, was set up in Cairo in 1900. At first this institution was not popular with the public; only six students applied for entry in its first year. Student numbers did, however, build up over the next few years. To begin with, the institution provided a two-year course. This included Arabic, English language, mathematics and domestic subjects. In 1909 the course was lengthened to three years, and in 1915 to four years. In 1915, too, the School was divided into two sections, one for general education and the other for domestic studies. To gain admission to the School, students had to have the Elementary School Certificate. In 1930 the School was replaced by the Secondary School for Women. (1)

Another institution for training women teachers was established in 1903. Its aim was to train women to teach in 'kuttabs', and it had a 'kuttab' attached to it for demonstration lessons and training purposes. When the school started, it provided only a one-year course. Two years later, the course was made a two-year course, and in 1909 a three-year course. In addition to general subjects, students were taught science and health subjects, sewing and domestic subjects. The last year of the course was devoted to domestic subjects. In 1918 another department was set up to train teachers for infant schools, and in 1930 yet another department was established for the training of teachers for teaching blind children. (2)

^{1.} Ahmed, S.M. and Ali, S.I., (1974), <u>Tarikh al-Tarbiya wol Ta'Lim</u> (The History of Education and Training) Cairo Press, Chapter 4
2. Ibid.pp. 282-286

The School for Training Men Teachers

The School for Training Men Teachers was set up in 1904 to train men to teach in 'kuttabs'. At the outset this school provided only a one-year course, but this was made a two-year course in 1907 and a three-year course in 1910. To gain admission students had to pass simple examinations on the Koran and in reading. To meet the demand for more primary teachers, other schools were established at Fuyum and "Qaluab". Since 1924 the number of primary school teachers had increased substantially. In every city a school for the training of men teachers, and a school for the training of women teachers, for primary schools had been established by 1929. (1)

Considerable changes were made to these training institutions in 1952. The curricula and the length of the course were made uniform for both men's and women's colleges. The entrance qualification was raised from the elementary school certificate to the certificate of graduation from preparatory school. In 1961 the Ministry of Education, in an effort to raise the standard of teachers entering primary education, increased the length of the course to five years.

Teacher Training for Secondary Schools: Historical Background

The training of secondary school teachers has undergone several changes since the first College (Nasiria) was set up in 1872 for the training of teachers to teach Arabic language. In 1880 another institution (Ecole Normale) was established for the training of teachers to teach French and science subjects. In 1889, another institution was set up for training teachers of English and other

^{1.} Mursi, M.M., (1975), <u>Idarat Tanthem al-Ta 'Lim al-am</u> (The Administration and Organisation of General Education) Alam al-Kutab, Cairo Press, Chapter 10, pp. 187-191

subjects for state secondary schools. In 1905 the latter institution was reorganised after the closing down of the "Ecole Normale".

The course, which included professional training and a study of a special subject or subjects, lasted four years. This was reduced to three years in 1909. In 1923 the school became the Higher Teacher Training School. Six years later this institution was replaced by the Institute of Education. The Institute had two sections, one for the training of primary school teachers and the other for the training of secondary school teachers. In 1937 the Institute ceased to train primary school teachers; it henceforth concentrated on the training of secondary school teachers. (1)

In 1952 a training college for men teachers was established in Cairo. Other colleges were set up in Assiut and Minia. A college for the training of women teachers for secondary schools was also established in Minia. Gradually training colleges were established in other cities. In 1966 the Egyptian Government affiliated the training college in Cairo to the University. It was not, however, until the end of 1970 that the Government amalgamated the educational studies of the Institute of Education and the professional training given by the teacher training college into one faculty: what is in fact today the Faculty of Education of Ain Shams University, Cairo.

The University College for Women: Historical Background

The University College for Women had its origin in the Women's Institute of Education, established in 1934. Like the Institute of Education for the training of men teachers, this institution had two sections, one for the training of primary school teachers and the other

^{1.} Mursi, M.M., (1975), op. cit., pp. 192-195

for the training of secondary school teachers. In 1948 the primary section was removed and the Institution was renamed the Higher Training College for Women at Zamalek, Cairo. This institution provided a two-year course for university graduates and a four-year course for secondary school leavers. Since 1950 the two sections have been part of Ain Shams University where they formed the nucleus for the University College for Women. In 1956 the Higher Training College for Women became what is now known as the Women's University College "Kulliyyat al banat al Heliopolis, Cairo". Unlike other universities in Egypt, the University College for Women is not divided into separate colleges. It is divided into departments. It has fourteen sections covering science and arts subjects plus a Home Economics Department, established in 1956. In addition to preparing women teachers for teaching in preparatory and secondary schools, it also provides purely academic courses in science and arts subjects. It awards the degree of B.A. in Education, the degree of B.Sc. in Education and the specialist science subject and the degree of Bachelor of Home Economics. Since 1959 the Education Department of the University College has provided courses leading to the degrees of M.A. and Ph.D. in Education. It also offers advanced courses for the B.A. and B.Sc. degrees. The University College for Women is in fact the first multi-purpose educational institution in Egypt.

In 1960 the Islamic Women's College was established at El Azhar University. This institution provides courses leading to Bachelor's degrees in medicine, science, social studies, Arabic and foreign languages. In 1970 it began to provide a four-year course for secondary school leavers to prepare teachers for the preparatory and secondary stages of education. Entrants to the College, like their

counterparts at the Women's University College, must have the Secondary School Certificate. They are also required to pass oral examinations on the Koran and Islamic subjects.

Teacher Education in Egypt Today

Boktor (1963)⁽¹⁾ and Mursi (1975)⁽²⁾ give details of the different types of institution involved in preparing primary teachers and preparatory and secondary school teachers. The Egyptian system of teacher-training is a dual one. Primary school teachers are trained in colleges of education, but preparatory school and secondary school teachers are trained in Faculties of Education in universities. are a number of differences between these two institutions. first place, those who intend to teach in preparatory and secondary schools have to be of higher academic quality and attainment than training college of education students. Training for primary school teaching begins at the end of the preparatory stage, whereas training for secondary school teaching requires a university degree. The staff of the teacher training colleges are generally elementary school inspectors or secondary school teachers, whereas the staff of university faculties of education are all holders of higher degrees (Ph.D's.) in some branch of educational studies. There are, of course, differences between the curricula in colleges and faculties of education, and different certificates to mark the successful completion of a course of training. The university teacher enjoys a higher status. a higher salary and better working conditions than the college teacher. Administrative control is different for the two types of institutions. Training for elementary school teaching is strictly controlled by the

^{1.} Boktor, A., (1963), The Development and the Expansion of Education in the United Arab Republic, (The American University in Cairo Press)

^{2.} Mursi, M.M., (1975), op. cit., Chapter 10

Ministry of Education; training for secondary school teaching is supervised, without the same degree of control, by the Ministry of Higher Education.

Finally, there are differences in the social backgrounds from which elementary school teachers and preparatory school and secondary school teachers come. Elementary school teachers come, on the whole, from the lower socio-economic classes, whereas preparatory school and secondary school teachers tend to be drawn from the middle and upper classes.

Teacher Training Colleges

The Ministry of Education shoulders the responsibility for preparing primary school teachers. Candidates for admission must have the general preparatory school certificate and must not be more than eighteen years old. In practice, the decision to enter a teacher training college implies that the candidate has been rejected for a general secondary school or a technical secondary school. Thus, those who are recruited are likely to be of low academic ability.

The course lasts five years. The first three years are devoted to general studies as in the general secondary school, but students are not obliged to sit the competition examination at the end of the third year before continuing for their fourth and fifth years. The last two years are mainly occupied with the study of methods of teaching various school subjects, and of psychology and pedagogy. Every week a student spendsone day on teaching practice. Students may specialise in one of the following: Arabic language and social studies; science and mathematics; home economics (for girls); agricultural industries (for boys); physical education; art education; musical education; nursery and kindergarten teaching.

Faculties of Education

Each of the twelve universities in Egypt has a Faculty of Education which is responsible for the training of teachers for preparatory and secondary schools. The Education Department in the Women's College at Ain Shams University and the Islamic Women's College at El Azhar University also provide courses similar to those given by Faculties of Education.

Two types of courses are provided which qualify those who complete them successfully to teach in preparatory or secondary schools.

- (a) The General Diploma course for graduate students who have obtained a degree from a university or other institution of higher education. This is a one-year course which includes the study of psychology and pedagogy and teaching practice.
- (b) A four-year course for non-graduate students who have obtained the General Secondary School Certificate for the current year. In addition, Faculties of Education provide a special diploma in education for graduate teachers who have taken their first degree in Education and a special subject with a minimum grade of 'Good'. These courses may be one year full-time or two years part-time. They include educational theory, educational psychology, teaching methods, curriculum theory, comparative education and the history of education.

There are in Egypt a number of institutions for the training of specialist teachers, e.g. the Higher Institute for Physical Education for Men (in Cairo and Alexandria), the Higher Institute for Physical Education for Women (in Cairo and Alexandria), the Higher Institute for Musical Education and Institutions for the training of teachers of domestic subjects. Teacher education is also provided by El Azhar University.

English and Egyptian Education: Some Contrasts

Perhaps the most fundamental difference between the English and Egyptian educational systems is that the English system is highly decentralised, whereas the Egyptian system is highly centralised. In Egypt the control of education rests with the central government and its agents, the Ministry of Education and the Ministry of Higher Education in Cairo, which have complete control not only over manpower and finance but also over curricula, textbooks, examinations, courses of training and of professional education for teachers, the appointment of teachers and discipline. Teachers in Egypt are civil servants and are expected to support and propagate the ideology of the government in power. Recently there has been a slight movement towards the decentralisation of education by making local authorities responsible for education in their own areas, but basically the system remains highly centralised.

In England and Wales, however, the distinctive feature of the educational system is decentralisation. The Department of Education and Science (1977) makes the point as follows:

"A distinctive feature of the British education service is that it operates on the basis of the distribution of power between central government, the local education authorities and the teaching profession. It is, therefore, correct to speak of it as a national system locally administered, with the Department of Education and Science (D.E.S.) a major operational partner rather than its sole controller."(1)

The D.E.S. does not lay down the curriculum of a school or college, nor does it intervene in the running of any school or college. Decisions about what is to be taught and how it is to be taught, about the selection of textbooks, timetabling, etc., are, in practice, in the hands of the head of a school and his staff or the principal of

^{1.} D.E.S., (1977), The Educational System of England and Wales, H.M.S.O., p. 2

a college and his staff. (1) Teachers in maintained schools are not civil servants; they are servants of the local authority. L.E.A's. at the present time number 105. Something like 60% of what an L.E.A. spends on educational services in its area comes from central government through the Rate Support Grant. The balance of an L.E.A's. spending has to come from the rates (local property taxes).

^{1.} D.E.S., (1977), op. cit.

CHAPTER II

REVIEW OF PREVIOUS RESEARCH INTO STATUS OF DIFFERENT OCCUPATIONS. ESPECIALLY TEACHING

Many researches have been carried out on the ranking of occupations. e.g. (a) status of different occupations: (b) comparison of occupational status in various countries; (c) stability in rating occupations according to social status over a period of time; (d) the status of women's occupations; (e) correlates and determinants of occupational status; (f) status of occupation within "situs".

These researches were undertaken in various countries, socialist and capitalist, developed and under-developed. They have utilised a variety of measurement techniques and different types of samples of raters.

Three major methods have been used in constructing the scales of the status of occupations:

- (1) ranking in order of merit
- (2) paired comparisons
- successive intervals. (3)

The three methods have been empirically investigated by Hevner (1) (1930), Thurstone (2) (1931) and Saffir (3) (1937). The results indicate the scales obtained by the method of rank order, the method of paired comparisons and the method of successive intervals are comparable.

Hevner, K. (1930), 'Three Psychological Methods', J. of General 1. Psych., 4, pp. 191-212

^{2.}

Thurstone, L.L. (1931), 'Rank Order as a Psychological Method', J. of Exp. Psych., Vol. 14, pp. 187-201
Saffir, M.A. (1937), 'A Comparative Study of Scales Constructed by Three Psychological Methods', Psychometrika, Vol. 2, No. 3, pp. 179-199 3.

Saffir concluded that "choice of scaling methods becomes, then, a matter of practical convenience rather than of relative validity". These three techniques were illustrated in the following studies.

(a) Ranking for Occupational Prestige

Most of the researches were carried out in the USA. The first was by Counts (1) (1925). His subjects were groups of school chilren and college students. They were asked to arrange a list of 45 occupations from the one "most looked up to" in descending order to the one "least looked up to". All levels of the teaching profession were included in the list. His findings, on the whole, showed that teachers were given a high ranking: the college professor was ranked second. the superintendent of schools seventh, the high school teacher tenth. the elementary school teacher thirteenth, and the rural school teacher nineteenth. By this stage of his investigation, however, Counts' interest had been engaged by the remarkable agreement shown by respondents in ranking occupations. When he broke down his sample, he found that differences in the social backgrounds, the vocational features of the children and the part of the country where they lived did not seem to have much effect on their judgments.

Bogardus (2) (1928) brought this area of inquiry into the field of social distance: this approach required students to declare their willingness to associate more or less intimately (the scale of intimacy ranging from 'would marry' and 'would admit to my club' through 'would admit to my street as a neighbour' to 'would exclude from my country. His findings coincide with those of Counts (1925).

Counts, G.S. (1925), 'The Social Status of Occupations', School Review, 33, Jan. pp. 16-27
Bogardus, E.S. (1928), 'Occupational Distance', Sociology and 1.

^{2.} Social Research, Vol. 13, pp. 73-81

In 1927 and 1929 Anderson (1 & 2) reported on the relationship between social prestige, social contribution and economic return of occupations. In the earlier study he asked college students to rank 25 occupations on social contribution. The rankings he found were similar to those Counts had found on social prestige. In his later study Anderson asked students to rank 25 occupations on social prestige, social contribution and economic return. He found that students related social prestige more closely to economic return than they related social prestige to social contribution or social contribution to economic return. Tehman and Witty (3) (1931) gave the Lehman Vocational Attitude Quiz about the occupations most respected to a large number of children aged 8.5 to 18.5 years. The doctor was ranked top by both boys and girls. The boys' list of highly respected occupations included those occupations which boys are willing to enter. Similarly the girls' list included occupations girls at that time would willingly enter. Children's rankings of esteemed occupations are influenced by the opportunities they have to follow these occupations.

Bowden. Caldwell and West (4) (1934) attempted to investigate what factors determined the prestige ratings of certain professional groups, namely. lawyers. physicians. ministers, priests and other clergymen. educators, engineers, businessmen, public officials professors. and leading citizens. Eight statements purporting to be solutions offered by specific professional and civic groups to the problem of the metallic base of the currency were given to samples of high school pupils and college students in California. They were asked to indicate which of the eight groups offered the best solutions for the country.

4. Prestige', American J. of Sociology, Vol. 41, pp. 193-204

^{1.} Anderson, W.A. (1927), 'The Occupational Attitudes and Choices of a Group of College Men, Part I', Social Forces, Vol. 4, No.2, pp.279-283 Anderson, W.A. (1934), 'The Occupational Attitudes of College Men',

^{2.} J. of Social Psychology, Vol. 5, pp. 435-465 Iehman, H.C. and Witty, P.A. (1931), 'Further Study of the Social

^{3.} Status of Occupations, J. of Ed. Sociology, Vol. 5, part 2, pp.101-102 Bowden, A.O., Caldwell, F.E. and West, G.A. (1934), 'A Study in

Hartmann's (1) (1934) study made some progress. He too was concerned with the status of teachers. He used adult judges from various walks of life and asked them to rank twenty-five occupations in order of their respect and admiration for them. His results confirmed the established ranking pattern; the professions were put at the top of the prestige hierarchy and manual labour near the bottom. A clear order of merit within the teaching profession was also shown. ranging from the college professor, through school superintendent, principal, high school teacher to, lastly, elementary school teacher. The interesting part of the study was his test of 'occupational insight. Ten to twenty representatives of each of twelve occupations were asked to rank their occupation along with the other eleven. closeness of agreement between external and internal rankings gave a measure of 'occupational insight'. Hartman found little evidence of marked occupational egocentrism: each individual seemed to have a pretty good idea of where his career stood in relation to other walks of life.

Hyman (1942)⁽²⁾ devised a scale for measuring subjective status.

He defined subjective status as a person's conception of his position relative to other individuals, and he used the term with regard to several dimensions. A sample of 41 college students in a psychology department completed a scale which required them to rank themselves on the following dimensions: general standing, economic status, intellectual standing, cultural and social status and physical attractiveness. Three reference groups were the bases of the rankings: (1) the total adult population of the USA; (2) friends; and their colleagues. Results showed that subjects derived their standards from

^{1.} Hartmann, G.W. (1934), The Prestige of Occupation, Personal Journal, Vol. 13, pp. 144-152

^{2.} Hyman, H.H. (1942), 'The Psychology of Status', Archives of Psychology, No. 269, pp. 5-92

different reference groups. The introduction of a different reference group changed an individual's judgment of status. The friends' reference group was the one most commonly used in judgment of status; the population reference group was rather rarely used.

Adult judges are reported to have been used in the study by Hall (1) (1938). This covered a greatly expanded list of occupations. Two hundred and fifty-two occupations were printed on cards. Two hundred adult subjects were asked to sort the cards into eleven piles according to the social prestige which they personally attributed to the occupations in the list. Unfortunately, nothing beyond the design of the study has been reported.

Cattell (2) (1942) asked this question: "Will the prestige ranking of occupations be agreed upon by observers at different levels of the social scale and with different degrees of acquaintance with the occupations concerned, or is prestige order always relative to a point of reference ?" Rankings of a list of 26 occupations by 20 college graduates were compared with those of 20 unskilled and skilled labourers. The agreement between the two groups was markedly good. though within the groups mean inter-individual correlation was notably lower with the labourers than with the students. Cattell's results suggest an affirmative answer to his question. He also suggests other causes of differences in ranking occupations: (a) varying valuation of the products or associated objects of an occupation from the standpoint of the needs of the occupation of the rater; (b) differences in the culture pattern to which the individual belongs; (c) varying values arising from differences in temperament between raters.

of Occupations, Psych. Bull., Vol. 35, p. 696 Cattell, R.B. (1942), 'The Concept of Social Status', J. of Social 2. Psychology, Vol. 15, pp. 293-308

Hall, G.W. (1938), 'Social Prestige Values of a Selected Group 1.

In Smith's (1943)⁽¹⁾ study, 345 high school and college students rated 100 occupations on a prestige scale. They were asked to draw up a preliminary ordering of occupations from high to low prestige status at a dinner honouring a celebrity. Having done this, they were asked to rate the occupations on a hundred-point scale. Smith's main findings showed that the extreme occupations stood out more clearly in the minds of the raters than did the others. His list. though it includes a wide range of occupations, was not sufficiently representative of all the occupations in the USA, and had the further disadvantage that rating 100 occupations seemed to be beyond the motivations and the capabilities of many raters. And in 1949 Welsh (2) asked 500 teachers and college students in Indiana to rate 25 different occupations. His results showed that differences in sex. experience, schooling and passage of time had little effect on the esteem associated with various occupations.

Richy. Fox and Fauset (3) reported a study (1951) in which 1676 freshmen at the University of Indiana ranked 18 occupations drawn from Hartmann's list. Three levels of teaching were included: elementary, secondary and college levels. They found a slight tendency for students to rate their parents' occupations a little higher than average judgment did. The three researchers paid considerable attention to the prestige rating of the teaching profession. Their results showed (1) some tendency for those with previous experience of teaching to rate this occupation higher than did those without such experience; (2) a significant tendency for those preparing to become teachers to rank high school teaching

Social Status', Occupations, 27, pp. 237-241
Richy, R.W., Fox, V.H. and Fauset, C.F. (1951), 'Prestige Ranks 3. of Teaching, Occupations, 30, pp. 33-36

^{1.} Smith, M. (1943), 'An Empirical Scale of Prestige Status of

Occupations', American Social Review, Vol. 8, pp. 185-193 Welsh, M.K. (1949), 'The Ranking of Occupations on the Basis of 2.

higher than did those who were not intending to teach; and (3) a tendency for freshmen to lower their prestige ranking of the occupation of teacher in proportion to the size of their father's income.

The first nation-wide investigation of occupational prestige was conducted in the USA in 1946 by the National Opinion Research Centre (NORC) under the direction of North and Hatt. (1) A representative sample of people were asked to rate eighty-eight occupations on a six-point prestige scale. The total number of respondents was 2.930; the largest sample so far and was an attempt to determine the structure of occupational prestige.

Blane (1957) (2) reanalysed the NORC data. He found that raters had a very small bias when rating their own occupations and that there was a slight tendency for individuals to under-rate occupations lying below their own on the occupational prestige scale. Analysis of the ratings of these individuals who were occupationally mobile, both upwardly, downwardly, showed no differences in rating,

One of the most important English studies of occupational prestige was conducted by Hall and Jones (1950). (3) They were not interested in occupational status but their main purpose was to discover the chief factors responsible for social class differences, for movement and for hindrances to movement from class to class under existing conditions, and for the changes that have been taking place in the class structure of the population of England and Wales. They based their classification of occupations on that of the Registrar General:

3. British J. of Sociology, Vol. 1, pp. 31-55

Hatt, P.K. (1950), 'Occupation and Social Stratification', American 1.

Journal of Sociology, Vol. 55, pp. 533-543
Blane, P.M. (1957), 'Occupational Bias and Mobility', American
Sociological Review, Vol. 22, pp. 392-399
Hall, J. and Jones, D.G. (1950), 'Social Grading of Occupations',
Description of Sociology, Vol. 24, pp. 341-55 2.

Class Description

- 1 Professional and High Administrative
- 2 Managerial and Executive
- Inspectional, Supervisory and other Non-Manual, Higher grade
- 4 Inspectional, Supervisory and other Non-Manual, Lower grade
- 5 Skilled Manual and routine grades of Non-Manuel
- 6 Semi-Skilled Manual
- 7 Unskilled Manual

They carried out two surveys. The first, the pilot inquiry, used members of Adult Education classes and their friends; the second, the general inquiry, got its sample from a number of voluntary organisations, including trade unions. They were asked: (1) to assign thirty occupations, ranging from medical officer and company director to dock labourer and road sweeper, to one of five classes, lettered in descending order, A, B, C, D, E; and (2) to arrange these occupations in descending numerical order in relation to one another.

Jones and Hall concluded that there were no major differences of opinion about the social grading of selected occupations, though there might be minor differences in judgment between men and women, young and old people, people from different social levels, in their ranking of certain occupations or grades of occupations. These differences, on the average, did not appear to be highly significant. The broad conclusion was that the differences in average judgment are likely to be greater in grading occupations in the central region of the occupational scale than in grading occupations at the top or the bottom of the scale.

Young and Willmot (1956) (1) presented the results of a study complementary to the Hall and Jones investigation of social grading. They used the thirty occupations selected by Hall and Jones whose investigation had concentrated on middle class respondents. sample consisted of manual workers. The final ranking determined by Young and Willmot had a rank order correlation of 0.90 with the rankings of the Hall and Jones group. The main differences occurred in the central regions of the scale: skilled manual occupations tended to be upgraded and the scores of routine non-manual occupations tended to be downgraded. The findings of Young and Willmot confirmed those of Hall and Jones that raters with occupations at the lower end of the prestige scale are more variable in their perceptions of occupational prestige structure. This they demonstrated by quoting the judgments of a group of 'deviant' raters: these 'deviants' placed agricultural labourers at the top of the scale and miners, policemen and tractor drivers in fourth, fifth and sixth positions respectively. On examining the criteria that respondents used in rating the occupations, they found that 'deviant' raters stressed the ability needed to work in such occupations. Moreover. the deviants were more likely to hold a Marxist ideology.

In Germany, Bolt (1955)(2) carried out a study in which three samples, adults, university students, and technical students were asked to rank 38 occupations in terms of prestige. The list of occupations included the three levels of teaching, university teacher, secondary school teacher and primary school teacher. Results showed interesting differences in ranking those occupations, between the three samples. The three groups agreed in according

Young, M. and Willmot, P. (1956), 'Social Grading by Manual 1.

Workers', British J. of Sociology, Vol. 7, pp. 337-345
Bolt, K. (1955), Wand Lungen und Struckturen in unserer Gesellschaft 2. cited in Kob, J. (ed.), <u>Definition of the Teacher's Role</u> in Halsey, A.H. (ed.), <u>Education</u>, <u>Economy and Sociology</u>, Free Press of Glencoe, 1963, pp.559-565

the university teacher the first rank, but differed slightly in ranking the primary teacher, who was ranked 11th by the adult group, 10th by university students and 9th by technical students. They differed in ranking the secondary teacher. The adult sample accorded the secondary teacher 3rd rank; the technical students gave a relatively similar rank, 4th; and the university students gave a lower rank, 7th.

In India, Krishnan (1956, 1961) (1 & 2) Cook (1962) (3) found similar ranking patterns from different raters; male and female. student and adult, urban and non-urban. In comparing their results with the studies of Counts (1925) and Deeg and Paterson (1946) they found a high degree of correlation.

(b) Comparative Studies of Occupational Prestige

An early attempt in the field of comparative studies of occupational prestige, was that of Davis (1927). (4) He got 72 Russian children from twelve to seventeen years of age to rank 45 occupations according to their actual standing in the community. He then compared the rankings of the Russian children with those of American children on Counts! He found that sometimes the rankings of American and Russian children did not differ widely. Doctor and civil engineer were ranked high by both groups and barber and waiter were ranked relatively low. but there were striking differences between the ranking of peasant. banker, prosperous businessman and minister of religion in the USA and Russia. Russian children ranked the peasant as having the highest

Krishnan, B. (1956), 'Social Prestige of Occupations' Journal of 1. Vocational and Educational Guidance, 3, pp. 18-22

Krishnan, B. (1961), 'Regional Influences on Occupational Preferences', 2. Psych. Studies, Mysore, India, Vol. 6, pp. 66-70

Cook, D.R. (1962), 'Prestige of Occupations in India', Psych. 3.

Studies, Mysore, India, Vol. 7, pp. 31-37
Davis, J. (1927), 'Testing the Social Attitudes of Children in the Government Schools in Russia', American J. of Sociology, Vol. 32, 4. pp. 947-953

standing and the banker and priest as having the lowest standing. American children ranked the banker highest and the ditch-digger last. The results suggest that "there are varying evaluations for different occupations, and that such social judgments vary in different countries".

In Canada, Tuckman (1947) investigated how occupations were ranked in social status in Canada, and how the rank order obtained compared with that of a population in the United States. The questionnaire used by Deeg and Paterson (1947)(2) was duplicated and was given to 410 college students. A comparison of rank orders produced by Canadian and American samples revealed high similarities between the two countries; the correlation between the rankings was .97. Tuckman suggests that "similarity in social status accorded occupations reflects the similarity in socio-economic factors and values. In both countries, an individual's occupation determines, to a considerable extent, his social and economic status".

Researchers in many countries replicated the work of Hall and Jones. All the studies mentioned below were based on the selection of occupations used by Hall and Jones. All of them used a similar rating procedure. Some occupations were changed slightly to correspond with those that existed in the other countries.

Montague and Pustilnik (1954)(3) applied the methods of Hall and Jones to raters in an American city. They obtained a correlation of 0.9 with the Hall and Jones findings. They also supported the conclusion of Hall and Jones, that the differences between the rankings of occupations by different occupational groups are small.

Tuckman, J. (1947), 'Social Status of Occupations in Canada', Canadian J. of Psychology, Vol. 1, pp. 71-74

^{2.}

Deeg and Paterson (1947), op. cit., pp. 205-208
Montague, J.B. and Pustilnik, B. (1954), 'Prestige Ranking of Occupations in an American City with Reference to Hall's and 3. Jones' Study', British J. of Sociology, Vol. 5, pp. 154-159

In Australia, Taft (1953)⁽¹⁾ asked 277 urban youth and adults to rank 20 occupations as to status. He also compared the rankings given by his Australian sample with those of the American and English samples in the Hall and Jones study: the results were again similar to those reported for the American and English samples. A few differences also appeared between the three samples: English and Australian subjects accord a distinctly higher status to farmers and a lower one to commercial travellers than do the Americans.

Congalton (1953)⁽²⁾ investigated the social grading of thirty occupations in New Zealand. He found a high measure of agreement as to the status of these occupations in both England and New Zealand. This agreement was more apparent with those falling within classes 1, 2, 3 and 7 of the English Standard Classification, and less apparent with those in classes 4, 5, and 6, (see Table 2.1 overleaf).

So many studies of the social ranking of occupations were yielding similar results that Inkeles and Rossi (1956)⁽³⁾ were encouraged to undertake a comparative study of the prestige positions accorded to occupations in six industrialised countries. They compared the NORC North and Hatt study ranking in the USA with the ratings reported in studies carried out in Great Britain, New Zealand, Germany, Japan and Soviet Russia. Though these studies of occupational evaluations asked somewhat different samples of people to rate somewhat different occupations ranging from 88 occupations in the USA to 13 in the USSR, twelve of the fifteen possible correlation coefficients

^{1.} Taft, R. (1953), The Social Grading of Occupations in Australia, B. J. of Soc. Vol. 4, pp. 181-187

Congalton, A.A. (1953), 'Social Grading of Occupations in New Zealand', <u>British J. of Sociology</u>, Vol. 4, pp. 45-59

Inkeles, A.S. and Rossi, H.P. (1956), 'National Comparison of Occupational Prestige', <u>American J. of Sociology</u>, Vol. 61, pp. 329-339

Table 2.1: Social Grading of Occupations in (a) New Zealand Survey (All Groups) and (b) English Survey (General Group), by

All Classes Except "Semi-Skilled" and "Unskilled"

New Zealand				English				
	A.M. of Group Judgments							
Rank Order	Occupation	N.Z. Classification	Males (N = 408)	Males (N = 706)	English Classification	Occupation	Rank Order	
1 2 3	Doctor Company Director Country Solicitor	I II I	1.4 3.6 3.8	1.3 1.6 2.6	1 1 1	Medical Officer Company Director Country Solicitor	1 2 3	
5 7 4 8 6	Public Accountant Civil Servant Business Manager Works Manager Nonconformist Minister	I II II I	5•7 7•0 5•3 7•9 5•9	3.2 6.0 6.0 6.4 6.4	1 2 2 2 2	Chartered Accountant Civil Servant Business Manager Works Manager Nonconformist Minister	4 5 6 7 8	
9 10 11 12 13	Farmer Primary Sch. Teacher Jobbing Master Builder News Reporter Commercial Traveller	VII III III III	8.1 10.3 10.7 13.8 14.1	7.3 10.8 11.4 11.8 12.0	1 3 3 3 3	Farmer Elementary Sch. Teacher Jobbing Master Builder News Reporter Commercial Traveller	9 10 11 12 13	
23 17 14 15 18 16 19	Chef Insurance Agent Newsagent & Bookseller Policeman Routine Clerk Fitter Carpenter	IV III IV III IV IV	21.8 16.1 15.4 15.5 16.4 15.8 17.0	13.8 14.6 15.0 16.1 16.1 17.6 18.6	4 4 5 5 5 5	Chef Insurance Agent Newsagent & Tobacconist Policeman Routine Clerk Fitter Carpenter	14 15 16 17 18 19 20	

Continued overleaf/.....

Table 2.1: Continued

	New Zealand				English			
	A.M. of Group Judgments							
Rank Order	Occupation	N.Z. Classification	Males (N = 408)	Males (N = 706)	English Classification	Occupation	Rank Order	
22 20 24 26 27 25 21	Shop Assistant Bricklayer Tractor Driver Coal Miner Railway Porter Agricultural Labourer Carrier	IV V V V VI V	20.2 19.3 22.8 24.7 25.3 24.4 20.2	20.2 20.2 23.0 23.2 25.3 25.5 25.8	5 5 6 5 7 6	Shop Assistant Bricklayer Tractor Driver Coal Hewer Railway Porter Agricultural Labourer Carter	21 22 23 24 25 26 27	
28 29 30	Barman Wharf Labourer Road Sweeper	VI VI VI	28.3 28.3 28.9	26.4 27.0 28.9	7 7 7	Barman Dock Labourer Road Sweeper	28 29 30	

Source: Congalton, A.A. (1953), 'Social Grading of Occupations in New Zealand', British Journal of Sociology, Vol. 4, p. 53

between the scores of ranks of occupation common to pairs of studies were found to be above 0.9. The following table shows the various correlations that were obtained.

Table 2.2: Correlations between Prestige Scores (or Ranks) Given to

Comparable Occupations in Six National Studies

	U.S.S.R.	Japan	Great Britain	New Zealand	U.S.	Germany
U.S.S.R.	-	•74	. 83	. 83	•90	•90
Japan	-	-	•92	•91	•93	•93
Great Britain	-	_	-	•97	•94	•97
New Zealand	-	_	-	-	•97	•96
United States	-	-	-	-	-	•96
Av. correlation	•84	.89	•93	•93	•94	•94

Source: Inkeles, A. and Rossi, P.H. (1956), 'National Comparisons of Occupational Prestige', American Journal of Sociology, Vol. 61 pp. 331.

Inkeles and Rossi concluded that "despite the heterogeneity of research design, there exists among the six nations a marked degree of agreement concerning the relative prestige of matched occupations". However, their comparisons of the national ranking show some variance in each case. They suggested two explanations for the international discrepancies: (1) "The unique aspects of the culture or social structure of a particular country determine distinctive appraisals of a certain type of types of occupation"; (2) "The types of occupation which generate the greatest amount of disagreement are highly variant and unstandardised or difficult to assimilate to the industrial structure".

In the Philippines, Tiryakian (1958)⁽¹⁾ questioned what the prestige hierarchy would be in an under developed country, not sharing

^{1.} Tiryakian, E.A. (1958), 'The Prestige Evaluation of Occupations in an Underdeveloped Country: The Philippines', American J. of Sociology, 63, pp. 390-399

a common tradition of Anglo-Saxon culture or a high degree of industrialisation. A sample of urban and rural Philippino respondents was asked to rank a list of thirty occupations to social standing. They were also asked to indicate the criteria used in evaluating the three top and bottom occupations. Tiryakian concluded that "the Philippines, primarily an agricultural-underdeveloped area, shares the same pattern of occupational prestige as urban industrial and/or Anglo-Saxon countries". He also indicated that a large number of his sample employed various frames of reference in ranking occupations.

In Northern Rhodesia, Mitchell and Epstein (1959)⁽¹⁾ investigated the social grading of occupations among three groups of urban African students. Their results showed that the rank order of occupations was similar to those of similar studies in European countries. He concluded that the social grading of occupations among town Africans reflected the more generalised prestige system which manifested itself as the evaluation of the way of life of the socially dominant Europeans. In another underdeveloped country, the Pacific island of New Britain, Epstein (1967)⁽²⁾ replicated the study made by Mitchell and Epstein (1959) in Rhodesia with raters drawn from five educational institutions. He found a pattern of ranking similar to those found in advanced and developed countries.

Hutchinson (1957)⁽⁵⁾ applied the method of Hall and Jones to raters in Brazil. He used their list of English occupations translated into Portuguese. As with the studies mentioned above, a high correlation (0.92) was found.

Africa, Vol. 29, pp. 22-39

2. Epstein, A.L.(1967), 'Occupational Prestige on the Gazelle Peninsula, New Britain', The Australian and New Zealand J. of Sociology, Vol. 3, pp. 111-122

3. Hutchinson, B. (1957), 'Social Grading of Occupations in Brazil', British J. of Sociology, Vol. 8, pp. 176-189

^{1.} Mitchell, J.C. and Epstein, A.I. (1959), 'Occupational Prestige and Social Status Among Urban Africans in Northern Rhodesia', Africa, Vol. 29, pp. 22-39

In Ramsey and Smith's (1960)⁽¹⁾ study, seniors in Japanese and American high schools were asked to compare occupations as to prestige, social importance, and income. A comparison of prestige rankings obtained from Japanese and American samples reveals striking similarities. But a few cross-cultural differences of ranking were observed. The American sample ranked the college professor fourth, while the Japanese sample ranked him as having the highest status. The Americans ranked the soldier thirteenth; the Japanese ranked him nineteenth. Also of interest is the ranking of the clergy, who were ranked third by the Americans, and thirteenth by the Japanese. The results also indicate that the rankings of occupations as to social importance were similar in the two countries.

These studies were undertaken from two different positions, the Structuralist and the Culturalist. The Structuralist Approach would predict that all countries would have very similar prestige rankings of occupation, whereas the Culturalist Approach would predict that these rankings would differ from country to country.

Rossi and Inkeles (1956)⁽²⁾ found little evidence to support the culturalist position that "within each country or culture the distinctive local value system would result in substantial, and, indeed sometimes extreme, differences in the evaluation of particular jobs in the standardised occupational system", but much evidence to support the structuralist contention that "there is a relatively invariable hierarchy of prestige associated with the industrial system, even when it is placed in the context of larger social systems which are otherwise differentiated in important respects".

^{1.} Ramsey, C. and Smith, R.J. (1960), 'Japanese and American Perception of Occupations', American J. of Sociology, Vol. 65, pp. 475-482

^{2.} Inkeles, A. and Rossi, H.P. (1956), op. cit.pp. 329-330

Thomas (1962)⁽¹⁾ queries the conclusion of Inkeles and Rossi (1956) on the ground that all the nations in their study were industrialised nations and no non-industrialised nations were included. He argued that, "if low correlations of job status levels are found between industrialised and non-industrialised societies, we can have more confidence in the belief that the factory system imposes its hierarchy on the entire society. But what if high correlations are obtained between an industrialised and a nonindustrialised society ?".

Thomas and Soeparman (1963)⁽²⁾ also showed that an urban sample of people in a non-industrialised country rate titles of occupations in much the same way as people in industrial countries. They suggested that pre-industrial factors might well contribute to both similarities and differences in the standing of occupations.

They compared the prestige rankings of twenty occupations by an Indonesian sample with those accorded to similar occupations in the six countries covered in the investigations by Rossi and Inkeles (1956). They then proposed an alternative to the structuralist approach. They suggested that occupations should be examined on several dimensions: Power, Financial Reward, Crucial Role. Education, Mental and/or Physical Work involved and Service to Society. In their view, the interactions of these dimensions determine the prestige a particular occupation is likely to have in the minds of the public. They also pointed out that these dimensions are not of equal importance in every society and that could account for the fact that coefficients of correlation between prestige rankings of occupations in any two countries are less than perfect.

Occupational Prestige', American J. of Sociology, Vol.67, pp. 561-565 Thomas, R.M. and Soeparman, (1963), 'Occupational Prestige: Indonesia and America', Personal and Guidance Journal, Vol.41, pp. 430-434 2.

Thomas, R.M. (1962), 'Reinspecting a Structuralist Position on 1.

Lewis and Haller (1966)⁽¹⁾ also queried the hypothesis propounded by Inkeles and Rossi (1956): that industrialisation is largely responsible for much of the observed similarity between prestige hierarchies in different societies. They pointed out that

"evidence regarding similarities is limited to occupational titles. Moreover, the correlations reported are subject to error; small and biased samples of translatable titles tend to over-estimate the correlation, and small samples of people tend to underestimate it. In any case, industrialisation may have very little to do with whatever inter-societal occupational prestige similarities may exist".

They suggest that similarities may be due to urbanisation in general rather than industrialisation in particular.

Lewis and Haller (1964)⁽²⁾ produced evidence in support of their view from their study of rural and urban differences in pre-industrial and industrial evaluations of occupations. They asked a sample of Japanese adolescent boys from five areas reflecting differences between the influences of rural and urban environments to rank a list of occupations. They found some evidence of differences in prestige ratings between adolescent sub-groups living in different parts of the country.

Wood and Weinstein (1966)⁽³⁾ attempted to investigate the relationship between industrialisation and similarities in occupational prestige evaluations that has been suggested by Inkeles and Rossi (1956). They compared pre-industrial and industrial parts of a Latin American country, Uruguay, in order to clarify how the introduction of factories brings about a change in the occupational prestige hierarchy. A sample of 463 high school students was drawn from seven cities varying in size

2. Lewis, D.M. and Haller, A.O. (1964), 'Rural-Urban Differences in Pre-Industrial and Industrial Occupations by Japanese Adolescent Boys', Rural Sociology, Vol. XIX, pp. 324-329

Wood, J.R. and Weinstein, E.A. (1966), 'Industrialisation, Values and Occupational Evaluation in Uruguay', <u>American J. of Sociology</u>, Vol. 72, pp. 47-57

^{1.} Haller, A.O. and Lewis, D. (1966), 'The Hypothesis of Inter-Societal Similarity in Occupational Prestige Hierarchies', American Journal of Sociology, Vol. 72, pp. 210-216

and level of industrialisation. The sample included Catholics,

Protestants and people from other religious groups, from all class

levels. The questionnaire used in the study consisted of two parts.

The first part asked for information about such variables as sex,

religion, class and community. The second part was a paired

comparisons test designed to measure the dependent variable,

occupational prestige. It consisted of thirty-two pairs of occupations,

each pair containing one "traditional occupation" and one "industrial

occupation". Subjects were asked to choose from each pair the one

they thought had the higher social standing.

Wood and Weinstein's findings were that there were differences between the prestige ratings accorded to occupations by people living in communities with factories and people living in communities without factories. These findings support those of Lewis and Hollar that there were differences between prestige ratings of occupations by sub-groups from rural and urban areas.

Carter and Sepulveda (1964)⁽¹⁾ reported a study in which 260 Chileans rated sixteen occupations; fifteen of these had been included in the North-Hatt inquiry (1947). They compared their findings with those of similar studies in both more and less developed countries. The rankings were almost identical in the American and Chilean studies, and also bore a very close resemblance to ratings in several other studies which have been summarised by Inkeles and Rossi and by Thomas. The writers suggest that their findings coincide with those of Thomas:

"that ratings may depend largely on such factors as the power dimension, financial rewards, education, service to society and a blue-collar/white-collar distinction".(2)

Carter, E.R. and Sepulveda, O. (1964), Occupational Prestige in Santiago, Chile, American Behavioral Scientist, Vol. 8, pp.20-24
 Ibid., p. 24

They suggest also that their findings agree with those of Rossi and Inkeles; Chile as a state which was industrialising rapidly was indeed the kind of centralised national state which Inkeles and Rossi had described.

Hodge, Treiman and Rossi (1966)⁽¹⁾ extended their investigation into occupational prestige to developed and underdeveloped countries. They compared the ranking of occupations in the NORC study, made in 1963, with the ratings reported in twenty-three countries. Their findings showed that

"there is an impressive amount of agreement between the occupational prestige hierarchy of the USA and those of the 23 other countries. The average coefficient of determination was 0.83, not much different from the average of 0.88 recorded by Inkeles and Rossi".

Hodge, Treiman and Rossi present a modified interpretation of the similarities between the occupational prestige hierarchies based on comparisons between the rankings of all white collar occupations, on the one side, and the rankings of blue collar occupations on the other, for different countries. They suggest that

"major institutional complexes serving central societal needs which exist in all societies, and the common bureaucratic hierarchy imposed by the nation state, act to ensure (despite vast differences in level of economic development) similarity between nations in the white collar prestige hierarchy of doctors, scientists, teachers, public officials and clerks, but these factors cannot be expected to induce a corresponding degree of prestige similarity at the blue collar level".(2)

Moreover, Hodge et al assert the theoretical expectation that

"there is a substantial consistency between the amount of training required for a job, its prestige position and its return in the form of income".

Altogether the data suggest that

"occupations stand roughly in the same order of popular evaluation across a wide variety of nations of varying levels of industrialisation and varying cultural backgrounds". (3)

^{1.} Hodge, R.W., Treiman, J.D. and Rossi, P.H. (1966), 'A Comparative Study of Occupational Prestige'in Reinhard Bendix, & S.M. Lipset (eds.), Class. Status and Power, revised edition, New York: Free Press, 1966, pp. 301-322

^{2.} Ibid., p. 318.
3. Ibid., p. 310

Similar findings emerged from a study done in Taiwan by March (1971). (1)

A sample of 507 male Taiwanese heads of households ranked thirty-six occupations in terms of the reputation of the occupation in general. The results showed that the ranking of occupational prestige in Taiwan is virtually the same as that found in the United States and other countries. March added a further explanation to those which have been given of these cross-societal similarities between ratings of occupational prestige (Inkeles and Rossi, 1956; and Hodge et al (1966a)). He pointed out that

"the basic explanation of why a given occupational title has the same relative prestige in widely different societies is, therefore, not simply that societies share in a generalised way a common institutional structure, but the more precise reason for cross societal similarities in prestige is that a given occupation has highly similar requirements for recruitment (educational level), role functioning (authority, power), and similar relative rewards (income) across societies". (2)

(c) Stability in Rating Occupations According to Social Status over Periods of Time

Neitz (1935)⁽³⁾ and Deeg and Paterson (1946) were concerned with the question: how different would the rankings of occupations by American raters be some years later? Neitz put Counts' list to three groups of school children in 1928, 1932 and 1934. He found very little change in the prestige order of occupations as reported by Counts 1925. Deeg and Paterson⁽⁴⁾ reported their investigation (1947); they used twenty occupations from Counts' list with 475 university students and vocational and academic high school seniors. They confirmed the earlier result.

^{1.} March, R.B. (1971), 'The Explanation of Occupational Prestige Hierarchies', Social Forces, Vol. 5, pp. 214-222

^{2. &}lt;u>Ibid.</u>, p. 222

Neitz, J.A. (1935), 'The Depression and Social Status of Occupations', Elementary School Journal, Vol. 35, pp. 454-461

^{4.} Deeg, M.E. and Paterson, D.G., (1947), 'Changes in Social Status of Occupations', Occupations, Vol. 25, pp. 205-208

In 1963, Hodge, Siegal and Rossi (1964) (1) replicated the NORC study of 1947, with a national sample of 651 adults. The same list of occupations with the original instructions were used. Their results showed the ratings obtained in 1963 were very similar to those obtained in 1947. The product moment correlation coefficient was 0.99.

In 1967, in view of the extensive social and cultural changes since World War II, Hakel, Hollman and Dunnette (1968) (2) repeated the Deeg and Paterson survey carried out in 1946. They found very little change in the prestige order of occupations between 1925 and 1967.

Table 2.3 compares the social status ranks of 25 occupations from Counts' investigation in 1925 to Kanzaki's in 1975. The table shows considerable stability of hierarchies of occupations over periods of time.

Table 2.3: Social Status Ranks of 25 Occupations

Occupation	Counts (1925)	Deeg and Paterson (1946)	Hakel, Hollman & Dunnette (1967)	Kanzaki (1975)
Banker Physician Lawyer Superintendent of Sch. Civil Engineer Army Captain Foreign Missionary Elementary Sch. Teacher Farmer Machinist Travelling Salesman Grocer Electrician Insurance Agent Mail Carrier Carpenter Soldier Plumber	1 2 3 4 5 6 7 8 9 0 1 1 2 3 4 5 6 7 8 9 10 1 12 3 14 5 6 7 8 17 18	2.5 1 2.5 4 56 7 8 9 9 16 3 11 10 14 15 19 17	(1967) 4 1 2 3 5 8 7 6 12 13 17 9 10 18 11 15 16	3 1 5 4 2 8 9 6 7 11 16 13 10 14 17 12 19
Motorman Barber Truck Driver Coal Miner Janitor Hod Carrier Ditch Digger	19 20 21 22 23 24 25	18 20 21.5 21.5 23 24 25	20 14 21 23 22 24	22 18 21 20 24 23 25

Note: The rank order correlations (rho) are as follows: 1925 & 1946, .97; 1925 & 1967, 88; 1925 & 1975, 92; 1946 & 1967, 93; 1946 & 1975, 96; 1967 & 1975,.94. Source: Kanzaki, G.A. (1976) Fifty Years of Stability in the Social Status of Occupations, op. cit., p. 101

^{1.} Hodge, R.W., Siegal, M.P. & Rossi, H.P. (1964), 'Occupational Prestige in the United States (1925-1963), Am.J. Sociol., 70, pp. 286-302

2. Hakel, M.D., Hollman, T.D. & Dunnette, M.D. (1968), 'Stability and Change in the Social Status of Occupations over 21 and 42 Year Periods' Personal Guidance Journal 46 (8), pp. 762-764

This conclusion is confirmed by Kanzaki (1976) (1) from his investigation of stability in the social status of occupations.

This stability in ranking occupations suggests the importance of vocational guidance counsellors in schools in explaining career opportunities to students and putting occupational prestige into proper perspective for them.

It may be of interest to note from Table 2.3 that the teaching profession (primary school teacher) has moved up from eighth rank in 1925 and 1946 to sixth rank in 1967 and 1975. School superintendent moved up from fourth rank in 1935 and 1946 to third in 1967.

In 1973 Braun and Bayer (2) reported a study of the social desirability of occupations. Their sample of forty matched pairs of blacks and whites, forty-three males and females, and forty pairs of students and adults were asked to rank the twenty-five occupations selected by Deeg and Paterson (1947). Rank order correlation between each pair was obtained. Brawn and Bayer also compared the rankings of the total sample with the findings obtained by Deeg and Paterson (1947). Their results suggest that

"social status or prestige rankings of occupations may have undergone specific changes in the society at large, but there is no evidence that student or black groups differ from adults or whites according to any discernible pattern. In the direction of consistency, it should be noted that physician, lawyer, superintendent of schools, banker, and civil engineer are still rated as highest in social status among the occupational choices presented. These were also the first five in 1947".(3)

2.

Ibid., p. 204 3.

Kanzaki, G.A. (1976), 'Fifty Years (1925-1975) of Stability in 1. the Social Status of Occupations', The Vocational Guidance
Quarterly, Vol. 25, September, pp. 101-105
Braun, J.S. and Bayer, F. (1973), 'Social Desirability of
Occupations' Vocational Guidance Quarterly, Vol. 21, pp. 202-205

(d) The Perception of the Status of Women's Occupations

It would seem from the results of the researches already mentioned that the prestige of occupations has remained stable over the past four decades. When comparisons were made between national cultures (e.g. Inkeles and Rossi (1956), Hodge, Siegal and Rossi (1964); Hakel, Hollman and Dunette (1968); Thomas (1962)) the coefficient of correlation between occupational prestige scores for any two countries was above 0.90.

This section will be concerned with the perception of the status of women's occupations and women's perception of their occupations.

Many researchers have tried to find answers to the following questions:

- (1) Do women differ from men in their perception of the status of different occupations ?
- (2) Does the status of occupations vary with the sex of workers ?
- (3) Does occupation have prestige/status independent of the sex of the workers?
- (4) Are some occupations suitable only for men, others suitable for women only?
- (5) How is occupational prestige related to traditional and nontraditional views of women's role?

A study concerned with people's understanding of the social status of women was carried out in the USA by Menger (1932). (1) From both sexes, there were 704 subjects, juniors and adults, workers and students, teachers and workers in other occupations. Thirty-five

Menger, C. (1932), 'The Social Status of Occupations for Women', <u>Teachers' College Record</u>, Vol. 33, pp. 698-704

occupations selected as popular by a large number of girls were submitted to each subject, who was asked to rank them in order of their social standing. On the basis of the median score of each occupation, the occupations were ranked. It was found that physician ranked highest in social standing as a female occupation; second came the lawyer, and then the dentist; fourth, the high school teacher. fifth, the elementary school teacher.

Although Menger found similarities between the rankings of occupations on Counts' scale and rankings of the same occupations on her scale, it may be that the two researches are not strictly compatible, since Menger asked judges to rank occupations in a female context, whereas Counts gave no indication about the sex of the worker. It is therefore highly likely that the rankings made by his subjects were in a male context.

In 1940, Stevens (1) made a similar study concerned with the attitudes of college women towards women's vocations. A representative list of twenty-five occupations which college trained women frequently follow was presented to students at an Eastern women's college. 150 responses were received. The vocations were rated three times (a) according to their contribution to society; (b) according to financial return; (c) according to social prestige. The subjects chose from the list and ranked five vocations which would be their own preferences. They were also asked to indicate three occupations which they thought they would probably follow and to rank them in order of preference. Then the vocations were ranked in order of mean scores. Physician, Teacher, Nurse and Religious Worker were rated as making the greatest contribution to society. Those occupations ranked as making least contribution were beautician

^{1.} Stevens, R.B. (1940), 'The Attitudes of College Women Toward Women's Vocations', <u>Journal of Applied Psych</u>., Vol. 24, pp. 615-27

(the lowest), and then advertising writer, commercial artist, interior decorator and department store worker. According to financial return, those occupations which were ranked as likely to bring in the highest income were, in order, physician, lawyer, interior decorator, commercial artist and radio announcer.

On the basis of social prestige physician again ranks first, with lawyer, teacher, musician and artist. At the other end, beautician rated lowest followed in order by secretary and advertising writer. The vocations for which subjects showed highest preference were, in order, teacher, physician, personnel worker, interior decorator, social worker, and department store worker. At the other end, beautician was the lowest, followed in order by statistician, religious worker, athletic director and girl guide leader.

The correlations between the average rankings of these vocations on the various criteria indicate that there is some relationship between social prestige and financial return: .34, or .45 when contribution to society is held constant. Contribution to society has some relationship to social prestige: .45, or .54, when financial return is held constant. The rank correlation between probable vocation and first choice is .42. Data also indicated that the social background of the sample had little effect on the rankings of occupations according to the criteria used in the study. On the whole, the correlations between the rankings of the sub-groups (urban-rural, professional and non-professional, city-dwellers and villagers) were all very high, indicating high agreement in ranking vocations for women on the various criteria.

Baudler and Paterson (1948)⁽¹⁾ obtained similar results when they compared the rankings of twenty-nine female occupations made by judges

^{1.} Baudler, L. and Paterson, D.G. (1948), 'Social Status of Women's Occupations', Occupations, Vol. 26, pp. 421-424

of different sexes (763 high school and college students in all). A rank coefficient of correlation of .98 between the rankings of the two sexes was found. Further support for this finding came from Welsh's (1) (1949) study, in which a group of teachers and college students (250 males and 250 females) agreed almost perfectly in ranking Counts' list of forty-five occupations (R = .98).

A more refined study was made by Steffire, Resnikoff and Lezotte (2) in 1968 with a view to answering these questions: "Does the prestige of an occupation vary with the sex of the worker ?" "Is the prestige given to a physician invariate or is it a function of the sex of the physician ?" "Does a male physician have more prestige than a female physician ?" "Conversely, does a female elementary school teacher have more occupational prestige than a male elementary school teacher ?". A number of subsidiary questions were also asked: "If a worker of one sex is given more prestige than a worker of the other sex, when they are in the same occupation, is this difference in allocation of prestige related to the sex of the judge who is assessing the prestige levels of the two workers ? and If there are differences of prestige associated with the sex of the worker, are such differences accounted for by the procedure used in gathering the data, that is, will those forms which require judges to respond to workers of both sexes elicit less or greater prestige differences based on sex than forms which ask judges to respond to workers who are all of the same sex?".

To make cross-comparisons an interval scale was constructed. Subjects were shown a normal curve with 'A' at the extreme left (the person with the least prestige), 'C' on the middle (people with an average amount of prestige), 'E' at the extreme right (indicating the

Welsh, M.K. (1949), op. cit.
 Steffire, B., Resnikoff, B. and Lezotte, L. (1968), 'The Relationship of Sex to Occupational Prestige', <u>Vocational Guidance Quarterly</u>, Vol. 46, pp. 765-755

person with the most prestige), 'B' is the midway point between A and C (expressing people with little prestige), 'D' is midway between C and E (describing people with much prestige). Twenty occupations were listed which might reasonably be filled by either men or women.

"Four forms of the scale were constructed: two homogeneous scales - Form A which identified each worker as male and Form B which identified each worker as female; two heterogeneous scales - Form C which alternated between the sexes and began with a male worker (e.g. A - male architect for an architectural firm; B - female book keeper for a small company), and Form D, which alternated between the sexes but began with the female worker".

The forms were given randomly to the judges, and each judge responded to only one form. Two groups of samples were used. The first sample consisted of students taking the beginning (i.e. first year) course in pupil personnel services at Michigan State University. The second sample served as a cross validation; they were students taking the same course the next spring. The majority were teachers planning to be school counsellors.

"Data were analysed separately for the two samples and for each of 20 occupations by 2x2x2 analysis of variance in which the three dimensions were sex of the worker in the occupations (male versus female), and form of the scale (homogeneous with regard to the sex of the worker versus heterogeneous with regard to the sex of the worker)".

The results on the whole indicate that

"the allocation of occupational prestige by these samples using this instrument is not a function of the sex of the worker. Neither does the form of the instrument"

affect results, though some significant results were found but none of them held up on the cross validation sample. These were: male architect and male book-keeper were rated significantly higher than female architects and female book-keepers by the first sample.

(2) Female judges rated architects, laboratory technologists, lawyers and physicians significantly higher than did male judges, while male judges rated salespersons significantly higher than did female judges.

(3) In the main sample also, male judges rated male secondary teachers, speech correctionists and vocational counsellors significantly higher than females in these three occupations. Conversely, female judges ranked female workers in these three occupations significantly higher than male judges ranked them.

Because of women's movements for equal rights, Medvene and Collins (1973)⁽¹⁾ tried to answer questions about how occupational prestige is related to traditional and non-traditional views of women's role. Their subjects were from groups representing traditional and non-traditional people: (1) members of a university women's "caucus" staff and students who were interested in furthering women's rights); (2) a sample of university graduates; (3) a sample of classified employees, a group made up of secretarial and clerical women; (4) a sample of non-working women in the community. Twenty-five occupations were chosen from Deeg and Paterson's (1947) list. Subjects were asked to rank them according to their social standing. Two questions had to be answered: (1) "Do the four samples differ in the way they rank the prestige of the 25 occupations ?"; (2) "Do the four samples differ in their judgments of which occupations are appropriate for women ?" correlations between the rankings of the four samples were determined by Kendal's coefficient of concordance (Siegal, 1956). Findings showed that there was agreement between divergent groups on the prestige rankings accorded to different occupations. In addition, Medvene and Collins found that the amount of prestige accorded to different occupations was closely similar to the ranking reported by Hakel in 1967.

^{1.} Medvene, M.A. and Collins, A. (1973), 'Occupational Prestige and its Relationship to Traditional and Non-traditional Views of Women's Roles', J. of Counselling Psych., Vol. 21, No. 2, pp. 139-143

Sharp differences did occur between the four groups about whether the occupations were appropriate for women. The four groups of women almost unanimously rated high prestige occupations such as physician, banker and superintendent of schools as appropriate for women, but differed significantly as to whether medium prestige or low prestige occupations such as travelling salesman or coal miner were suitable for women.

The members of the women's "caucus" expressed the most liberal views as to which occupations were appropriate for women. Findings about the ranking of the teaching profession support the findings of previous research. All four groups considered the job of elementary school teacher as appropriate for women. The university women's "caucus" and the graduates considered the job of school superintendent as totally appropriate; 96% of the secretarial and clerical women and 93% of the group of non-working women considered it a suitable job for women.

(e) Correlates and determinants of occupational status

A number of studies have raised the following questions:

- 1. Do people have the same criteria in ranking occupational prestige?

 Is it common for people to have a generalised attitude toward occupations which may influence ranking of occupations?
- 2. What are the determinants of occupational prestige, in other words, what are the constituent qualities which go to make up the status of occupations?
- 3. Do these qualities refer to the general characteristics of the occupations instead of to particular persons who are usually engaged in these occupations?

- 4. Are these determinants of occupational status widely shared by persons of various ages, of both sexes, of different social and occupational backgrounds, in different countries and cultures, at different periods of time ?
- 5. What is the relationship between the status of occupations and other characteristics of particular occupations ?

Partial answers to these questions are given in the following studies.

An attempt was made by Asch, Block and Hertzman, (1) reported in 1937 to determine the elements of the prestige of occupations. A group of psychology students were asked to rank ten faculty professional occupations for general esteem, and then in terms of the intelligence, social usefulness, conscientiousness, stability of character and idealism thought characteristic of their members. The findings showed high agreement in all rankings, intercorrelation with general esteem ranking was the highest, suggesting that underlying the several judgments is the subjects' general attitude to the profession.

A refined version of this study was carried out by Osgood and Stagner (1941). (2) They were concerned with analysing what frames of reference were used in making prestige rankings of occupations by one hundred male college students in an introductory class in psychology. To explore the question whether the notion of the prestige of an occupation is independent of the notion of an individual worker engaged in that occupation, they constructed two forms of a questionnaire: the "person form" and the "job form". The former asked subjects to rank fifteen occupations; the latter asked them to judge persons

2. Osgood, C.E. and Stagner, R.C. (1941), 'Analysis of a Prestige Frame of Reference by a Gradient Technique', J. of Applied Psychology.

Vol. XXV, June, pp. 275-90

^{1.} Asch, S.E., Block, H. and Hertzman, M. (1938), 'Studies in Principals of Judgments and Attitudes. 1. Two Principles of Judgment', <u>J. of Psychology</u>, Vol. 5, pp.219-251

employed in the same occupations. The technique used required the subjects to rate a group of occupational stereotypes on a series of continua, the ends of which were defined in terms of psychological opposites. Fifty men filled in the "job form" and fifty the "person form". Their instructions were to rank fifteen occupations in terms of general prestige and for ten attributes in which these occupations might be thought of as differing, e.g. Brains (Brawn), Liberal (Conservative), Honest (Dishonest), Free (Restricted), Secure (Insecure). A Pearson coefficient of correlation was computed for each attribute and the general prestige rankings. Results showed that high prestige occupations are more closely related to dominance traits such as brains, leadership and self-assurance than to humanitarian traits such as honesty, kindness, idealism. Osgood and Stagner concluded that

"the mere presentation of a set of occupational stereotypes for a series of judgments caused our subjects spontaneously to establish a prestige framework which then determined in a highly reliable manner judgments on specific traits listed". (1)

The differences between the judgments of the two groups were so clear that the independence of the two notions could be considered established. Further support for this conclusion is offered by Baudler, (2) using almost the identical list of fifteen occupations, asked eighty senior high school students to rank occupations in terms of prestige and ten other traits. Attneave (1951)(3) obtained similar results, using a larger sample of occupations and including seven of the fifteen traits used in the preceding studies.

^{1.} Tbid., p. 289

^{2.} Baudler, G. 'A Comparative Study of Fifteen Occupations and Certain Factors of Prestige', unpublished study cited in Thomas, op. cit. p. 193

^{3.} Attneave, G.L. (1951), 'Occupational Prestige: An Experimental Analysis of its Correlates', unpublished doctoral thesis cited in Thomas, (ed.), The Occupational Structure of Education, Englewood Cliffs, N.J. 1956, p. 193

A similar study reported by Rossi and Inkeles (1) in 1957, aimed at investigating the popular evaluations of occupations in a Russian community. A sample of 2146 former Soviet citizens rated thirteen Soviet occupations according to their general desirability, material position, personal satisfaction, safety and popular regard. findings showed that there is considerable agreement in the evaluational patterns of the various sub-groups of the samples measured by the standard deviations in each of the ratings of each of the occupations. Inkeles and Rossi found that the high agreement in rankings of the middle range occupations, e.g. accountant, foreman and brigadier was contrary to the findings of Davies (1952) (2) that the greatest disagreement tended to be produced by the middle range occupations. In comparing the profile ratings of each occupation Rossi and Inkeles showed that

"although there is some 'strain toward consistency' in the rating pattern, it by no means is the case that occupations are similarly rated regardless of the dimension. Knowledge of an occupation's standing on only one dimension would hardly permit the prediction of its standing on all the other dimensions with a high degree of accuracy".(3)

Again this conclusion conflicts with that of Asch, Block and Hertzman (1938) and also with that of Osgood and Stagner (1941) who suggested that

"there is a frame of reference or general standard which leads individuals to assign similar standing to any occupation regardless of the dimension rated. (4)

When multi-dimensional ratings were examined by means of productmoment correlation coefficients, results showed that

Rossi, P.T. and Inkeles, A. (1957), 'Multidimensional Ratings of 1. Occupations', Sociometry, Vol. 20, pp. 234-251
Davis, A.F. (1952), 'Prestige of Occupations', British J. of

^{2.}

Sociology, Vol. 3, pp. 134-147
Rossi, P.T. and Inkeles, (1957), op. cit., p. 241
Osgood, C.E. and Stagner, R.C. (1941), op. cit., p. 3. 4.

"material position and personal satisfaction are highly associated as are personal satisfaction and desirability. This suggests that the Russian sample realistically perceived occupations in accordance with objective criteria in their own lives, e.g. material position, general desirability, personal satisfaction, rather than in accordance with some general underlying standard attached to these occupations."

In Poland, Sarapata and Wesolowski (1960). (1) in an investigation into the social evaluation of occupations by Warsaw inhabitants, employed the multidimensional ratings used by Rossi and Inkeles (1957). Their list of occupations included thirty occupations chosen as representative of the social structure of Polish society. A sample of 352 men and 411 women rated the occupations according to prestige. material reward, scarcity, and desirability for their children. Their results showed that prestige is strongly associated with education, skill and security, but it is interesting to note that the teacher in Poland has enjoyed relatively higher status than the teacher in western countries and the USA. Results showed that the teacher was rated third in prestige, fourth in security, but twenty-second in material reward. University teachers occupied the first position in prestige, the second in security and the seventh in material reward. The social prestige of army officers, and private entrepreneurs had decreased since pre-War days; that of skilled workers and nurses had increased. The rankings were similar to those obtained with American, English and German samples.

Garbin and Bates (2) reported in 1961 an investigation into the relationships between the prestige evaluations of a selected group of thirty occupations and the evaluations of these occupations in terms

^{1.} Sarapata, A. and Wesolowski, W. (1960), 'The Evaluation of Occupations by Warsaw Inhabitants', American J. of Sociology, Vol. 66, pp. 581-591

^{2.} Garbin, A.P. and Bates, F.I. (1961), 'Occupational Prestige: An Empirical and its Correlates', Social Forces, 40, pp. 131-136

of twenty specified occupational traits. A sample of 107 freshmen students in three introductory courses - geography, history, and sociology - at Louisiana State University completed the questionnaire. Garbin and Bates found that the highest correlations with prestige rankings were: (a) .91 with intellectual and training requirements; (b) .91 with rewards for the work. The two lowest correlations found were (a) .49 between prestige and working conditions, and (b) .48 between prestige and individual independence on the job. The writers noted that these characteristics of occupations are not of equal importance to each occupation. That is, the significant ingredients of occupational prestige may not necessarily be the same for all occupations.

The previous finding was confirmed in a replication study made by the same authors in 1966, in which 490 individuals representing various occupations and income levels completed the same questionnaires as had been used in the previous study. The prestige-trait relationships were found to be very similar to those found in four previous studies: Osgood (1941), Attneave (1951), Baudler (n.d.), Garbin and Bates (1961), (see Table 2.4 overleaf). A comparison of the occupational prestige among the sub-groups of the samples showed a high consensus of trait and prestige evaluations. This finding of the similarity in prestige evaluations by a diverse population coincides with the findings of several other studies. The writers concluded that

"occupational prestige should be viewed as a generalised subjective attitude of deference accorded a work position, which is composed of several different variables, each of which contributes to the generalised subjective whole. (1)

^{1.} Ibid., p. 301

Table 2.4: Comparison of Occupational Prestige-Trait Correlates of This and Four Previous Studies

Table 2.4: Comparison of Occupational Prestige-Trait Correlates of This and Four Previous Studies					
	Coefficients of Correlation				
Occupational Traits	Osgood and Stragner 1941	Attneave	Baudler	Authors' Previous Study 1961	Present Study 1966
Intrinsic nature of the work Dealing more with people than with things Honorable and morally good work Interesting and challenging work Service to humanity and essential Work calls for originality and initiative	- - 99 -	•64 - - - •93	- - - 60	•49 •75 •90 •59 •87	•50 •77 •91 •61 •87
Intellectual and training requirement Education required Education and training required Intelligence required Scarcity of personnel who can do the job Training required	- - •96 -	- •95 - - -	.86 - -	.83 - .90 .90 .84	•90 - •94 •93 •91
Individual independence in the work situation Being one's own boss Free time on the job	<u>-</u>	•70 -	•65 -	•57 •15	•68 •19
The working conditions Clean work Flexible working hours Safe work	 -	- - -	•46 •50	•51 •44 •35	•67 •56 •49
Interpersonal relations Having an influence over others Regarded as desirable to associate with Responsibility to supervise others	- -	- - -82	•90 •96	.86 .84 .79	•86 •95 •87
Rewards of the work Income Opportunities for advancement Security	•97 - •79	•94 •84 -	•85 - •22	•78 •71 •79	•79 •82 •84

Source: Garbin, A.P. and Bates, F.L. (1966), 'Occupational Prestige and Its Correlates: A Re-examination' Social Forces
Vol.44, p. 299

In 1959, Steffire, (1) used factor analysis procedure in an attempt to determine the elements of prestige. He asked his subjects to rank occupations on the following dimensions of prestige: altruism, choice, control, education, money, security and self-realisation. He found a general factor accounted for most of the variance. His results suggest that either these dimensions are highly associated with prestige, or the subjects were unable to distinguish between the various dimensions of prestige.

R. Simpson and I. Simpson (1960), (2) in an attempt to make an index of prestige, obtained ratings of ninety occupations selected by the National Opinion Research Centre, from twenty-one graduate students in social science. These students were asked to rate those occupations on: prestige, responsibility, training, education and skill required in each occupation, and autonomy. The results showed a multiple correlation of .922 with the NORC prestige scores. They indicate that training, education, skill and responsibility, together account for much of the variance in prestige. This view coincides with the views of North and Hatt, Hakel, Barber and others.

Rettig and Pasamanick (1959)⁽³⁾ reported a research on status and job satisfaction, involving 400 people from various professions, 100 lay persons and 40 public school teachers in two different high schools. They set out their main hypothesis as follows:

"It was hypothesized, therefore, that the public school teacher has a lower socio-economic status, aspires to higher status, but indicates a lower subjective supply of status than the total professional sample. The relationship between status and job satisfaction is probably more crucial among public school teachers than it is for the total professional sample". (4)

4. Ibid., p. 113

^{1.} Steffire, B. (1959), 'Analysis of the Interrelationships of Rankings of Occupations', <u>Personal Guidance Journal</u>, Vol. 37, pp. 338-435

^{2.} Simpson, R.L. and Simpson, Ida H. (1960), Correlates and Estimations of Occupational Prestige, American Journal of Sociology, Vol. 66, pp. 135-140

^{3.} Rettig, S. and Pasamanick, B. (1959), 'Status and Job Satisfaction of Public School Teachers', School and Society, Vol. 87, pp. 113-116

Subjects were asked to rank a set of professions, including their own profession for status (a) as the "general public" would rate them; (b) as they thought they ought to be rated. They were also asked to say what status they expected their own profession to have. They were then asked to rate eight factors of job satisfaction in order of their importance to them and of the extent to which their own work provided each of these factors of job satisfaction. The results support the hypothesis stated above. The public school teacher was not as concerned about the status his own colleagues or other professional people will assign him as he is concerned about his standing in the eyes of the general public. However, the sample of lay persons gave the public school teacher higher status than did the professionals. Rettig and Pasamanick suggested that

"the public school teachers in this study seem to suffer somewhat from an 'inferiority complex' with respect to their own status and prestige".(1)

In an empirical attempt to investigate the bases that have been used in ranking the prestige of occupations, Gusfield and Schwartz (1963)⁽²⁾ conducted a study of the consistency between the ranks of occupations on the NORC scale and responses to a Semantic Differential scale. An occupational rating scale, which included thirty-four of the ninety occupations in the NORC scale, and a Semantic Differential scale, which used fifteen of these thirty-four occupations as concepts to be judged on twenty-two seven-point scales, were administered to 337 students in sociology and architecture classes. The results showed that the rank orders of the thirty-four occupations on the rating scale were similar to those reported by North and Hatt (1947), but that the rank order of the twenty-two concepts of the Semantic

^{1. &}lt;u>Ibid</u>., p. 116

^{2.} Gusfield, J.R. and Schwartz, M. (1963), 'The Meanings of Occupational Prestige: Reconsideration of the NORC Scale', American J. of Sociological Review, Vol. 28, pp. 265-271

Differential Scale varied to some degree from the rankings on the NORC scale. Gusfield suggests that

"there is a distinct possibility that, in the study of occupational prestige, we are not getting only the system of evaluations which respondents may use in judging occupations. Either we obtain descriptions of a factual order, in which the existent fact A is a better job than B is recognized, or we may be confronted with a 'pluralistic ignorance' in which each respondent assumed that the factual order is a reflection of the normative order which others, not himself, possess. In either case, the ratings emerge as descriptive rather than evaluative or ambiguously as both. (1)

Garbin (1967)⁽²⁾ extended his studies of occupational prestige and its correlates. He set out with the following hypotheses:

- "(1) The respondents' perceptions of the occupations in each of the dimensions under study will yield hierarchically arranged orders.
- (2) There will be no significant differences among the dimensional rankings by each of the highly diverse subgroups composing the sample population.
- (3) Although the ratings attributed to most of the occupations will result in relatively irregular rating profiles it is expected that:
 - (a) certain types of jobs will share a similar rating pattern;
 - (b) occupations in the middle of the prestige hierarchy will have the greatest disconsensus of rating pattern;
 - (c) jobs, when judged in certain categories, will exhibit a more regular profile."

A total of 490 subjects, students and members of five other occupational groups (bankers, secretaries, professors, morticians, and manual groups) was used. Subjects were asked to indicate their personal rating of thirty defined jobs on twenty-one work dimensions,

^{1. &}lt;u>Ibid.</u>, p.
2. Garbin, A.P. (1967), 'Occupational Choice and the Multi-dimensional Rankings of Occupations' <u>Vocational Guidance</u> <u>Quarterly</u>, Sept. pp. 17-25

e.g. prestige, income, opportunities for advancement ... etc. rankings were made in terms of a five-point scale. The rating patterns were presented in terms of profile scores. A rating among the top ten occupations was scored plus (+); a rating among the middle ten occupations was scored minus (-); a rating among the lowest ten occupations was scored zero (0). The occupations were then arranged from highest to lowest in order of their prestige ratings. All Carbin's hypotheses were verfield. Teaching occupations were found to be among the middle prestige occupations. These were characterised by the most irregular rating profiles.

In 1955 and 1958 Weinstein (1 & 2) reported studies of children's conceptions of occupational prestige. Children in Chicago Public Elementary Schools were interviewed with open-ended questions designed to measure the relative weight each child assigned to each of seven criteria. Each question required the child to rate the relative importance of two different criteria of prestige, e.g. "Which do you think is more important: a job which pays more or a job which takes more education?". The criteria given were income, education, working conditions, fame, community service, authority and scarcity. Weinstein's findings showed that the ways in which children perceive the status of occupations reflected the evaluations of these occupations in adults of their own sub-culture. On the whole results indicated that the child's perception of status level was related to the weights he assigned to income, education, working conditions, fame and authority. Children from lower middle class homes gave income more weight than did children from upper middle class homes. Psychological

Weinstein, E.A. (1956), 'Weights Assigned by Children to Criteria 1.

of Prestige', Sociometry, Vol. XIX, No. 2, pp. 126-132 Weinstein, E.A. (1958), 'Children's Conceptions of Occupational 2. Stratification', Sociology and Social Research, Vol. 42, pp. 248

rewards, prerequisites and personal ability were accorded greater emphasis by upper and middle class children. The child's grade level was related to the weight assigned to fame and authority. The older children gave more weight to authority, and less emphasis to fame than the younger children did.

Using a national sample of adults, Kriesberg (1962)⁽¹⁾ obtained prestige ratings for seven occupations: owner of a factory with 100 workers, physician, official of an international labour union, trained machinist, lawyer, dentist and university professor. He analysed the relationship between individual ratings of the prestige of dentists and of several characteristics of dentists. His findings showed varying, but generally low, correlations between subjects' prestige ratings of the dentist and their perceptions of the extent to which dentistry was characterised by the possession of scarce skills, high income, social origin and their experience with dentists in receiving dental care.

(f) Status of Occupations within a "Situs"

Many studies have considered the status of occupations within a "situs", i.e. one specific family of occupations, e.g. teaching occupations, psychology, medicine. In these studies a number of questions have been raised:

(1) Does a person following an occupation within a particular family of occupations perceive a clear hierarchy of status within his/her own family of occupations?

^{1.} Kriesberg, I. (1962), 'The Bases of Occupational Prestige: The Case of Dentists', American Sociological Review, 27, April, pp. 238-244

(2) Is an occupational egocentrism observable when a subject ranks his/her occupation along with occupations similar to his/her own?

Coutu (1936)⁽¹⁾ investigated the relative prestige of professional occupations. A list of twenty professions arranged in pairs was given to three groups: engineering, law and medical students. They were asked to underline the one occupation in each pair which they consider "the more honourable, the more admirable or the more worthy of prestige". The results showed that the three groups of professional students did differ in their evaluations of the relative prestige of their own future profession in comparison with the nineteen other professions. Each group, the medical group in particular, considered its own profession to be higher than others in prestige.

Hartmann (1936)⁽²⁾ confined his study to the relative social prestige of medical specialties. A sample of 250 Pennsylvania adult laymen ranked twenty-five medical occupations in terms of their general prestige. The results suggest that greater acquaintance with an occupation leads to a sounder appraisal of its relative prestige and that the less well known occupations receive hesitant and dubious rankings.

In 1959 Granger (3) undertook a research designed to answer the following questions:

- (1) Do psychologists perceive a prestige hierarchy within their own family of jobs ?
- (2) Are there differences in the manner in which various special interest groups within psychology perceive this hierarchy?

Granger, S.G. (1959), 'Psychologists' Prestige Ranking of Twenty Psychological Occupations', J. of Counselling Psych., Vol.6, pp.183-188

^{1.} Coutu, W. (1936), 'The Relative Prestige of Twenty Professions as Judged by Three Groups of Professional Students', Social Forces. Vol. XIV, Part 4, pp. 522-529

^{2.} Hartmann, C.W. (1936), 'The Relative Social Prestige of Representative Medical Specialties', J. of Applied Psych., Vol. 20, pp. 659-63

A random sample of psychologists from eleven special interest groups in the American Psychological Association were asked to rank twenty titles of jobs according to the social prestige they attached to them. Results indicated that psychologists were, with a reasonably high degree of agreement, able to make the prestige discriminations asked for. This finding has been interpreted as suggesting an occupational prestige hierarchy within psychology. Comparison of the rankings of the members of the various APA divisions and diplomatic groups did not show any significant differences, though respondents tended to upgrade occupations related to their own speciality in psychology.

Kondrasuk (1971)⁽¹⁾ designed a study which confirmed the close relationship between the prestige rankings of graduate students and APA members, and occupational egocentrism. Two hundred and sixty-nine graduate students of psychology ranked twenty occupations in psychology. The prestige rankings of the total sample and of twelve sub-groups into which it had been divided were analysed. The results showed that the occupational prestige hierarchy of the total sample was similar to that found by Granger (1959), except that service and academic occupations were upgraded while research occupations were downgraded. Sub-groups tended to upgrade occupations related to their specialist area.

In a similar study Dolliver (1967)⁽²⁾ was concerned with the high status sector occupations. He used the fifty-one SVIB occupation titles that were currently being used on the National Computer System report form in the USA. A sample of college students and V.A. psychology and graduate students were asked to identify the high status

Vol. 18, No. 2, pp. 142-146

2. Dolliver, R.H. (1967), 'The High Status SVIB-M Occupations', Vocational Guidance Quarterly, Vol. 16, pp. 119-124

^{1.} Kondrasuk, J.N. (1971), 'Graduate Students' Ranking of Prestige Among Occupations in Psychology', J. of Counselling Psychology, Vol. 18, No. 2, pp. 142-146

level occupations from those listed and then to rank them in order of status. The results were very similar to the results of earlier studies of occupational status (e.g. Hartmann, 1934). When the rankings of psychologists were compared with those of college students a tendency towards occupational egocentrism was noted.

Stephens, Stevens and Arnold (1967)⁽¹⁾ asked over 1,000 students in eighteen colleges to rank twenty professional careers in terms of prestige. Findings, on the whole, showed a similar hierarchy of occupational prestige; physician, vice-president of a corporation, lawyer and college professor were put at the top of the scale by all the sub-groups of the sample, and insurance salesman, operator of a small retail establishment, and civil servant were put at the bottom of the prestige scale, while high school teacher was ranked in the bottom half of the scale: thirteenth by Arts students, fifteenth by those majoring in Economics, and fourteenth by Science and Technical students.

In England, Butcher and Pont (1968)⁽²⁾ carried out a study in which 1,100 secondary school pupils were asked to rate fifteen careers on six criteria: liking, interest, salary, prestige, qualification, usefulness to society. They were also asked to write essays about what they expected to be doing in five years' time. Their findings showed that boys and girls agreed quite closely about the usefulness and prestige of various careers, but that they differed in their interests and likings. Girls placed teaching first in their rank order of preferences while boys ranked it fifth. Boys gave a

^{1.} Stephens, E.W., Stevens, N.D. and Arnold, D.I. (1967), 'What are the Attitudes of Students Toward Occupations?', J. of College Placement, 27, pp. 124-134

^{2.} Butcher, H.J. and Pont, H.B. (1968), 'Opinions About Careers among Scottish Secondary School Children of High Ability', British J. of Ed. Psych., Vol. 38, pp. 272-279

a higher rating to careers such as engineer, research worker, chemist, physicist, and science teacher, while girls rated more highly those of social worker and teacher of non-science subjects.

Humphreys (1970)⁽¹⁾ undertook a study of the prestige of different teaching subjects. He asked a sample of 426 subject specialists in the province of Ontario, Canada, to rank seventy-five subjects for prestige on a nine-point equal appearing interval scale. He found that his subjects had definite views about the prestige of different subjects. Academic subjects were accorded the highest prestige. They were followed by commercial and technical subjects.

Clark and Seals (1975)(2) investigated the social status of careers for college graduates. They asked a stratified random sample from undergraduate students attending different colleges of Oklahoma State University to give their opinions of the social status of each of ninety-four occupations as careers for a college graduate. mean scores were computed for each of the student variables: college, class, grade, point average (GPA), and sex. From these mean scores a rank order of occupations was made in each of the student variables. Pearson product-moment coefficients of correlation between the rankings by college, class etc., were computed. In order to assess occupational egocentrism, the mean rating of career by students preparing to work in an occupation was compared with the mean rating of the occupation by all the students. In addition, all the occupations that were clearly associated with one of the colleges were compared with the ratings of occupations by all students. The results showed that students had a definite perception of the social status of careers for college graduates. The physician was accorded first rank,

 Clark, A.J. and Seals, J.M. (1975), 'Student Perceptions of the Social Status of Careers for College Graduates', J. of College Student Personal, Vol. 16, Part 4, pp. 293-298

^{1.} Humphreys, E.H. (1970), Interaction and Prestige of Secondary School Teachers in the Province of Ontario, Sociology of Ed., Vol. 43 (Fall), pp. 405-418

and the "sanitarian" assigned lowest rank. Teaching occupations, with the exception of college and university teacher were rated in the bottom half of the scale. When specific occupations were compared in terms of college, class, GPA and sex, differences between rankings were discovered, women gave careers in the social sciences and service occupations higher ranks than did men students. Supporting the findings of Coutu (1936), Hartmann (1936), Granger (1959) and Dolliver (1967), concerning occupational egocentrism, Clark and Seals found that students preparing to work in specific careers rated these occupations higher than those students not preparing for them. They also rated higher in status occupations that were related to their field, their college and the occupations associated with it.

With a short list of occupations confined to the professional sector, McDonagh, Wermlund and Crowther (1959) (1) compared occupational statuses in the USA and Sweden. Two samples of American and Swedish university students ranked eight professional occupations according to their prestige, intellectual ability, usefulness to society and deviations from society's moral standards. Findings showed that respondents in the two countries evaluated occupations somewhat differently. Swedish students accorded the university professor highest status in terms of prestige and required intellectual ability, while American students assigned the medical doctor highest prestige but agreed in ranking the professor highest in intellectual ability; the civil engineer was assigned second rank by the Swedish sample and sixth by the American sample as to usefulness to society. In both countries doctor was ranked highest in usefulness to society, and minister was viewed as most subject to criticism for moral deviancy.

In this respect he was followed by grade school teacher. The results suggest that there are clear distinct differences between the relative statuses accorded to professional occupations in the two western countries when several aspects of status are considered.

As far as the present investigation is concerned, we may note that the status of the teaching profession at different levels has maintained a similar hierarchy in a wide variety of nations at different levels of industrialisation and modernisation: the university teacher at the top of the hierarchy, the secondary school teacher in the middle and the primary school teacher at the bottom. When rural school teacher was included his/her rating was lower than that of primary school teacher.

Several dimensions have been suggested as influential in determining the status of incumbents of a particular occupation. The most common were the education and training required, value to society, working conditions, personal satisfaction, income. These dimensions are not of equal importance in every occupation or in every country. Results have also shown that subjects employ different frames of reference in evaluating the prestige of different occupations.

CHAPTER III

REVIEW OF PREVIOUS RESEARCH STUDIES ON TEACHERS ATTITUDES TO EDUCATION

The general aim of this chapter is to present the studies which have been concerned with measuring attitudes to education and the factors influencing individuals to choose teaching as their profession.

We can classify these researches as follows:

- (1) Those aimed at establishing measures of attitudes towards education.
- (2) Those aimed at studying the factors which influence people to choose teaching.
- (3) Those aimed at studying the factors influencing teachers adjustment and commitment to teaching.
- (4) Those aimed at measuring change in attitudes towards education among student teachers during their course of training or at studying teacher attitudes in certain sectors of education.
- (5) Those aimed at studying how teachers perceive their roles and educational goals.
- (6) Those aimed at cross-cultural comparisons of teachers attitudes.
- (1) Researches Aimed at the Establishment of Measures of Attitudes to Education
- (a) Many attempts have been made in England and the USA to establish the measurement of attitudes to education. The outstanding measure of attitudes towards education was devised by Oliver and

Butcher (1962). (1) (An earlier form of the questionnaire had been published by Oliver in 1955. (2)) It was constructed on the hypothesis that there are three dimensions that might constitute teachers attitudes: (i) Naturalism-Idealism; (ii) Radicalism-Conservatism; (iii) Tender-mindedness-Tough-mindedness. The first dimension was suggested by a review of writings on the philosophy of education, the other two by results of research into general attitudes (Eysenck, 1947, 1954). (3,4)

The three scales were constructed to measure teachers' attitudes in terms of Naturalism (the N Scale), Radicalism (the R Scale) and Tender-Mindedness (the T Scale). Scores were obtained from a sample of three hundred drawn from representatives of practising teachers in Manchester. This study clearly showed that teachers' attitudes to education are organised in structures which can be described in terms of tender-mindedness, Radicalism and Naturalism. The tender-mindedness factor was found very clearly defined by the items of the scale and was most satisfactory in terms of reliability and validity. The radicalism factor was also clearly identified, but less satisfactorily in terms of reliability and validity. The naturalism scale was the least satisfactory and the dimension of naturalism seemed less clearly applicable in the description of teachers' attitudes. Oliver and Butcher comment:

"It seems that the description of attitudes arrived at by psychological research fits teachers' opinions about education better than that which is usually employed in accounts of philosophies of education." (5)

5. Oliver, R.A.C. and Butcher, H.J. (1962), op. cit., p. 68

^{1.} Oliver, R.A.C. and Butcher, H.J. (1962), 'Teachers' Attitudes to Education', British J. of Soc. & Clin. Psychol., 1, pp. 56-69

^{2.} Oliver, R.A.C. (1955), A Survey of Opinions about Education, University of Manchester, Unpublished booklet

^{3.} Eysenck, H.T. (1947), 'Primary Social Attitudes. I: The Organisation and Measurement of Social Attitudes', Int. J. Opinion Attitude Res., 1, pp. 49-84

Attitude Res., 1, pp. 49-84
4. Eysenck, H.T. (1954), The Psychology of Politics. London: Routledge and Kegan Paul

Rushton and Ward (1969)⁽¹⁾ gave the Oliver and Butcher questionnaire "A Survey of Opinions about Education" to a sample of American teachers taking a summer course at the University of Illinois with a view to comparing their responses with those of British teachers and investigating possible relationships between variables. One important finding was that various items in the test required modification.

A further study of this test was carried out by Ward (1972) (2) who tried to investigate the fakeability of the survey and opinions about education. The three scales were applied twice to four groups of student teachers. The second time students were asked to fake responses in accord with those of ideal students on the college of education course. Ward found that students who tried to fake their answers with a view to obtaining high marks were not very successful in their efforts.

In 1976. Wilson and Bill, (3) with a view to examining the factor structure of the Oliver "Survey of Opinions" asked 424 teachers in a probability sample of fifty post-primary schools in Northern Ireland to complete the Oliver questionnaire. Factor analysis of the responses suggested that

"the hypothesised structure was most satisfactory for the Tender-mindedness dimension, less satisfactory for the Radicalism dimension, and least satisfactory for the Naturalism dimension. This order of structural consistency was reflected in the internal consistency estimates of the scales."(4)

(b) Earlier, Wandt (1954)⁽⁵⁾ had investigated the relationship between principals' judgments on their teachers and the attitudes of

Rushton, J. and Ward, J. (1969), 'American and British Attitudes to 1. Education, Durham Research Review, Vol. 5, pp. 403-405

^{2.}

Ward, J. (1972), 'The Fakeability of the "Survey of Opinions about Education", J. of Ed. Psych., Vol. 42, Wilson, J.A. and Bill, J.M. (1976), 'The Structure of Oliver's Survey of Opinions about Education', Brit. J. Educ. Psych., 46, 3. pp. 184-189

^{4.}

<u>Ibid.</u>, p. 188 Wandt, E. (1954), 'A Comparison of Attitude Contrasting Groups of 5• Teachers, Ed. Psych. Measur., Vol. 14, No. 2, pp. 418-422

those teachers to various groups of people in their schools. His study involved 600 school principals made up of three groups, viz. (1) 200 elementary school principals; (2) 200 high school principals in the fields of mathematics and/or science; and (3) 200 high school principals in the fields of English and/or social studies. Each principal was asked to nominate one excellent and one poor teacher from his school. Three attitude scales developed by Wandt (1952) (1) were used: Scale P. which measured attitude towards pupils, including attitude towards democratic school procedures; Scale A, which measured attitude towards administrators, including supervisors; Scale N, which measured attitude towards an adult, non-administrative group including teachers and non-teachers. Each principal was given the three scales to give to each of the two teachers he had nominated from his school. Results showed that teachers given high ratings by their principals expressed significantly more favourable attitudes towards pupils than teachers given low ratings. This was true of teachers in all groups. Teachers given high ratings also expressed more favourable attitudes towards administrators. But in their attitudes towards adult-non-administrators both "high" and "low" teacher groups were similar. In general, elementary school teachers expressed more favourable attitudes than secondary school teachers. Wandt did point out, however, how the way in which a statement of attitude is framed makes it susceptible to faking by respondents.

(c) Kissack (1956)⁽²⁾ constructed a Thurstone-type Scale for measuring attitudes towards corporal punishment. This scale was administered to a sample of teachers in three training colleges, both at the beginning and at the end of their two-year course of training.

^{1.} Wandt, E. (1952), 'The Measurement of Teachers' Attitudes Towards - Groups Contacted in the Schools', <u>J. of Ed. Research</u>, 46, pp. 113-122

^{2.} Kissack, M. (1956), 'The Attitudes of Training College Students Towards Corporal Punishment', M.Ed. Unpublished Research Manchester University

He found that women were significantly more opposed to the use of corporal punishment than men, and that this applied when men and women in a mixed college were compared. Apart from this sex difference, it appeared that there were marked differences between colleges. For instance, students in the mixed college had less unfavourable attitudes to corporal punishment than students in the men's college. A then unpublished version of Oliver's three scales was also administered at the end of the course of training and no significant differences between groups measured on Kissack's Scale were found.

- (d) Steel (1958), as part of his investigation into changes in attitude of training college students towards education in junior school, constructed a uni-dimensional scale of attitudes towards education which sought to discriminate between traditional and progressive attitudes. The questionnaire, a Likert-type scale, presents a variety of items within the field of education, namely, teacher-child relationships, parent-teacher relationships, discipline, incentives, obedience, freedom, classroom organisation, philosophy of education, and methods of teaching in junior school. A sample of college students, which included many older women and married women with children as well as normal age entrants to teaching, completed the questionnaire at the beginning of their two-year course, at the end of their course and after six months of full-time teaching. The main findings were that:
- (1) Only the group of eighteen-year-old school leavers showed a significantly more traditional outlook than other age-groups.
- (2) Experience in teaching had led to a markedly significant more progressive attitude than that held by the normal-age entrants.

^{1.} Steel, M. (1958), 'Changes in Attitudes of Training College Students Towards Education in Junior School', Unpublished M.Ed. Research, Manchester University

- (3) Previous experience as a mother had led to a more progressive attitude than that of normal age entrants.
- (4) Students who chose to train for infant teaching showed a significantly more progressive outlook than those who chose to teach juniors.
- (5) There was no significant difference between the attitudes of school leavers and those who had been in employment other than teaching.
- (6) Attitudes showed a slight correlation with intelligence.
- Thompson (1958)⁽¹⁾ used a battery of tests to investigate the factor structure of the values and attitudes of graduate teachers in training: these included: Allport, Vernon and Lindzey's Study of Values (1951), (2) Wichert's Test of Goal Values (1940), (3) Higson's Study of Educational Values (1951). (4) Steel's The Education of Junior School Children (1956). (5) Kissack's Experimental Study of Opinions about Corporal Punishment (1956), (6) Eysenck's Inventory of Social Attitudes (1954), (7) Oliver's Survey of Opinion about Education (1955).(8) The responses of 193 students taking the Graduate Certificate in Education at Manchester were factor analysed. Eight factors were extracted. of which four were validated by means of an essay written

Thompson, J.W. (1958), 'A Factorial Study of the Values and 1. Attitudes of Graduate Teachers in Training', B.J. of Ed. Psych. XXVIII. pp. 182-181

Allport, G.W., Vernon, P.E. and Lindzey, G. (1951), Study of Values, 2. revised edition, Cambridge, Mass .: Houghton, Mifflin Co.

Wichert, F. (1944), 'A Test for Personal Goal Values', J. Soc. 3. Psych., 13, pp. 259-274 Higson, F.G. (1951), 'An Inquiry into the Interests in Education

^{4.} of Teachers in Training', University of Manchester, Dept. of Ed. (Unpublished M.Ed. Thesis)

^{5•}

Steel, M. (1958), op. cit. Kissack, M. (1956), op. cit. Eysenck, H.J. (1954), op. cit. Oliver, R.A.C. (1955), op. cit. 6. 7.

by forty-seven students on "My Attitude to Teaching". These were:

(1) Tender-mindedness v. tough-mindedness in education; (2) Aesthetic
Tidiness v. Creative Untidiness; (3) The aesthetic, religious and
social values as opposed to the economic, theoretical and political
values; (4) progressive education.

Thompson found significant differences in factor scores between men and women, the latter scored more in favour of religious, social, tender-minded values and were educationally more progressive than the men.

- (f) Ewing and Maciver (1976)⁽¹⁾ in an investigation into the views of primary school teachers, constructed a Thurstone-type Scale measuring teaching methods from traditional to modern. 403 primary school teachers (52 men and 351 women) completed the questionnaire. The results showed that teachers were more in favour of traditional teaching methods with increase in age, or length of service or earlier date of qualification. No significant differences between the two sexes with respect to their attitudes to the different teaching methods were found.
- (g) Several attempts have been made in the USA to investigate the factor structure of teacher attitudes in education. Ryans (1953)(2) analysed the opinions about curriculum and teaching methods held by teachers in American primary and secondary schools. He set out his main hypothesis as follows:

"It was hypothesised that the educational viewpoints of teachers tend to be organised into several relatively independent clusters with respect to standards of academic achievement, curricular organisation, pupil participation in class planning and similar matters, but that a teacher's viewpoints with regard to certain significant educational practices may bear little or no relation to his viewpoint regarding other significant practices."(3)

2. Ryans D.C. (1953), A Statistical Analysis of Certain Educational Viewpoints, J. of Exper. Educ., Vol. 22, pp.119-132. 3. Ibid., p. 119

^{1.} Ewing, J.M. and Maciver, L. (1976), 'Modern or Traditional Methods? The Views of Some Primary School Teachers', Times Educational Supplement, 18-6-1976, pp. 18-20

To test this hypothesis Ryans constructed two forms of an opinion. questionnaire, one for use with secondary school teachers and the other for use with elementary school teachers. These tests were given to samples of 338 secondary school teachers and 213 elementary school teachers. Both samples contained a proportion (approximately one third) of student teachers. Ryans' main conclusion was that teachers' viewpoints on education (at any rate within the framework of his study) were not highly systematised or organised but that one or two constellations or clusters of opinion were suggested by his results. Insofar as a principal dimension of opinion could be distinguished, it appeared to him to be concerned with

"the general tendency of the teacher to associate himself with so-called 'modern' educational viewpoints as contrasted with viewpoints that sometimes have been called 'traditional'."(1)

(h) A well-known measure of teachers' attitudes to education, the Minnesota Teachers! Attitude Inventory, has been frequently used in the USA. It was constructed by Cook, Leeds and Callis (1951) in an attempt to measure those attitudes of a teacher which were of most help in predicting how well a particular individual would get along in personal relationships and to distinguish those who were likely to establish a desirable classroom atmosphere from those less likely to do so. The inventory consists of 150 Likert-type-scale items about children and their behaviour.

Callis (1950). (3) Coleman (1954). (4) Rabinowitz (1954). (5) Sorenson (1956), (6) Stein (1957)(7) investigated the extent to which Ibid., p. 130 1.

Cook, W.W., Leeds, C.H. and Callis, R. (1951), 'The Minnesota 2. Teacher Attitude Inventory New York Psych. Corp.

Callis, R. (1950), Changes in Teacher-Pupil Attitudes Related to 3. Training and Experience', Ed. Psych. Meas., 10, pp.718-727

Coleman, W. (1954), Susceptibility of the MTAI to Faking with 4. Experienced Teachers', Educ. Admin. & Supervision, Vol.4, pp.234-237 Rabinowitz, W. (1954), The Fakeability of the Minnesota Teacher

^{5.} Attitude Inventory', Ed. Psych. Measmt., 14, pp. 657-664

Sorenson, A.C. (1956), 'A Note on the Fakeability of the Minnesota 6. Teacher Attitude Inventory', J.Appl.Psych., 40, pp. 192-194

Stein, H.L. and Hardy, J. (1957), 'A Validation Study of the 7• Minnesota Teacher Attitude Inventory in Manitoba!, J.of Ed. Res., Vol. 50, pp. 321-338

responses to the M.T.A.I. could be faked. Each investigator had his sample complete the inventory twice, each time under differing conditions of administration. Their findings indicate that it is possible for a respondent to fake his responses to the inventory. In England, Evans (1958)⁽¹⁾ found that the M.T.A.I. was not a suitable measure to use in Britain. Her results with Scottish students did not correspond to the American or Canadian norms. She also considered the test very susceptible to faking by British students, possibly because the items are so phrased as to suggest that progressive responses are the desirable ones.

(i) Horn and Morrison (1965)⁽²⁾ investigated the factor content of the Minnesota Teacher Attitude Inventory. The responses of 306 college students enrolled in education courses were factor analysed. The analysis of their findings by the two investigators revealed five factors instead of the one factor they had hypothesised. Indeed,

"the test authors and users usually imply this factor is a uni-factor attitude involving, at the one extreme, a belief in, and preference for, democratic values, versus, at the other extreme, a belief in, and preference for, autocratic values."

The five factors suggested were:

- (1) Factor One: a modern attitude towards class control as contrasted with a traditional attitude;
- (2) Factor Two: an optimism-favourable v. a pessimism-unfavourable dimension of opinion about pupils;
- (3) Factor Three: a permissive lack of concern v. punitive concern about 'smart' rebellious behaviour;
- (4) Factor Four: a rejection of pupils, but a rejection stemming from bewilderment rather than from dislike.

Attitudes, J. of Ed. Psych., Vol. 56, No. 3, pp. 118-125

Evans, K.M. (1958), 'An Examination of the Minnesota Teacher Attitude Inventory', <u>Brit. J. of Ed. Psychol.</u>, 28, pp. 253-257
 Horn, J.L. and Morrison, W.L. (1965), 'Dimensions of Teachers'

(5) Factor Five: a desire to maintain control over children v. an inclination to let them 'run free'.

In a similar study Yee and Fruchter (1971) (1) factor analysed the responses of 368 serving teachers with an average of about ten years' experience to the M.T.A.I. Their results were explicable in terms of a factor structure similar to that of Horn and Morrison (1965).

(j) Kerlinger (1956)⁽²⁾ bases his main theory on the presumed dichotomy between (a) restrictive-traditional, and (b) permissiveprogressive, viewpoints on educational matters. He constructed a questionnaire on the hypothesis that

"individuals could be categorised by this dichotomy, and that certain individuals would exhibit the cleavage more than others, depending on their occupational roles, their knowledge and experience with education."(3)

Twenty-five subjects, some of whom were professors in arts and education and some businessmen from outside the university in the eastern zone of the USA, were asked to respond to eighty statements on educational theories and practices on an approval-disapproval continuum. The findings showed that people's attitudes to education could be described in terms of traditional and progressive factors. In 1958 Kerlinger (4) gave the same questionnaire to another sample in the Mid-West of the USA. The factor results were very similar to the earlier ones.

In a further research into the construction and factor analytic validation of scales to measure attitudes toward education, Kerlinger and Kaya (1959) found *progressivism* and *traditionalism* independent

135.

3. Ibid., p. 112

4. Ibid., pp. 111-135

Kerlinger, F.N. and Kaya, E.(1959), The Construction & Factor

Analytic Validation of Scales to Measure Attitudes Toward Education,

Educ. Psych. Measurement, Vol. XIX, No. 1, pp. 13-29 5.

Yee, A.H. and Fruchter, B. (1971), 'Factor Content of the 1. Minnesota Teacher Attitude Inventory', American Ed. Research J., Vol. 8, No. 1., pp. 119-133

Kerlinger, F.N. (1956), The Attitude Structure of the Individual: 2. A Q-Study of the Educational Attitudes of Professors and Laymen', reported in Kerlinger, F.N. (1958) 'Progressivism and Traditionalism: Basic Factor in Educational Attitudes', J. of Soc. Psych., Vol. 48, pp. 111-

and orthogonal attitudinal dimensions. Using an expanded collection of items, Kerlinger (1961)⁽¹⁾ found two second order factors confirming the earlier results. He called the first Traditionalism. This emphasised subject matter, strict discipline and moral standards. The second he called Progressivism. This stressed children's needs, individual differences and social learning.

- (k) In another investigation into the dimensions of teachers' beliefs about the teaching process Wehling and Charters (1969)(2) analysed the responses of eight groups of teachers in the General Mid-West to an attitude questionnaire, made up of some items from the MTAI and others from Kerlinger's (1959)(3) measure of progressive and traditional attitudes. Their findings revealed eight distinct and relatively independent dimensions of teacher beliefs with sufficient regularity among the different groups. The factors were defined as follows: (1) Subject Matter Emphasis; (2) Personal Adjustment Ideology; (3) Student Autonomy vs. Teacher Direction; (4) Emotional Disengagement; (5) Consideration of Student Viewpoints; (6) Class-room Order; (7) Student Challenge; (8) Integrative Learning.
- (1) Wolfe and Engel (1977)⁽⁴⁾ investigated the factor structure of an inventory designed to sample pre-service teachers' opinions about teacher-pupil relations, classroom discipline, subject matter, and appropriate teacher behaviour. The analysis yielded three factors. The first two factors, which accounted for most of the

^{1.} Kerlinger, F.N. (1961), Factor Invariance in the Measurement of Attitudes Toward Education, Educ. Psych. Measurement, Vol. XXI, No. 2, pp. 273-305

^{2.} Wehling, L.J. and Charters, W.W. Jr., (1969), Dimensions of Teacher Beliefs About the Teaching Process, American Ed. Research, Vol. 6, No. 1, Jan. pp. 7-30

^{3.} Kerlinger, F.N. (1959), op. cit.

^{4.} Wolfe, M.L. and Engel, J.D. (1977), Dimensions of Opinion About Teacher-Pupil Relations, J. of Exp. Ed., 46, pp. 41-45

most of the variance, tended to confirm the findings that progressivism and traditionalism are independent factors rather than opposite poles of a single continuum.

- (m) Coughlan's (1969)⁽¹⁾ study of the factorial structure of teacher work values involved 192 teachers drawn from four Mid-Western, middle class suburban high schools in the USA. The questionnaire used to measure teacher work values was described as "a self-rating paired comparison paper and pencil inventory". It lists fifteen problem areas and gives Professional, Organisational, Professional-Social or Organisational-Social responses to each problem. The problem areas relate to such matters as discipline, handling individual differences, planning classroom work. The factor analysis of item scores disclosed five bi-polar factors. These were defined as follows:
- (i) Administrative focus: Procedures vs. Persons: deals with the organisation and administration of the school.
- (ii) Work-emphasis: Role Expectation vs. Need-Dispositions: this related to the goals and emphases of the teacher in enacting his work role.
- (iii) Source of authority: School officials vs. Colleagues: this is concerned with two major reference groups which influence the teachers decisions regarding his work.
 - (iv) Educational concerns: Intellectual Growth vs. Social Development: this is related to the work goals of the school in developing pupils and working with fellow teachers.
- (v) Source of support: Self. vs. Colleagues: this deals with the teacher's sense of autonomy, self-sufficiency as opposed to dependency on fellow teachers in the work relationship.

^{1.} Coughlan, R.J. (1969), 'The Factorial Structure of Teacher Work Values', American Ed. Research J., Vol. 6, No. 2, March, pp.169-189

The results so far suggest the need to look for a coherent structure of beliefs, since attempts to investigate these dimensions are unlikely to be consistent. Further studies and more measures need to be made in order to examine teacher attitudes to education.

(2) Researches Aimed at Studying Factors which Influence People to Choose Teaching

Many studies have been made of the factors that are important in selecting or rejecting the teaching profession.

Austin (1931), (1) as a result of an inquiry into vocational choices of secondary school pupils, found that teaching was the most popular profession, being chosen by 10 per cent of the boys and 40 per cent of the girls. She also found that the direct influence of relatives or teachers was the most frequent reason for choosing teaching.

Valentine (1934), 2 in an enquiry into the reasons for becoming a teacher in four university training departments, found that interest in a favourite subject and economic reasons carried most weight in the choice of teaching as a career; general liking for teaching and fondness for children were stronger motives with women. Valentine also found that there was no truth in the view that advice given by secondary school teachers was the chief motive for making people choose the teaching profession. He found a minority of students chose teaching as a stop-gap or because they saw no alternative. Objections to teaching included poor salaries, long training, poor prospects for promotion, fear of getting into a rut, domination by examinations and mental strain.

the Teaching Profession by University Students, Brit. J. of Psych., Vol. 42, pp. 237-259

^{1.} Austin, F.M. (1931), 'Analysis of the Motives of Adolescents for Choice of Teaching Profession, Brit. J. Educ. Psych., Vol.1,pp.87-103
2. Valentine, C.W. (1934), 'An Enquiry as to Reasons for the Choice of

A similar study was undertaken with training college students during World War II by Tudhope (1944). (1) This showed that their motives for teaching were the attraction of a secure job, fondness for children, interest in special subjects and the possibility of doing good. Tudhope's findings showed that women take the decision to teach earlier than men and that the most influential factor in deciding on their choice of profession was parents.

Studies have also been made of the motives for choice of the teaching profession by people who decided to change to teaching after following another career for some time. Grant (1950)(2) made a study of the factors which influenced people who had been engaged in some form of National Service during World War II to choose teaching as their profession. He also explained the reasons for their choice. They were asked to answer a questionnaire on their personal background history and the circumstances which led to their decision to take up teaching. Results showed that the main reasons for men's decision to teach were a growing interest in young children and young people through having a family of their own, membership of a youth club and church activities. For women, the main reasons were growing interest in young children through church activities and running youth clubs.

Sutherland (1955) (3) made a comparison between the success in the teaching profession of the students admitted to train as teachers in Scotland under the Post-War Emergency Training Scheme and normal entrants to the profession. He found little difference between the two groups.

3. Teachers in Scotland under the Post-War Emergency Scheme', Brit.J. Ed.Psych., Vol. 25, pp. 78-91

Tudhope, W.B. (1944a), Motives for Choice of the Teaching Profession by Training College Students, Brit.J.of Ed. Psych., Vol. 14, pp. 129-141

Grant, P.J.T. (1950), The Social and Educational Background of 2. Emergency Trained Teachers and Reasons for Their Choice of the Profession', Brit.J. of Ed. Psych., Vol. 20, pp.164-173 Sutherland, J. (1955), A Survey of Students Admitted to Train as

Evans (1952)⁽¹⁾ made a study aimed at testing the hypothesis that attitudes towards teaching as a career may be affected by the type of society in a particular area, the socio-economic state of the pupil's home, the type of school he attended and attitudes to school. A test of attitudes towards teaching and an intelligence test were given to 211 School Certificate candidates from eight grammar schools in different parts of the country. Evans found that attitudes to school seemed to be most highly correlated (0.36) with attitudes to teaching as a career. Achievement as measured by School Certificate results and attitudes to working with one's hands were both negatively correlated with attitudes to teaching as a career. Neither the socio-economic level of the home nor having friends or relatives who were teachers appeared to affect attitudes to teaching as a career, but pupils whose interests were mainly academic or social were more likely to hold a favourable attitude to teaching as a career.

McCuffin (1958)⁽²⁾ in an investigation into the factors influencing choice of career among boys in two grammar schools, found that the most frequently quoted reason for choosing a particular job was interest in the job. Other reasons stated were liking for special subjects, good prospects and security, interest in people, good pay, hours of work and holidays.

In a survey of occupational values among 3,905 college students in the USA, Rosenberg (1957)⁽³⁾ suggested the existence of a relationship between an individual's value system and his choice of an occupation. Rosenberg sketched three distinctive value orientations:

^{1.} Evans, K. (1952), A Study of Attitudes Towards Teaching as a Career, Brit.J.of Ed.Psych., Vol. 22, pp. 63-69

McCuffin, SJ, (1958), Factors Influencing the Choice of Career by
Boys in Two Belfast Grammar Schools, Brit. J. of Ed. Psych., Vol. 28,
pp. 180-181

^{3.} Rosenberg, M. (1957), Occupations and Values, The Free Press, Glencoe, Illinois

'people-oriented', 'extrinsic reward-oriented' and 'self-expressionoriented' and showed that the distribution of these value orientations varied from one occupation to another.

Bending and Stillman (1958) (1) attempted to test the adequacy of factor analysis and content analysis techniques in identifying the dimensions of job incentives. It was hypothesized that job incentives of college students would lie along the 'need achievement vs. fear of failure dimension. 267 college students on a psychology course were asked to describe their job goal at graduation and to rank eight selected job incentive statements in order of importance in choosing a job. Factor analysis of the data obtained yielded three factors. They were defined as follows: (i) need for achievement versus fear (ii) interest in the job versus the job as an opportunity of failure; for acquiring status; (iii) job autonomy from supervision versus supervisor dependency. A content analysis of statements contributed by 29 per cent of the ranking sample group (267) revealed three major categories: opportunity to help others, job satisfaction and job interest as having major influence in the choice of a job.

In a survey into undergraduate attitudes to teaching conducted by Williams, Finch and Poll (1966)⁽²⁾ a random sample of 2745 English and Welsh students in their final undergraduate year in the faculties of arts, social studies and science were interviewed. Findings indicate that about 24 per cent of the students had decided to teach, whereas 22 per cent were determined not to do so. The remainder were neither committed to teaching nor opposed to it. Among women students, the proportion intending to teach (37 per cent) was

Bending, A.W. and Stillman, E.L. (1958), Dimensions of Job Incentives Among College Students, J. of Applied Psych., Vol. 42, No. 6, pp. 367-371

^{2.} Williams, M.R., Finch, S., and Poll, G. (1966), 'Undergraduates' Attitudes to School Teaching as a Career (England and Wales)', Central Office of Information: Social Survey for Ministry of Education, SS354, April

more than twice as large as that among men (17 per cent). There were also marked differences in the proportion of intending teachers in different universities: the Welsh universities produced the highest proportions (28 per cent of the men and 56 per cent of the women) and London University the lowest (10 per cent of the men and 24 per cent of the women). The results suggest that there are reasonable grounds for believing that the teaching profession will continue to recruit a high proportion of women graduates; that some men graduates will continue to be attracted into teaching by its social value, its working conditions, the opportunity it gives to make continuing use of specialist knowledge and perhaps also by the security and pension arrangements that it offers. The substantial majority of those opposed to teaching gave poor pay and prospects as one of their reasons. The data, however, indicate that they badly underestimated the actual levels of graduate teacher earnings. The survey found little evidence that students were influenced against teaching by any of the people whose advice on careers they would normally be expected to seek - their parents, the staff of their school and the academic staff and appointments board at their university. In the survey subjects were asked to rate how they felt about teaching in various kinds of schools and at different levels. The most popular choice was teaching in grammar school at sixth form level. Then in descending order came grammar school teaching below sixth form level and teaching in secondary modern schools, then teaching juniors and finally teaching infants. The results suggest that lack of knowledge of the true facts about salary and skills was one of the main reasons of those rejecting teaching as a career.

Liversidge (1961)⁽¹⁾ attempted to study the relative influence of educational background and of social origin in determining the

^{1.} Liversidge, W. (1961), 'Life Chances' in William, W.M. (ed.), (1974), Occupational Choice, George Allen and Unwin, pp. 58-78

occupational expectations and aspirations of children. 616 school children in grammar, modern and primary schools in Leicestershire completed the questionnaire.

This questionnaire asked them (1) to give information about their social background, school age and parents' occupations;

(2) to state which kind of job they would like to do if they could choose whatever they fancied (fantasy aspiration); (3) to state what they expected to do when they left school (real expectations); (4) to grade various occupations in terms of status; (5) to state what earnings they expected in the jobs of their choice; (6) to state their preferred age of marriage.

Among the findings related to our investigation were that: Aspiration and expectations choices of the grammar school boys were significantly higher than those of their counterparts in secondary modern schools: while 93 per cent of the grammar school boys would like upper class jobs, only 46 per cent of the modern school boys aspired to them. The aspirations and expectations of the girls in grammar school were slightly lower than those of the boys. contrast, the girls in modern schools did not aspire to a higher occupation, but expected to work in a higher social class than their boy counterparts. The older girls aspired to higher occupations than the younger; 90.1 per cent of the modern school girls and 79.1 per cent of the primary school girls chose the higher class occupations. All the pupils tended to upgrade the status of white collar workers compared with the ranking made by the adult scale. The results on the whole suggest that

"Despite these minor deviations, it would seem clear that these children, even from primary school level, have a pretty clear idea of the social structure of the community in which they live, and of the position they will occupy in that community when they leave school."(1)

^{1.} Ibid. p. 70

The results also indicate that

"children have an extremely realistic perception of the adult wage and salary structure."(1)

Timperley and Gregory (1971)⁽²⁾ investigated the career aspirations and expectations of sixth form leavers and the information which influenced their career perceptions and their images of industry.

233 girls in four girls' grammar schools and 198 boys in five boys' grammar schools answered a questionnaire which asked them to identify the occupation they would like from a list of occupations. Temperley and Gregory⁽³⁾ found that:

- (1) the aspirations of many sixth formers were realistic in nature and needed to be examined in the context of their expectations:
- (2) over a quarter of their sample aspired to occupations in the industrial and commercial sector and the educational sector;
- (3) of those who wanted industrial or commercial careers, 68.5 per cent were male and 31.5 per cent female;
- (4) students wishing to enter the industrial and commercial sectors were more likely to come from Social Class III (skilled workers), and students wishing to enter education were more likely to come from Social Class I (professional people).

An earlier study by Clark (1968)⁽⁴⁾ involving 1,511 pupils (634 girls and 877 boys) from eighteen secondary schools showed that, of these pupils, thirty-five boys and 115 girls stated that they hoped to teach. Low salaries and fear of discipline problems were among the main reasons for rejecting teaching. The perception of pupils of the

 <u>Ibid.</u>, p. 71
 Timperley, S.R. and Gregory, A.M. (1971), Some Factors Affecting the Career Choices and Career Perceptions of Sixth Form Leavers, in Williams, W.M. (1974) (ed), Occupational Choice, op. cit., pp. 187-204

 ¹⁶¹d., p. 204
 Clark, J.H. (1968), The Image of the Teacher, Brit.J.of Ed.Psych.,
 Vol. 38, pp. 280-285

image of the teacher, enjoyment at school, and parental influence were among the main factors influencing pupils to choose teaching as a Shipman (1966) (1) concluded from a survey of student teachers in a college of education that the school and older fellow-students were important sources of information for the individual who decided Morris (1969)⁽²⁾ found that the prospect of interesting work was an important reason for a sixth former's or college entrant's choice of teaching as a career.

In 1965 Mori (3) investigated the motivations for becoming a teacher of 556 student teachers at Michigan State University, USA. The basic assumption underlying his study was that motivation for choosing a particular career is the resultant of two vectors: (1) the individual's attitude toward occupational values and (2) his selfconcept of his need for these values. He further hypothesised that motivation not only indicates behaviour but also determines its direction, strength and perseverance.

After examining previous studies of motivation in the United States, England and Japan, Mori constructed a questionnaire covering three main facets of motivation: (a) Job-Person Interaction; (b) Aspects of Job; (c) Time (e.g. (i) pre-job: the period of preparation; (ii) on-Job: the actual working period; (iii) post-Job: the time after resignation or retirement). These facets distinguished thirty-six theoretically possible sub-universes or motivations for becoming a teacher.

Shipman, M.D. (1966), 'Personal and Social Influence on Work of 1. Teachers' Training College in Cohen, L. (ed.). 'Students' Characteristics and Attitudes in a College of Education in Lomax, D.E. The Education of Teachers in Britain, London: John Wiley Morris, R.N. (1909), The Sixth Form and College Entrants, London: Routledge and Kegan Paul

^{2.}

Mori, T. (1965), 'Structure of Motivations for Becoming a Teacher' 3. J. of Ed. Psych., 56, pp. 175-183

Mori concluded from an elaborate statistical analysis of the data he obtained that

"(a) the motivation for becoming a teacher derived from five communities - Economic, Social, Interpersonal, Intellectual and Ethical; (b) each of the five communities was the interaction between the attitudes toward the occupational values of teaching and the self-concepts of needs for becoming a teacher; and (c) the five communities kept the order which was predicted from their semantic definition in the facet design."(1)

Kitchen (1965)⁽²⁾ used the Semantic Differential technique to investigate the changes of teacher attitude in five areas: attitude to the teaching profession, to training, to the self, to teachers as people and to abstract values. A factor analysis of the results showed that attitudes of first year students differed from attitudes of third year students. First year students teachers tended to associate college with the personal attainment of maturity, while third year students were more concerned with responsibilities to their chosen profession.

In a similar study Bewsher (1966)⁽³⁾ suggests that it is an interest in people that makes the teaching profession attractive to many students. Raby (1970),⁽⁴⁾ as the result of his investigations of the motivations of students in a college of education, found that the dominant motive for choosing teaching as a career was the desire to work with children.

In a longitudinal study of student identification with a profession Cohen (1969)⁽⁵⁾ followed 802 freshmen entering the

4. Raby, I (1970), 'The Motivation of Students in a College of Education for the Choice of Teaching as a Career', in Lomax, D. (ed.), op.cit.p307
5. Cohen, L. (1969), 'Student Identification with a Profession', Ed.

Research, 12, 1, pp. 41-45

Mori, T., op. cit. p. 182
 Kitchen, R.D. (1965), 'An Investigation into the Attitudes of First Year Students in a Training College using the Semantic Differential Technique', in Lomax, D. (ed.) Teacher Education cited in Education in Britain, No. 3, 1973, p. 316

Bewsher, H.G. (1966), 'A Study of Attitudes and Incentives among a Group of Students Training to be Teachers', M.A. thesis, University of London. In D Lomax (ed.), Education Research in Britain, 3: University of London Press, p. 307

University of Bradford (1966) over two years. A questionnaire was constructed to elicit subjects' views on the importance of participation in a wide range of activities, apart from the study of their particular degree subjects. A number of cultural and intellectual activities were rated on a five-point scale ranging from "1" denoting absolutely essential' to "5" denoting 'of no importance at all'. These freshmen were also asked to give their ideal job choice on leaving University or their probable choice of occupation. Finally, they completed the Rosenberg Scale of Occupational Values by rating as of high importance (1) median importance, (2) of low importance, (3) the extent to which they thought their future career would have to satisfy each of ten values. The 1966 entrants were asked to complete these three questionnaires in 1968. Forty-seven (5.9%) of the freshmen stated that their ideal job was teaching, and 45 (5.6%) thought teaching would be their probable Of the 92 students who chose occupation on leaving university. teaching in 1966 as their ideal or probable job, 54.1% gave teaching as their ideal or probable choice of occupation. When Cohen compared a non-teacher with a teacher group, he found that teachers were more likely to have come from working class families than non-teachers. He also found that the teacher group was significantly more oriented towards people on the Rosenberg Scale than the non-teacher group. After a two-year period, the intending teacher group were found to have moved increasingly towards subject specialism, to continue to regard intellectual and cultural activities as highly important, and to wish for a high level of informal contact with representatives of the teaching profession in their own university. The findings suggest

"a process of identification on the part of the students who have made their choice of future occupation with some degree of certainty."(1)

^{1.} Cohen, I, (1969), op. cit., p. 45

In another study of the occupational choices of sixth formers, Cohen (1969)⁽¹⁾ found that 17% of his sample intended going to a college of education. Able girls were more likely to choose a college of education than able boys. Cohen argues that in general the girls, while not underestimating themselves, are content with their prospects, possibly in anticipation of family responsibilities.

Barker Lunn (1970), (2) in the course of her national survey of streaming in the primary school, asked all the children in the fourth year what they would like to do when they grew up. Thirteen per cent of the girls aspired to be teachers compared with only 2 per cent of the boys. Further, the girls' choices appeared to be more realistic and more influenced by their ability than the choices of the boys seemed to be. For girls, nursing and teaching were more popular, while the majority of boys wished to be footballers or sportsmen.

Dale (1969)⁽³⁾ asked a sample of 2,000 pupils from forty-two schools to write down the occupations they would like best in order of preference. The results with respect to teaching, for children aged fifteen, showed that, at the secondary stage, girls expressed a stronger preference for teaching than did boys; while the proportion of boys interested had increased, there were still twice as many girls as boys preferring teaching.

In a more advanced study Ashley et al (1970)⁽⁴⁾ attempted to test the hypothesis that student motivation to become a teacher

^{1.} Cohen, I. (1969), 'Sixth Form Pupils and Their Views of Higher Education' in Further Studies of a Technological University: Vol. 1.Research Report by the School of Research in Education, Univ., Bradford.

^{2.} Barker Lunn, J.C. (1970), 'Streaming in the Primary School', N.F.E.R.

^{4.} Dale, R.R. (1969), <u>Mixed or Single Sexed School</u>?, London: Routledge and Kegan Paul, Ch. 17

^{5.} Ashley, B., Cohen, H., McIntyre, D. and Slather R. (1970), A Sociological Analysis of Students' Reasons for Becoming Teachers', Sociological Review, 5, 18, pp. 53-69

varied in four distinct dimensions, corresponding to four defined aspects of role, <u>viz</u>. those of the teacher as educator, teacher, person and worker. A questionnaire was developed using the reasons for choosing teaching obtained from 542 students in a training college in the Edinburgh area.

Two samples, one of the whole year of graduate student teachers, taking the one-year postgraduate course of professional training, and the other of women taking a three-year course of training, completed the questionnaire. They were asked to rate each reason for choosing teaching on a five-point scale according to its importance in influencing them to take up teaching. The data from each group were then factor analysed. Results showed different groups placed different emphases on three teaching roles. These may be conceptualised as follows: the teacher as educator, the teacher as worker, and the teacher as a person. The fourth factor was widely different for the sample groups.

A study carried out in France has been reported by Currible (1971). Trench students were asked to assess their motives for taking up teaching, on fifteen scales. Four groups of motives were explored: (1) motives deriving from parents and teachers (2 scales); (2) motives connected with features of the teacher training programme (4 scales); (3) motives connected with the professional and social status of the teacher (5 scales); (4) motives of a strictly vocational kind towards teaching as such (4 scales). The principal findings of the investigation were as follows: (1) at the age of fifteen or sixteen the choice of the majority of school pupils is determined by the prospective training

^{1.} Currible, D. (1971), The Vocational Motivations of a Primary School Teacher Trainee, <u>International Review of Applied Psych.</u>, Vol. 20, No. 2, pp. 101-109

conditions, rather than by professional considerations; (2) teaching is chosen because it appears to be a sheltered and safe profession; like a residential college it provides a sheltered environment; (3) strictly vocational motives towards teaching as such are a matter of ethics rather than psychology, and are necessarily, therefore, somewhat unstable; (iv) motivations towards the teaching profession tend to improve with increasing age. The investigator suggests the importance of studying the psychological process which underlies the desire to exercise authority over young persons.

In an inquiry into the factors motivating eighty-two teachers from German secondary schools to choose teaching as a career, KO b (1956)⁽¹⁾ found that for thirty-six (44% of the sample), teaching was a second choice of occupation. Twenty-one of the thirty-six had worked for several years in other occupations. In view of the fact that teaching represents a career of relatively high prestige in the German Civil Service and requires a lengthy professional training, Knob suggests that the unexpectedly large number of the group who made teaching their second choice might be attributaed to the nature of their professional training which did not impose adherence to a definite professional goal from the start of the course but permitted students to change their goals without loss of time or money.

In Queensland, Australia, McSweeny (1972)⁽²⁾ attempted to set out a procedure for measuring the extent to which the value system of the individual affects his occupational choice. He carried out an investigation with secondary school students using Prince's (1958)⁽³⁾ Differential Values Inventory which tests reasons for choice of

^{1.} Kob, J. (1956), 'Motives for Taking Up Teaching', in Halsey,
A.H., Floud, J. and Anderson, G.A. (eds.), Education, Economy
and Society, The Free Press of Glencoe, 1963, pp. 560-564
2. McSweeny, R.V. (1972), 'Occupational Choice and Student Values',

Ed. Research, Vol 15, pp. 106-108
7 Prince, R. (1958), Values Study Questions, Booklet of Instructions, Form 65
Davis, University of California

occupation and value orientations regarding Morality, Time, Autonomy and Achievement.

Responses were classified by two raters working independently as 'Traditional (T), Emergent (E), or Indeterminate (I) in the value orientation shown. McSweeny found that adolescents who were traditional-oriented on the Values Inventory tended to be so in choosing an occupation, whereas emergent-oriented adolescents showed emergent values in their occupational choices. There was, then, a transition of theoretically held values into practice.

(3) Studies Aimed at Studying the Factors Influencing Teacher Adjustment and Commitment to Education

Rudd and Wiseman (1962)⁽¹⁾ enquired into the sources of dissatisfaction among 590 teachers in the Manchester area. represented about 72 per cent of the total output of the training colleges in and around Manchester and the Department of Education of the University of Manchester, School of Education. questionnaire designed to elicit teachers' estimates of current levels of dissatisfaction and major sources of dissatisfaction in the profession. They found that subjects who had had experience of teaching expressed a higher level of satisfaction than subjects who had had no experience. Teachers in infant and grammar schools appeared to derive more satisfaction from their work than teachers in other types of school, e.g. secondary modern schools and junior schools. Sources of dissatisfaction included low salaries. poor human relationships among the staff, inadequate buildings and equipment, heavy training load, inadequacies of training, large classes, personal feelings of inadequacy, lack of time for certain professional duties and low status of the profession in society. In listing items, women seemed to be pre-occupied with day-to-day

^{1.} Rudd, W.C. and Wiseman, S. (1962), 'Sources of Dissatisfaction among a Group of Teachers', Brit. J. of Ed. Psych., Vol. 32, pp. 275-91

classroom problems, whilst men found their frustrations in a wider context.

In an attempt to assess teacher effectiveness and adjustment to teaching Cortis (1972) (1) followed up a sample of 222 teachers with two years' experience. Subjects were given batteries of tests tests of intelligence, of attitudes and of personality - in the final year of their college courses. In addition, they supplied biographical details and their college grades. At the end of their second year of teaching, information about their level of personal satisfaction with teaching and their headteacher's rating of them as teachers were obtained. Cortis found that: (1) there were significant relationships between college-teaching assessment and teacher performance over the two-year period; teachers rated more highly by their head teachers were superior in all college examinations, as well as on practical teaching, to those rated as less able; (2) teachers given low ratings were pupils of larger schools while those given higher ratings had attended smaller classes in smaller schools; (3) one quality of personality that went with higher ratings of overall teaching ability was sensitivity; suspiciousness and insecurity were characteristic of teachers given lower ratings; (4) men teachers in primary schools were found to be more sensitive, to have higher scores on a flexibility test and to come from areas of denser population than secondary school teachers: (5) those secondary school teachers who were more selfsufficient and conscientious tended to come from growth areas; (6) women teachers in primary schools appeared to be more stable as indicated by their responses to the questionnaire, but women teachers in secondary schools had more G.C.E. A! levels and did better on written examinations and intelligence tests.

⁽¹⁾ Cortis, G.A. (1972), 'The Assessment of a Group of Teachers in Relation to Earlier Career Experience', Ed. Review, Vol. 25, pp. 112-123

(7) the teachers who gained the most satisfaction from teaching were those whose teaching was highly rated and who displayed the quality of friendliness. The women's scores on the tender-mindedness scale were significantly higher than those of the men at the one per cent level.

In an enquiry into the reasons given by students who withdrew from a college of education Grane (1972)(1) suggested that adjustment to teaching was the basic problem. His main hypothesis was formulated as follows: there is a significant relationship between attitudes towards acceptance of self and others, and adjustment to teaching. Two separate Likert-type Scales were constructed, one to measure attitudes towards acceptance of self and one to measure attitudes towards acceptance of others. The sample population consisted of three groups: Group I, 183 women under twenty-five, Group II, 113 women over twenty-five; and Group III, fifty-three men under twenty-five, from two colleges of education. A battery of measures which included the attitudes scales (self and others) and estimates of job satisfaction were given to all three groups. The Cattell 16 P.F. questionnaire was given to the younger group. The scores on all measures for each group were factor analysed. Inability to teach was examined in a supplementary investigation. Questionnaires were completed by three groups of women students: a younger and older group still in college and a group of young students who had withdrawn voluntarily. The findings supported the hypothesis that there is a relationship between attitudes towards acceptance of self and others and adjustment to teaching. This is indicated by the following correlations: (i) the scores on attitude scales correlated significantly and consistently with three different estimates of

^{1.} Grane, C. (1972), 'Attitudes Towards Acceptance of Self and Others and Adjustment to Teaching', Brit. J. of Ed. Psych., Vol. 44, pp. 31-36

expected job satisfaction in all three population samples and the factor analysis procedure used confirmed these results; (ii) the mean scores on attitude scales (self and others taken together) for the sub-samples of students who had never considered withdrawal from their college course were significantly higher than the mean scores of students who had withdrawn; (iii) statements made by students who withdrew were shown to be expressions of non-acceptance of the self/or others.

Cortis (1968), in a study of 259 students drawn from three colleges of education, found that success in the classroom appeared to be linked with previous teaching experience and a naturalistic, tender-minded attitude to education, while academic success appeared to be related to high verbal ability and a tough-minded attitude to education.

with a view to investigating the effects of sex role on women's commitment to teaching McNamara (1972)⁽²⁾ conducted a survey into the process by which women students in a college of education became committed to the occupational role of a teacher. All the first, second and third year students in a college of education completed a role norm inventory designed to examine four sectors of the teacher's role: acting towards children, acting towards colleagues, acting towards parents and acting towards the community. Subjects were also asked to complete a questionnaire which sought information on past, present and future vocational plans. In addition, they were asked to respond to a scale measuring vocational commitment.

Cortis, G.A. (1968), 'Predicting Student Performance in Colleges of Education', Brit. J. of Ed. Psych., Vol. 38, pp. 115-122
 McNamara, D.R. (1972), 'Women's Commitment to Teaching',

^{2.} McNamara, D.R. (1972), 'Women's Commitment to Teaching',
Research Forum on Research Education, National Foundation for
Educational Research in England and Wales, pp. 101-110

McNamara found that a large number of women students made the decision to teach at a comparatively early age in their school careers. This contradicts the currently held view that teaching is a second choice occupation and that students decide to become teachers only after failing to obtain the necessary qualifications for other occupations. He also found that students who made an early decision to become teachers were more likely to be satisfied with that choice, and to indicate a higher degree of vocational commitment; students who were satisfied with their choice of teaching were likely to indicate a higher degree of vocational commitment. The author suggests that

"it may be worthwhile to probe students' reasons for becoming teachers in order to discover when they made the decision rather than to discuss their future career plans, since they are likely to be related to their future family commitments."(1)

Part of a large survey under the supervision of the National Education Association of the USA (1957)⁽²⁾ was designed to examine the beginning teacher's commitment to a teaching career. A random sample of 7.150 beginner teachers in all school districts and all parts of the USA in 1957 was studied. Information was obtained about each individual's decision to enter teaching and his occupational plans. It was found that women were more committed to teaching than men. Beginning women teachers had a contingent commitment to teaching, their plans generally being dependent upon factors extrinsic to their work (e.g. family reasons). Beginning men teachers did not see teaching as a life-time career; they thought rather in terms of moving into a non-teaching job; their occupational plans were largely dependent on factors intrinsic to

^{1. &}lt;u>Ibid</u>., p. 48

National Education Association (1957), 'The Beginning Teachers: Status and Career Orientation', U.S. Department of Health Education and Welfare. Office of Education, Washington, U.S.

work (e.g. pay, status ...). Women also tended to make earlier decisions to take up teaching and to be more content with their decision to teach than men. In examining the factors related to a teacher's commitment to a teaching career it was found that beginning teachers in the higher salary range were less likely to leave teaching and more likely to have educational plans, than those on the middle and lower salary scales; that teachers who were more satisfied with teaching as indicated by a direct measure of jobsatisfaction were more committed to teaching and education: that beginning teachers who scored high on the People-Oriented Value Scale were more committed to teaching while those who scored high on the Extrinsic Rewards Value Scales were less committed to teaching. However, the results suggest that commitment to teaching is a complex phenomenon which cannot be easily reduced to a single measure running from strong to weak, though it appears that the time dimension is an important factor: variations in plans were observed depending on whether the question referred to the next year, the next five years or the teacher's entire career. The large number of factors to be related to one or more aspects of career commitment make it clear that there is no simple answer to what produces dedicated teachers. Economic factors were found to be of some importance, especially for men, but the data show other factors, e.g. occupational values and job satisfaction. These seem to be of equal importance.

Wiseman and Start (1965)⁽¹⁾ reporting on 248 teachers from seven colleges of education and one university department of education five years after their training was concluded, reported that

^{1.} Wiseman, S. and Start, K.B. (1965), 'A Follow-Up of Teachers Five Years After Completing their Training', Brit. J. of Ed. Psych., Vol. 35, pp. 41-78

"apart from the graduate and grammar school teachers it is difficult to see what the professional course is associated with - certainly not with promotions, head-master's assessment, or satisfaction in the profession."(1)

Wiseman and Start's findings are in contrast to those of an earlier study (Tudhope, 1942)⁽²⁾ which found correlations of .84 for men and .77 for women between the final college teaching mark and an assessment made by an inspector after three years of teaching.

(4) Studies Aimed at Measuring Changes in Attitudes Towards Education Among Student Teachers During the Course of Training

It is difficult to assess the change in teachers' attitudes that were the effects of college of education courses. Inconsistent findings can be observed in the results of previous studies in this section. These inconsistencies may be due to the fact that many studies used cross-sectional data in considering the differences between sample groups rather than data from longitudinal studies, in which measures are administered to the same individuals over a period of time. In some studies where longitudinal data are used, the measures may be made over a relatively short period of time.

Cohen (196)⁽³⁾ concludes from a survey of research into changes of attitude during the first year of teaching that

"A number of British studies have shown attitude changes similar in form to those shown by some of the American research, that is, increasingly progressive attitudes during the college course followed by reversals when the students experienced full-time teaching."

3. Cohen, L. (1969), 'College and the Training of Teachers', Ed. Research, Vol. 11, p. 15

^{1.} Wiseman, S. and Start, K.B. (1965), 'A Follow-Up of Teachers Five Years After Completing Their Teaching', British J. of Ed. Psych., Vol. 35, pp. 41-78

Psych., Vol. 35, pp. 41-78

2. Tudhope, W.B. (1942), 'A Study of the Training College Final Teaching Mark as a Criterion of Future Success in the Teaching Profession', British J. of Ed. Psych., Vol. 12, pp. 167-171

Jacob (1957), (1) reviewing a large number of surveys made in the USA of the values and attitudes of students in social studies departments, came to the conclusion that the effect of college seemed to be confined to "socialising" the individual, to "shaping" his values so that he could fit comfortably into the ranks of American college alumni. Insofar as change did take place, it was in the direction of stronger orientation towards status, achievement and social prestige. (2)

The most discouraging conclusion, however, which Jacob comes to is that no significant changes in student values could be attributed directly to the curriculum or the quality of teaching. Neither did the teaching method have any influence on the values of the majority of students.

In contrast to Jacob, Newcomb and Feldman (1969)⁽³⁾ concluded from their analysis of numerous surveys conducted in America over some forty years that a consistent pattern of change in students' values and attitudes in the direction of a more liberal and more tolerant view of ethnic differences could be distinctly noted.

In England, Butcher (1965)⁽⁴⁾ found changes associated with teacher training on the three scales designed to assess naturalism, radicalism and tender-mindedness. A consistent tendency for scores to increase in the direction of more naturalism, radicalism and tender-mindedness was observed during the period of the course. Changes in scores on individual items were also studied. There

4. Butcher, H.J. (1965), The Attitudes of Student Teachers to Education, Brit. J. Soc. Clin. Psych., Vol. 4, pp. 17.-24

^{1.} Jacob, P.E. (1957), 'Changing Values in College: An Exploratory Study of the Impact of College Teaching' reported in McLeish, John (ed.) <u>Teachers' Attitudes: A Study of National and Other Differences</u>. Cambridge, 1969, pp. 33-39

Tbid., p. 38
 Newcomb, T.M. and Feldman, K.A. (1969), 'The Impact of College on Students', reported in Cohen, L. (ed.) 'The Impact of the College Course' in Lomax, D.E. (ed.) The Education of Teachers in Britain. Wiley, London, 1972, p. 405
 Butcher, H.J. (1965), 'The Attitudes of Student Teachers to

was relatively little regularity of pattern between the three groups of the sample, (teachers: graduate students and training college group). The biggest change in each group was on the item: time to begin reading lessons is when children felt the need for them (N 18)". Further analysis suggested that these tendencies were reversed when students took up their first posts.

McIntyre and Morrison (1967)(1) replicated the work of Butcher in their study involving 430 graduate and non-graduate Scottish student teachers. They confirmed that students changed in the direction of increased scores on all the three scales after one year of the course.

Morrison and McIntyre (1967)⁽²⁾ report the result of an experiment in which 100 teachers were retested with the Manchester Scale at the end of their first year of teaching. They found that the gains in student scores were changed in the opposite direction during the first year of teaching.

Hussel and Smithers (1974) examined changes in the educational opinions of student teachers associated with college experience and school practice. Batteries of tests, including Oliver's Survey of Opinions about Education were administered to a sample of student teachers in a college of education both before and after teaching practice and college experience. Hussel and Smithers found that over the six months of study, students' scores on the tendermindedness scale decreased significantly in contrast to what Butcher (1962) and McIntyre and Morrison (1967) had found. On the other

Soc. and Clin. Psych., Vol. 6, iii, pp. 161-163
Hussel, I. and Smithers, A. (1974), Changes in the Educational Opinion of Student Teachers Associated with College and School 3•

Practice', Res. in Ed., No. 11, pp. 43-49

McIntyre, D. and Morrison, A. (1967), The Educational Opinions 1. of Teachers in Training', British Journal of Soc. and Clin. Psych., Vol. 6. pp. 32-27

Morrison, A. and McIntyre, D. (1967), Changes in Opinion About 2. Education During the First Year of Teaching, The British J. of

hand, scores on the Radicalism Scale increased. This confirmed the findings of Butcher and McIntyre. Scores on the Naturalism Scale were slightly, but not significantly, higher.

An ambitious survey in this area was carried out by Mcleish (1969)⁽¹⁾ who made a longitudinal study of changes in students' attitudes in ten colleges of education in a single institute of education area. The whole intake of the ten colleges (1247) in one particular year was tested at the start of their college course and re-tested at the end of their course. A battery of tests had been designed to measure ten dimensions of college environment - student energy, concern for individuality, social commitment, staff image, intellectual climate, clarity and systematic nature of courses, student loyalty to college, group participation, humane regulations and lack of tension. This battery of tests was based on Pace and Stern's Inventory.

"The general hypothesis underlying the investigation was that the ten different colleges, established in a variety of urban or rural environments, providing different educational philosophies and regimes, operated to produce different measureable effects not only in the standards of academic achievement of students but also on their attitudes and possibly on their value system as well."(2)

The College Environment Index was related to thirty attitude and personality variables, to students' final examination results, to attitudes to three methods of teaching and twenty-three indexes of college characteristics classified into four categories: size of college, character of college, nature of courses provided and staff preparation. The relationships between various dimensions were examined by factorial analysis. Two factors were considered, the first being a general approval factor, the second a bi-polar

^{1.} Mcleish, J. (1969), 'Students' Attitudes and College Environments', Cambridge Institute of Education

^{2.} Ibid., p.25

factor which contrasted student response with staff competence. Further analysis, including analysis of the variables affecting students! attitudes on completion of their courses, showed that, over a period of three years, these attitudes changed in the direction of lecturers' and tutors' views insofar as they tended to move from a religiousconservative attitude towards a secular-humanism one. associated with greater emphasis on spontaneity in child development. less approval of traditional teaching methods and less emphasis on punishment. The mature students on two-year courses changed in certain areas. In religious affiliation, for example, there was change in the direction of non-commitment; there was no change in basic personality structure or in personal values. The very experienced teachers on a one-year course changed little in their attitudes. They gained information, acquired some insights and skills but retained their personal beliefs and opinions. There was a direct relationship between the educational quality of the environment and the amount of change that took place in the students. In all colleges the students showed increases in scores on the naturalism scale. There were smaller, but statistically significant. changes in radicalism and tender-mindedness - a small increase in scores on radicalism, a small decrease in scores on tendermindedness.

Herbert and Turnbull (1963)⁽¹⁾ used a battery of measures including a Moray House Adult Reasoning Test, Berneiter Confidence Scale, the Minnesota Teacher Attitude Inventory and a social intelligence test to measure personality factors of Scottish women on a three-year education course. Results showed that scores on the MTAI increased significantly among second and third year students as

^{1.} Herbert, N. and Turnbull, G.H. (1963), 'Personality Factors and Effective Progress in Teaching', Educational Review, 16, pp.24-31

compared with the first year group. Those second and third year students also showed an improvement in scores for verbal reasoning. an increase in confidence and gains in social intelligence, i.e. the sort of skill needed for adjustment to social situations. A similar finding was reported by Dickson (1969). (1) He found that the MTAI scores of students in training for primary school teaching increased during the period of their course. Using the same inventory, Scates (1969) (2) had also found that elementary school teachers in the USA with four years college education tended to score significantly higher than those with two years of college education. A fifth year of study increased their scores markedly.

In England Evans (1967) (3) found marked changes in students' scores on the MTAI after one year of training. On the other hand. she found no significant changes on the Study of Values Test by Allport. Vernon and Lindzey.

Steel (1958)(4) also found a marked change toward a more progressive attitude during training course on his scale, "Attitude Towards Education in Junior Schools", by all age groups, all previous occupation groups and by those who were initially traditional in attitude as well as those who were initially progressive. Further analysis suggested a return to a more traditional viewpoint took place during six months of teaching. This finding supports the earlier finding of Kissack (1956)⁽⁵⁾ that there were significant changes in the direction of corporal punishment after ten months of full-time teaching.

Dickson, G.E. and Wiersman, W. (1966), Student Teachers - American 1. and British', New Society, 4 August, pp. 187-191

Scates, D.E. (1969), Significant Factors in Classroom Attitudes, 2.

The J. of Teacher Education, Vol. 10, pp. 274-279

Evans, K.M. (1967), Teacher Training Courses and Student Personal Qualities, Ed. Res., Vol. 10, No. 1, pp. 72-77

Steel, M. (1958), op. cit. 3.

Kissack, M. (1956), op. cit.

Among the studies which have used a longitudinal design in investigating the impact of a college of education course upon student teachers is that of Marsland (1969). A comprehensive battery of measures was given to a sample of 150 students, a one-year intake in a college of education.

Marsland's analysis of his data shows that during their course of professional training students become:

- (1) increasingly educational in their orientation to teaching and to classroom interaction and less academic;
- (2) more highly committed to the "uniate" organisation of teachers and less committed to school organisation and its requirements;
- (3) less concerned with career-oriented values (status, income, prospects) and more concerned with vocation-oriented values (commitment to teaching, usefulness of teaching and satisfaction with the service);
- (4) more progressive and less traditional in their educational philosophy and methods;
- (5) increasingly affective in their role definitions;
- (6) increasingly specific and less diffuse in their role definitions.

Mahan and Lacefield (1977)⁽²⁾ reported a study involving 123 student teachers and forty-two supervising teachers in three primary schools. This investigated the effects of longer experience of teaching practice with multiple role models (supervising teachers) upon student teachers' value orientations toward education and schooling. Lacefield's Educational Preferences Scale was used as a measure of attitude in four dimensions: viz., the nature of

^{1.} Marsland, D. (1969), 'An Exploration of Professional Socialisation: The College of Education and the School Teacher's Role', SRHE 5th Annual Conference, pp. 45-78

Mahan, J.M. and Lacefield, W. (1977), Educational Attitude Changes During Year-Long Student Teaching, J. of Exp. Ed., Vol. 46, pp. 4-15

knowledge, the nature of learning, the nature of the learner and the purpose of school. They examined the differences in studentteacher scores before and after both the first term and second term of teaching practice as well as the ratings given by forty-two teachers supervising them. Results suggest that the supervising teachers' values and attitudes exercise a powerful influence upon the orientation of their student teachers. This confirms the findings of Yee (1969), (1) that most student teachers experience change in their attitudes towards those of their supervising teachers.

Edgar and Warren (1969)(2) found in a Californian school that. in attitudes about professional autonomy, new teachers shifted towards views held by their immediate supervisor.

Similarly, Johnson (1966)⁽³⁾ found in a British study that teachers' attitudes towards educational research correlated with those of the head of their school. He argued that this indicated heads influence their staff in this respect.

In Norway, Lauglo (1976)(4) investigated the influence on teachers' attitudes of their principals, their colleagues, the agecomposition of the school staff, size of school and the achievement levels and social origins of students. 1153 teachers in 775 schools answered a questionnaire sent to them by post. questionnaire included a Likert-type scale of 'reform-mindedness'.

Johnson, M.E.B. (1966), 'Teachers' Attitudes to Educational Research', 3.

Yee, A.H. (1969), Do Co-operating Teachers Influence the Attitudes of Student Teachers?', J. of Ed. Psych., Vol. 60, pp. 327-332

Edgar, D.E. and Warren, R. (1969), Power and Autonomy in Teacher 2. Socialisation' reported in Lauglo, J. (1976) (ed.), 'Teachers' Attitudes and the School Context; the Case of Upper-Secondary Teachers in Norway, Comparative Educational Review, Vol.20, p.70

Educational Research, Vol. 9, pp. 74-79

Iauglo, J. (1976), 'Teachers' Attitudes and the School Context: 4. the Case of Upper-Secondary Teachers in Norway', Comparative Ed. Review, Vol. 20, pp. 61-78

consisting of eighteen items designed to measure the extent to which a teacher had a favourable attitude towards reform of the 'gymnasium', the traditional Norwegian grammar school. It also indicated a 'rule-orientation scale'. This was conceptualised as a continuum ranging from 'restricted' to 'diffuse'. Teachers at the restricted end of the continuum were thought to define their own school tasks narrowly, whereas those at the diffuse end were conceptualised as displaying the opposite constellation of traits. Analysis of results showed that younger teachers were more reform-minded and more diffuse in their role orientation, and more progressive, less authoritarian and more in favour of research and innovation than older teachers. Correlations with colleagues' attitudes suggest that teachers do influence each other's opinions and attitudes on salient occupational issues.

Sandgram and Schmidt (1956)⁽¹⁾ showed that attitudes of student teachers towards children and school were improved after the period of teaching practice. They found that student teachers working with a supervising teacher whose attitudes towards pupils were superior to their own, improved significantly as a group in their attitudes towards pupils during their training course, while student teachers working with supervising teachers whose attitudes were inferior to their own did not change for the worse. Oelke (1956)⁽²⁾ found that students scoring best on the Minnesota Teacher Attitude Inventory before teaching practice expressed greater acceptance of children after the teaching practice period, while those with the poorest rating tended to become less tolerant of children's behaviour.

Sandgram, D.L. and Schmidt, (1956), 'Does Practice Teaching Change Attitudes Toward Teaching?', J. of Ed. Res., Vol. 49, pp. 673-680

Oelke, M.C. (1956), 'A Study of Student Teacher Attitudes Towards Children', J.of Ed. Psych., Vol. 47, pp. 193-198

The Minnesota Teacher Attitude Inventory already mentioned seems to have been a common instrument for the measurement of attitude change among student teachers and serving teachers in the USA. Callis (1950), one of the authors of the Inventory, studied changes of opinion among American student teachers during their training course. He found that opinions during the training course as measured by the MTAI were of sufficient stability to make them probably useful for predicting teacher-pupil relationships and for teacher selection.

The findings of Callis's study were supported by the findings of Day (1959)⁽²⁾ who examined the scores of graduates of Florida State University on the MTAI both before and after their initial teaching experience. Day found a mean loss of twenty points on the Inventory after the first six months of teaching. This loss was similar to that reported by the authors of the test. With a non-teaching group, Day found that a loss of only 1.5 had occurred. He suggested that students of Florida State University who prepared for teaching exhibited unrealistic attitudes towards children and school work at the time they started their internship and showed a drastic shift in the direction of less desirable attitudes after six months of teaching.

By means of factor analysis techniques Ward and Rushton (1969)⁽³⁾ attempted to study the relationship between the personality of a teacher and his/her degree of satisfaction with the job, his/her attitudes to education and perception of the school environment. Two

^{1.} Callis, R. (1950), op. cit., pp.713-739

^{2.} Day, H.P. (1959), Changes of Beginning Teachers After Initial Teaching Experience, The J. of Teacher Attitude, Vol. 10, No. 3, pp. 326-328

^{3.} Ward, J. and Rushton, J. (1969), 'Teacher Personality Related to Job Satisfaction Attitudes to Education and Perception of School Environment', <u>Durham Research Review</u>, Vol. 5, No. 22, pp. 358-364

groups of serving teachers in primary, junior and infant schools who were attending in-service evening courses organised by the School of Education, Manchester University, completed a battery of tests which included Cattell's 16 P.F. Test, Start's Job Satisfaction Questionnaire, the Oliver Questionnaire (Survey of Opinions about Education).

No generalisable conclusions emerge from this study. The authors affirm the importance of teacher personality in the process of adjustment to teaching.

(5) Researches Aimed at Studying How Teachers Perceive Their Roles and the Goals of Education

Although much has been written about the role of the teacher, few empirical studies have dealt with the role of the teacher from the differing viewpoints of parents, teachers, pupils, inspectors, etc. Westwood (1967a and 1967b) (1,2) reviewed the literature on the role of the teacher and the factors which operate upon that role. He discussed the problem of the status of teaching at different levels of education in relation to teachers' conceptions of their role. He suggested that one reason why teachers are regarded as "semi-professional", not ranked with such professional men as doctors and lawyers, is that the teacher's role has become increasingly diffuse in contrast to the roles of other occupations which have become more highly specialised.

Grace (1967)⁽³⁾ discussed the changing role of the teacher and its implications for the recruitment of teachers. Basic to his

^{1.} Westwood, L.J. (1967a), The Role of the Teacher (1), Ed. Res., Vol. 9. pp. 122-134

Westwood, L.J. (1967b), The Role of the Teacher (2), Ed. Res., Vol. 10, pp. 21-59

^{3.} Grace, G.E. (1967), 'The Changing Role of the Teacher: Implications for Recruitment', Ed. for Teaching, 72, pp. 37-57

argument are two propositions. First,

"that contrary to the folk-lore of older teachers, the teacher's role is today harder, more diffuse and more demanding than ever before, and that therefore the role requirements are more searching. Secondly, that if we are to attract enough candidates with these requirements. recruitment to teaching must be more dynamic, enterprising, attached to modern conditions."(1)

He draws attention to changes in the role of the teacher as "director of learning"; no longer is the teacher a formal instructor: he needs to be highly flexible in his methods of teaching and expert in the use of audio-visual aids. He cannot depend to any great extent on his institutional authority; he must rely more and more on his personal authority, i.e. the authority he establishes by virtue of his mastery of his subject, his capacity to put it across in interesting ways and his personal qualities. the social sphere the teacher is now expected to take responsibility for moral and ethical training. His influence in an achieving society is increasing. Counsellor, vocational guidance expert, social worker are all examples of how the teacher's role is becoming more and more diffuse. Indeed, teacher-social workers are being employed in areas of special difficulty. In the latter part of his article Grace discusses the implications of wide changes of the role of the teacher for teacher recruitment, and the salaries of teachers.

Musgrove (1961)⁽²⁾ reported an inquiry into parents' expectations of teachers in different types of urban area at different social levels. He found that working class parents of primary school children placed more responsibility for behaviour training on teachers than did middle class parents who felt this to be the responsibility of the home.

^{1.}

Grace, G. (1967), op. cit., p. 51 Musgrove, F. (1961), Parents' Expectations of the Junior 2. School', Soc. Review, Vol. 9, pp. 167-180

Musgrove and Taylor (1965)⁽¹⁾ conducted a survey among 470 teachers in grammar, secondary modern, junior and infant schools and 237 parents of primary and secondary school teachers, aimed at estimating to what extent teachers in different types of school and circumstances conceived their role as diffuse or restricted; what weight they attached to different aspects of their work; what weight they believed parents expected them to give to different objectives of education; and lastly, what weight parents attached to these objectives. A questionnaire was constructed dealing with six aspects of educational aims, namely, moral training, instruction in subject, social training, education for family life, social advancement and education for citizenship.

The teachers were asked to rank these objectives

"as they valued them, and also as their experience led
them to believe that parents in general would value
them".

They were also asked to indicate any objective which they thought of as no concern of theirs as teachers. The parents were asked to rank these objectives as they thought they should weight with the teachers in charge of their children and to indicate any of the listed objectives which they regarded as none of the teacher's business. Findings showed that teachers in grammar schools had more restricted views than teachers in secondary modern schools. Junior school teachers working in middle class areas had a more restricted view of their roles than teachers in working class areas. Married women teachers in junior schools seemed less prepared to accept a diffuse role than single women, whatever kind of social class district they taught in. But married women

Musgrove, F. and Taylor, P.H. (1965), 'Teachers' and Parents'
Conceptions of the Teacher Role', <u>Brit. J.Ed.Psych.</u>, Vol. 35,
pp. 171-177

in infant schools appeared readier to accept a diffuse role than single women. All teachers saw parents as agreed about moral objectives in the education of their children, and also agreed that education was mainly concerned with "instruction". In addition, they saw them as attaching great importance to "social advancement". On the whole, parents gave greatest weight to moral training and instruction and comparatively little to social advancement. Working class parents gave significantly more emphasis to social advancement than did middle class parents. Musgrove suggests that the area of tension between parents and teachers might be reduced if parents and teachers established effective means of communication. The results, however, indicate that teachers had a narrow conception of their role, attaching much importance to academic instruction and moral training, whilst regarding social training as less important. Parents' views followed similar lines.

Another study of the conception of the teacher role was carried out by Finlayson and Cohen (1967)⁽¹⁾ with the aim of examining the change which took place in students' views of the teacher role as they developed through their course of professional training, and comparing the expectations of the student teachers with those of head teachers. A role definition instrument was constructed consisting of twenty-two statements of expectations for teacher behaviour in four sectors: organisation, general aims, motivations and classroom management. A sample of 268 women student teachers and 183 head teachers of primary schools was used. Finlayson and Cohen found that

(i) students training to teach older children were significantly more in favour of authoritarian attitudes:

^{1.} Finlayson, D.S. and Cohen, L. (1967), 'The Teacher Role. A Comparative Study of the Conception of College of Education Students and Head Teachers', Brit. J. of Ed. Psych., Vol. 37, pp. 22-31

- (ii) a consistent pattern of change towards less authoritarian classroom behaviour reached its peak in the second year;
- (iii) student teacher perception of the teacher role had become more traditional by the third year;
 - (iv) student teachers' views regarding the four aspects of role expectations differed significantly from the views held by head teachers.

They suggested that these differences could be explained in terms of the different frames of reference of college and school. They concluded that college of education lecturers and students view the teacher's position from standpoints different from those of teachers in schools.

For a study of teachers' conceptions of their goals in comprehensive schools Finlayson (1973)⁽¹⁾ constructed a questionnaire consisting of a number of statements of various analytically derived out-put and support goals suitable for secondary school. A stratified sample of 210 teachers evaluated the degree of importance of each item goal on a five-point scale. Finlayson found that the top priorities for teachers were out-put goals concerned with the all round development of the potentialities and abilities of pupils and their general adjustment to society, followed by support goals, i.e. goals involving harmonious interaction between members of staff and the control of social tension. The teachers' low priorities were output goals, i.e. goals which related to direct service to the community. Support goals which they rated relatively low were adaptation to the needs of the community and maintenance of the status of the school.

Finlayson, D.S. (1973), 'The Goal Structure of Teachers in Comprehensive Schools', Ed. Research, Vol. 15, pp. 188-193

(6) Cross-Cultural Comparisons of Teachers Attitudes

One example of a cross-cultural study of student teachers in the United States and the United Kingdom is that of Dickson and Wierson (1966)⁽¹⁾ who carried out a large survey in 1964 aimed at assessing and comparing the intellectual and personal characteristics of student teachers in the United Kingdom and the United States who were being prepared for the profession under different systems. A battery of tests was developed, consisting of: (1) The Comprehensive College Tests (Educational Testing Service) for English composition, the natural sciences and the humanities; (2) Cooperative General Culture Test (CETS) for mathematics; (3) Teacher Education Examination Program (ETS) for child development and educational psychology, guidance and measurement; instructional methods, and elementary school education; (4) Ryan's Teacher Characteristics Schedule; (5) Cattell's Culture-fair Intelligence Test (IPAT).

National samples of student teachers were randomly selected in both countries from a large group of representative colleges.

- (i) United Kingdom student teachers in general tended to have,
 as indicated by test data, higher general intelligence and
 verbal comprehension than did United States student teachers.
- (ii) United States students tended to be more learning-centred, while their British counterparts tended to be more child-centred. This finding remained stable over the three years of preparation and held for both primary and secondary education students.

^{1.} Dickson, C.E. and Wierson, W. (1966), op. cit., pp. 157-189

- (iii) Teacher education students in the United States held more favourable opinions of administrators and other school personnel than did students in the United Kingdom.
- (iv) United Kingdom teacher education students appeared to be better prepared in the academic fields of study measured than United States students, except in the sciences.

 Elementary school teachers in the United Kingdom appeared to be better prepared than their counterparts in the United States.
- (v) The academic performance of the United Kingdom students tended to improve generally over the years, while that of the American students tended to drop or remain steady over the three years tested.
- (vi) American students appeared to be better prepared in the measured areas of professional education than their counterparts in the United Kingdom.

A research team under the supervision of Professor Biddle of the University of Missouri (1966)⁽¹⁾ conducted a survey of teachers' attitudes in England, the United States, Australia and New Zealand. Results confirm the earlier findings that English teachers tend to be child-centred and American teachers tend to be subject-centred. American students are more towards the traditional pole, English teachers lean more towards the progressive pole. The English emphasise non-conformity more than the Americans.

A later report by Biddle (1968)⁽²⁾ suggests that differences between attitudes and activities are more affected by demographic

2. Biddle, B.J. (1966), 'The Teacher as Benevolent Despot' Report Conference, The Times Educational Supplement, 30 August, p. 351

^{1.} Biddle, B.J. (1966), Comparative Study Data Questionnaire, Nationality, Sample', reported in McLeish, J. (1969), Teachers' Attitudes. A National Survey and Other Differences

variables, such as sex and religion than by nationality. But this is not the case with role conflicts where the widest differences were found between different national groups.

In an investigation into the occupational aspirations of boys from eleven different cultures, McGill and Klineberg(1963)⁽¹⁾ attempted

"(a) to compare the occupational aspirations of boys from a wide range of cultural settings; (b) to relate boys' aspirations to the social status of their fathers' actual occupations and to examine age and cultural variations in this son-father comparison; and (c) to relate variations in these indices to filial aspiration to cultural measures of achievement motivation".(2)

The countries included in the study were: Turkey, Lebanon, French Canada, Israel, Bantu (South Africa), USA, Brazil, English Canada, France. Germany and Japan. In each country, samples of six-year-old. ten-year-old and fourteen-year-old boys were selected. Half of the boys at each level came from what were considered lower class families for the particular culture groups, and the other half from middle class families. Each subject was asked what occupation he desired for himself when he would be an adult and what his father's actual occupation was. Each boy's occupational aspirations were compared with his father's actual occupation, and indices of filial aspiration were calculated. These reflected a tendency to aspire below, above or at the same social class level as that of the father's occupation. Results showed that there was a general similarity between occupational aspirations among the samples from different cultures. Engineering, medicine and mechanical occupations were popular aspirations in most of the eleven countries. Differences did. however, appear between choices of occupation. French Canadian

^{1.} McGill, W.L. and Klineberg, 0. (1963), Cultural Comparisons of Boys! Occupational Aspirations!, Brit.J.Social. & Clin.Psych., Vol. 2, pp. 56-65

^{2. &}lt;u>Ibid</u>., p. 57

boys, for instance, put the priesthood among their most popular choices, while the most frequent choice among Bantu boys was teaching.

Perhaps the most sensible conclusion to emerge from our review of teachers' attitudes to education is that teachers and student teachers are as diverse in their motivations for choosing the teaching profession as any other occupational group for choosing their particular occupation. Among the motives for choosing teaching those most frequently noted in research studies were liking for children, interest in a particular subject, using the knowledge gained through personal study, doing something important for the community, long holidays.

Several studies showed that, among the sources of dissatisfaction with the teaching profession and the reasons for rejecting it as a career, were poor working conditions, low salaries, low status and discipline problems in schools.

It is important to know how students teachers perceive the status of the teaching profession and also how they perceive other characteristics of the job of teaching. There is no indication in the literature reviewed as to how far the perceived status of teaching was related to such dimensions as salary or satisfaction with the work. Do student teachers value the teaching occupation because of its status or do other dimensions of teaching have more value for them than status?

CHAPTER IV

THE TESTS USED IN THE INVESTIGATION

The primary aim of the present research is to study the relationship between student teachers' perceptions of the status of the teaching profession and their attitudes to education in England and Before we describe the instrument used in measuring in Egypt. perceptions of the status of the teaching profession, we must define what we mean by 'perception of the status of the teaching profession'. The phrase means : (1) the evaluation by student teachers and serving teachers of the status of three levels of teaching (university, secondary school and primary school); in other words, how student teachers and serving teachers perceive the status of these three levels of teaching in relation to other occupations demanding a similar level of education; (2) their general evaluation of the teaching profession in terms of public opinion; (3) their opinion about the status of teaching which they think the public ought to have; (4) their perception of the status of different levels of teaching as evaluated by public esteem.

On the basis of earlier studies of the prestige rankings of occupations and of interview material, a questionnaire was drawn up in an attempt to answer the following questions:

- (1) How far are teachers aware of their status in comparison with other occupations which seem to outside observers similar to theirs?
- (2) Does perception of the status of the teaching profession vary with sex and age?

- (3) Is the perceived status of the teaching profession related to the individuals main teaching subject, course of study and parental occupation(s)?
- (4) To what extent do the factors noted in earlier researches

 (e.g. salary, personal satisfaction, using abilities fully and
 value to society) relate to perception of the status of teaching?
- (5) How do student teachers and teachers rate the teaching profession at different levels (primary school, secondary school and university) in terms of public esteem?
- (6) How far is the perceived status of the teaching profession related to subject's preference for a particular level of teaching, e.g. primary school, secondary school.
- (7) To what extent is the status of the teaching profession as perceived by the subjects related to the status they believe ought to have?

The Questionnaire consisted of Three Parts

- (a) Personal and background data.
- (b) A ranking of occupations according to status, personal satisfaction using abilities fully, and value to society.
- (c) Ranking the levels of the teaching profession according to public esteem and student preferences for working at different levels of teaching.

(a) Personal and Background Data.

On the first page of the questionnaire subjects were asked to give certain items of personal information, viz., sex, age, religion, geographical background in terms of place of primary and secondary education, main teaching subject, length of present course, qualification(s) certificate or degree to be awarded at the

end of current course, length of experience in teaching, type of secondary education and parents' occupations. (See Appendix B for the questionnaire on occupations).

- (b) Ranking Occupations:-
- (1) The list of occupations.

The questionnaire used in a preliminary study listed thirty occupations. It was based on two assumptions: (a) that teachers' points of reference are likely to be occupations chosen by graduates and approximately equal in the level of education they demand;
(b) that since our particular interest was in making comparisons

(b) that since our particular interest was in making comparisons between the views of student teachers and serving teachers in England and Egypt, the occupations chosen should require approximately the same level of education and similar qualifications in the two countries.

Twenty teacher volunteers who answered the questionnaire in the preliminary study were asked:

- (a) to give their opinions on the list of occupations in the light of their familiarity with them;
- (b) to say whether these occupations were likely to be in their reference groups:
- (c) to say whether the number of occupations to be ranked was one they could cope with in the time available without getting bored.

As a result of the preliminary trial, the number of occupations was reduced to twenty by excluding those occupations which subjects indicated as unfamiliar to them, or which they did not consider to be points of reference when they were assessing their status.

There are two methods by which the status of occupation may be measured. The first investigates how members of society rank each other in "the status reputation". This method was most employed by

Warner and his associates (1)(1949). In these studies, occupation was found to be the most useful index of person's status. The weakness of this method is the extreme difficulty of extending it beyond the boundaries of the community within which the study was undertaken. Moreover, even in a small community, various studies of stratification have shown that many people are unknown to many other people who live around them. The other weakness lies most clearly in the need for such a method to be followed up with a home interview. While useful under certain circumstances, this method leaves a considerable space which must be filled by a relatively simple method of assessing status in society. (2)

The second approach investigates how people rank various occupations which have been ranked by a panel of judges. This method is based on the following assumptions: (1) that the prestige of a particular occupation can be estimated; (2) that people are able to make a positional judgement; and (3) that the prestige of a particular occupation lies in the opinions of others, not in the occupation itself. (3) Counts (4) (1925) is generally regarded as being the first person to use this technique in the U.S.A., Jones and Hall (5) (1950) as being the first persons to use it in Britain. However, most of the studies on occupational prestige use somewhat varying lists and numbers of

^{1.} Warner, W. L, Meek, M. and Eells, K. (1949) Social Class in America: a manual for the measurement of social status Science Research Associates, Chicago.

^{2.} Barber(1957) Social Stratification: a comparative analysis of structure and process. Harcourt, Brace and World, Inc., pp_ 111-120.

^{3.} Hatt, P.K. (1950) Occupations and Social Stratification, American Journal of Sociology, p.533-43. Vol. 55

^{4.} Counts (1925) op.cit.

^{5.} Jones and Hall (1950) op.cit.

occupations and various kinds of samples. The results show considerable agreement between the ratings made by different kinds of samples, from one inquiry to another; by those who themselves had high ranking occupations and those who had low ranking occupations; by people in different parts of the country; and by men and women. Briefly, studies of occupational prestige show that members of a society know a lot about different occupations and show considerable agreement in their verbal judgements of the relative ranking of these occupations.

Although the evaulation of occupational position is among the few best indicators of esteem in modern society, and certainly among the easiest to use, it has some important limitations. First, it deals with opinions that are wholly subjective, dependent upon the feelings and moods of the raters, some of whom are not well acquainted with some of the occupations. But the determiner of social status is opinions: the opinions of those unqualified to express an opinion as well as those qualified through knowledge and experience to do so. Hence we are bound to use opinions in ascertaining the situation.

Another limitation of this procedure lies in the number of occupations to be ranked, another in the broad character of some occupations used in those lists and yet another in subjects' unfamiliarity with certain jobs.

Nevertheless, despite these limitations, the usefulness of occupational rating as an indicator of status should not be undervalued; even if the method is far from perfect, this indicator is easy to use and adequate where a reasonable number of occupations have to be ranked.

Hence we decided to use this method, since its usefulness had been demonstrated in several earlier studies and because we thought

it would be easier for our subjects to understand. This method requires subjects to arrange the given list of occupations. In rank order of status from (1), "the highest" to 20, "the lowest".

In addition, in an attempt to get clear information about the factors that are likely to influence an individual's estimate of the status of an occupation, four characteristics, which had commonly been used in previous studies (1) (2) (3) as indexes of status, were chosen. Those were: salary in the first year; using abilities fully; job satisfaction; and value to society. To minimise the labour of the task of ranking, subjects were asked to choose five of the twenty occupations given and to rank them on the basis of each of those characteristics.

This part of the study was designed to explore the relationship between the subjects' perceptions of the status of the teaching profession and their opinions about the status the profession ought to have in public esteem.

Two questions were formulated. Subjects were asked to estimate the status of the teaching profession as a whole; first, according to public opinion and, second, according to the status they thought the teaching profession ought to have. A five-point scale with ratings of excellent, good, average, below average and low was provided. For ranking the teaching profession in terms of public opinion an additional category was added for respondents who did not know how to rank the profession.

^{1.} Rossi, P.H. and Inkeles, (1957) op.cit.

^{2.} Garbin, A.B. (1967), op.cit.

^{3.} Ramsey, C.E. and Smith, R.T. (1960) op.cit.

(c) The ranking of the levels of the teaching profession:-

Since our main concern is the status of the teaching profession, it was thought that a further detailed list of the various levels of teaching would give interesting data about the relative position of the different levels of teaching within the hierarchy of the educational system. The list included adult education, further education, higher education, secondary education, primary education and nursery education. Subjects were asked to place the teaching levels according to their estimation by the "general public" on a five-point scale with ratings of excellent, good, average, below average and low. Another question was formulated, including the same levels of teaching which required the subjects to rank them according to their own personal preferences in teaching by assigning a rank of "1" to their first preference, "2" to their second preference ... and so on to the sixth, the lowest preference.

Satisfaction with teaching.

In this section subjects were asked to estimate their level of professional satisfaction. The actual wording of the question was:

"If you already are a teacher, are you satisfied with your career as a teacher? Please indicate by marking of the following expressions the extent of your satisfaction with your work: very well satisfied; fairly well satisfied; not very well satisfied; not at all satisfied."

Analysis of the responses of the pilot sample showed that this particular question was inappropriate, since most of the subjects were student teachers. Hence it was deleted from the revised form of the questionnaire.

The reliability of the questionnaire.

Considering the tests which have commonly been used in checking the reliability of a questionnaire - Split half techniques, parallel forms and test-retest procedure (1) - we must make the following comments:

- (a) Split-half techniques: It was not possible to assess the degree of reliability by dividing the questions of the questionnaire into two equal halves and computing the correlation between the halves, since the design of the questions (the occupation ranking list) does not permit this.
- (b) <u>Parallel Forms</u>: Because of the hard work of developing an equivalent form of the questionnaire and translating it into Arabic as well and then asking subjects to answer two forms it was decided that this procedure would be inconvenient for the purpose of this study. Moreover, we could not be sure that a parallel form of the test would measure the same attitudes.
- (c) <u>Test-retest procedure</u>: The test-retest procedure was proved to be impractical because of lack of co-operation when an attempt was made to use it. Subjects in the Arabic Group C of the Egyptian sample were unwilling to complete the questionnaire a second time.

Moreover, the examination of several questionnaire which had been completed for the second time indicated that subjects were not seriously answering the questionnaire, as they had done the first time. In any case, we believe that test-retest procedure may not be a very reliable test since attitudes and occupations may change after a period of time, or, if the questionnaire is readministered after only a short time, respondents may recall the answer they made the first time.

^{1.} Ary, D, Jacobs, Lucy, E. and Razavaih (1979) Introduction to Research in Ed. Holt, Reinhardt and Winston U.S.A.

Nevertheless, despite our inability to assess the reliability of the questionnaire, we note that there is great consistency and agreement between the responses of the pilot sample and the main sample (See Tables 5.2 in Chapter 5 and 8.1 in Chapter 8). A further source of encouragement was the consistency in ranking comparable occupations which had been ranked in previous studies. This will be illustrated in a later chapter.

The validity of the questionnaire.

Different criteria are commonly used in checking the validity of questions. It was not, however, possible to estimate the validity of the questionnaire on occupations, as there is no immediate way of checking the validity by using another test. Comparison of the results of two rankings of occupations might show a correspondence between the questionnaires, but this would not necessarily indicate that the two questionnaires are validly measuring an attitude. It is, moreover, not possible to judge from people's behaviour what they think about a large number of occupations, since they make a choice only on certain occasions and in response to personal circumstances McNemar (1946)⁽¹⁾ has discussed in detail the difficulty of supplying evidence of the validity of a questionnaire designed to test attitudes or opinions.

^{1.} McNemar, Q. (1946) Opinion attitude methodology Psych. Bulletin, 43, pp. 289-299.

Measures of Attitudes to Education.

In my review of the literature on measures of attitudes to education, I drew attention to several attempts at measuring such attitudes: Ryans (1953), Wandth (1954). The two most widely used are: "Survey of Opinions about Education", devised by R. A. C. Oliver of Manchester University (1955) and used mainly in England and the Minnesota Teacher Attitude Inventory, devised by Cook, and Calls (1952) in the U.S.A.

Although the M. T. A. I. has been extensively used in research in the U.S.A., Evans (1958), after experience with the inventory in the United Kingdom, suggested that it was not suitable for use with a British sample and that it also lent itself to the faking of answers of British subjects.

It was therefore decided that the Oliver Questionnaire would be a more suitable measure of teacher attitudes to education, as it appears to meet some of the main criticisms levelled against the M. T. A. I., - has been formulated with the English educational system in mind, and covers a wide range of educational topics. There has been some speculation as to how far subjects can fake responses to the scales. For instance, Ward and Rushton (1973) found that responses to questions on the Oliver Questionnaire are less likely to be faked than responses to questions on the M. T. A. I.

The Oliver Questionnaire has certainly been used quite a lot in this country, e.g. Oliver and Butcher (1962), Butcher (1965), Pollock (1965), McIntyre, Morrison and Sutherland (1966). Morrison and McIntyre (1967), Cortiss (1966, 1972), Glossop (1969), Start (1972). For this and other reasons already mentioned it seemed appropriate

to choose it for the present investigation Oliver's Survey of Opinions about Education was designed to Yield scores on three scales, Naturalism (the N Scale), Radicalism (the R Scale) and Tendermindedness (the T Scale). These attitude measures were derived from the experimental scales described by Oliver and Butcher (1962, 1968) and Butcher (1965).

- (1) The Naturalism...Idealism continuum is concerned with the degree to which the individual gives high regard to the spontaneous and unforced development of children, self-expression and experience as the bases for abstract thinking. Naturalist education values self-expression, stresses motivations and interest in learning, emphasises perceptual experience as the basis of abstract thinking and actions as the test of it. prefers self-expression in arts to the appreciation of the products of others. (1) At the other end of the continuum the Idealist gives high regard to promises of absolute standards which children must be helped to attain. The idealist in embryo. on the other hand, is to be found in the teacher who believes that the pupil should be "put to school to one of the great traditions', under a master who believes that pupils should be put to the school to one of the great traditions. (2)
- (2) The Radicalism-Conservatism continuum is concerned with attitudes to change and the degree and quality of change to be desired in an educational system.
- (3) The Tendermindedness Toughmindedness Continuum is concerned with the degree to which the individual accepts the desirability of insisting on standards, for example, standards of spelling, literacy, discipline and morals in the education of children.

^{1.} Oliver R.A.C. (1953) Attitudes to education, Brit.J. of Ed.Studies, 2.3 p.34.

^{2.} Ibid. p.35.

The present form of the questionnaire consists of three parts;

Part I comprises 10 items mainly of the N Scale; Part II; 12 items

of the R Scale and Part III; 14 items of the T Scale. A few items,

irrespective of the part in which they appear, yield scores on more

than one scale.

In each part the introduction and choice of response is phrased In part I, respondents are asked to indicate various shades of agreement or disagreement with the propositions (e.g. 'The time to begin reading lessons is when the children feel the need for them'); In Part II, different degrees of desirability are to be indicated for certain proposed changes in education. In Part III, opinions are to be expressed about different reasons for adopting educational procedures (e.g. reasons for religious instruction, for excluding propaganda from A copy of the Oliver questionnaire, the answer sheet and the scoring of Oliver are provided in the Appendix B. A high score on all three scales denotes the positive pole of the attitudes. words, a high score on the N scale should indicate a decided leaning towards naturalism in opinions about education. Similarly, a high score on the R scale would suggest a radical attitude towards education and a high score on the T scale a tender-minded attitude. Low scores on the three scales would indicate tendencies to idealism, conservation and toughmindedness.

The user of Oliver's questionnaire has an opportunity to choose between a factorial method and the Likert method of scoring. Scoring in the present study is on the Likert basis.

It should be pointed out that scores derived from the published shortened form of the scale used in this study are not directly

comparable with those reported by Oliver and Butcher (1962) (1968) and by a number of other research workers.

The scales produced by Oliver (1956) contain 133 items of which 110 are scored; the published form has 59 items of which 32 items are scored. The scored items are those which were found in Butcher's investigation, (1959), to have high loading on the three factors. In the present study, the scoring is based on the factor analysis of the 59 items, included in the questionnaire. The comparisons are difficult owing to these differences in scoring.

Many investigators have used the shortened form. Some have used factorial scoring, others have used Likert scoring.

The Reliability of the Questionnaire, "Survey of Opinions about Education"

The following figures were obtained by Butcher (1962) from a sample of 57 evening students who were working either for the Diploma in Education or the degree of Master of Education in the University of Manchester.

	N Scále	R Scale	T Scale
Split-half reliability coefficients	.917	.849	.813
Test-retest coefficient (3 weeks interval)	. 896	.870	.877

Source of the Table: Oliver, R.A.C. and Butcher, H. J. (1962) British J. Soc.

The Validity of the Questionnaire, "Survey of Opinions about Education";
Butcher used the following procedures in assessing the validity of the scales:

(a) <u>Naturalism-Idealism Scale</u>: On the Naturalism-Idealism Scale, validity was estimated by correlating the scores of 33 students with

the ratings of tutors (T.H.B.) who knew them very well. The following figures were obtained:

	N Scale	Test of retest
Rating by tutor on nine- point scale	.65 Correlation with tutor rating	•84 Reliability of rating (1 month interval)

Source: Oliver R.A.C. and Butcher, H.J. (1962) op.cit. p.60

(b) Radicalism: The validation of this scale was estimated by comparing teachers who belonged to politically committed groups on the assumption that individuals holding radical or conservative views on political issues would hold similar views on educational issues. Two other groups were included in the data for comparison. It was suggested that the R Scale discriminates significantly between groups in the expected directions. This is indicated in the following Table.

	Mean Score	s. d.	No. in samples
Conservative and Unionist group Labour Teacher's group	74•9	15.6	72
	122•3	19.1	82
Diploma in education and Master of Education Students Occasional students	100.3	18.0	57
	95.4	17.9	73

Source of the Table: Oliver and Butcher (1962) op.cit. p.61.

(c) <u>Tendermindedness</u>: In selecting the criterion group for this scale it was decided to compare teachers with an overt religious allegiance with students of a training college for teachers of technical subjects. The assumption was that the religious group would be tenderminded, and persons with strong inclinations towards technical education would be tough-minded. (Oliver 1953).

The following figures were obtained:

Mean Scores	s. d.	No of sample
137.9	14.9	58
123.2	15.8	73
143.3 126.1	13.8 15.7	57 73
	137.9 123.2 143.3	137.9 14.9 123.2 15.8 143.3 13.8

Source of the Table: Oliver and Butcher, op.cit. p.62.

Although many researches have been carried out using the Oliver Questionnaire as a measure of teachers' attitudes to education, there is no indication that they checked either the reliability or the validity of the measurement except for Wilson (1)(1976) who attempted to investigate the factor structure of the questionnaire by factorial analysis of the responses of primary school teachers in Northern Ireland. More details about the results of this study will be given in Chapter 9.

An attempt will also be made to check the factorial structure of the questionnaire in this present study.

In this study the scores of the pilot sample on the Oliver questionnaire were based on the 32 scored items chosen by Oliver and Butcher on the basis of factor analysis, whereas the scores for the main samples (English and Egyptian) were based on the factor scores arrived at by analysis of the responses to the 59 items included to the questionnaire. (See chapter 7).

^{1.} Wilson, T. A, Bill, J. M. (1976) The structure of Oliver's Survey of Opinions about Education, Brit. Journal of Educ. Psych. 46, 184-189.

CHAPTER V

THE PRELIMINARY INQUIRY

This account of the preliminary inquiry is divided into two sections: Section I deals with the English pilot inquiry, Section II deals with the Egyptian pilot inquiry.

SECTION I: THE ENGLISH PILOT INQUIRY

The main divisions of this section are as follows:

- (1) Sample and background data.
- (2) The questionnaire on occupations.
- (3) The Oliver Questionnaire.

The pilot inquiry aimed at examining the following points.

- (i) The proportion of the respondents completing the questionnaires.
- (ii) The utility of the procedures in collecting and analysing the data.
- (iii) The effectiveness of the questionnaire on occupations in getting public to rank the chosen occupations according to the adopted criteria.
- (iv) The likely value of the Oliver Questionnaire in measuring teachers' attitudes to education.
- (1) The sample and background data:
- (a) The sample:-

Testing was carried out in the autumn of 1976 in the Leeds area.

(i) The first group was composed of students from the School of Education at Leeds University who were working for the Post Graduate Certificate of Education during session 1976-1977. Fifty students were randomly chosen by taking one out of five from a list of names of P.G.C.E. students, arranged in alphabetical order.

(ii) The second group was composed of students who had already had experience of teaching and were studying for the Diploma in Education in the School of Education at Leeds University. The third group was consisted of student teachers who were in their third and fourth years of study for the B.Ed. degree. They came from two colleges of education which allowed me access to their students. Thirty questionnaires were given to students of each college by teachers in the two colleges; the choice of this sample had been determined by the availability of students.

The pilot inquiry produced 98 questionnaires, but the number studied was actually 74 after exclusion of those respondents who had not properly completed the questionnaire.

Table 5.1: The Composition of the English Pilot Sample and the number of questionnaires properly completed.

Pop	P.G.C.E. group	Diploma group	College A group	College B group	Total of the cells
Number of questionnaires sent out	50	50	30	30	160
Not completed	2	2	-	-	4
Irrelevant answers	_	3	2	-	5
Late returns	-	3	-	12	15
Completed satisfactorily	36	26	12	_	74
Per cent of each group completing questionnaires	72	52	40	-	46.3

Table 5.1 above shows that 72% of the questionnaires were returned by the P.G.C.E. group, and 52% by the Diploma group but that there was a very low return from College A and from College B. Twelve questionnaires were returned after the analysis of results had been completed. The low rate of return from colleges of education was perhaps due to the indirectness of the contact between the investigator and the colleges.

(b) The Procedure followed in collecting the data:

A letter was sent to a sample of P.C.C.E. and Diploma students enclosing the questionnaire on occupations and the Oliver questionnaire on opinions about education, with a self-addressed envelope for replies. Subjects were asked to complete the questionnaires in their own time and return them through the internal post. College of Education students were asked to complete the questionnaires and return them to a particular teacher in their colleges, who had agreed to receive them and send them to the investigator.

(c) Personal and Background Data:

Details of the sample classified according to sex, age, place of birth, religion, main teaching subject, length of course, experience of teaching, father's occupation, mother's occupation are given in Table 1:9 in Appendix C.

The classification of occupations of parents used with the English pilot scheme was the five-fold classification of the Registrar-General for England and Wales. (1)

Class I : professional, e.g. physicists, doctors, lawyers.

Class II : intermediate occupations including semi-professional

and managerial.

Class III: skilled occupations.

Class IV : partly skilled occupations.

Class V : unskilled manual occupation.

It was difficult for the investigator to distinguish between occupations in the last three categories, especially those in the skilled and semi-skilled categories. The classification was done under the supervision of Mr. John Glossop, School of Education, Leeds University.

^{1.} General Register Office (1967) Classification of Occupation (H.M.S.O.)

Where a mother in the sample did not have an occupation (e.g. housewife) the occupational category she was assigned to, was that of her husband. We cannot claim that the classification of the occupations of mothers in our sample accurately indicated their socio-economic class. For many of the mothers no classificable occupation could be given.

Analysis of the responses to the questions about personal background suggested that some of the items on the questionnaire needed to be changed or made more specific. The following items were considered (i) Place of birth:- Difficulties arose when some of the subjects did not answer the question and others commented: "Do not know"; "Do not Difficulties also arose when attempts were made to classify remember". these responses and assign them to categories. Therefore, it was thought that the location of the schools in which subjects had received their primary and secondary education might provide helpful indication of the influence of environment on their attitudes towards occupation In order to facilitate the analysis of the responses and education. the revised version of the questionnaire asked for the following information.

Place where you were educated :

- (a) primary school : city, town, village.
- (b) secondary school : city, town, village.
- (ii) To help respondents in answering the questions and the investigator in analysing their responses, certain questions were made more specific in the revised questionnaire: e.g. questions about subject of study; qualification already obtained; length of present course; certificate being studied for. (See Appendix B for revised version of questionnaire on occupation.)

(iii) Giving Names or remaining anonymous

At this early stage it was thought that subjects would give their names on the assurance of confidentiality, but it became evident that many were unwilling to do so. It was therefore decided that questionnaires should be answered anonymously and that the revised questionnaires should be numbered so as to make possible collations and analysis of the questionnaires (i.e. those on occupations and attitudes).

Comment on procedure.

In planning the main inquiry the investigator was aware that a high response rate was not to be expected, mainly because of the difficulty which is encountered by investigators in trying to persuade samples to complete a questionnaire. McNemar (1940, 1946) (1,2) has discussed the problems associated with individual refusal. However, previous studies e.g. Lundberg and Larson (1949) Ford and Zeisel (1949) (4) suggest that a low response is not likely to be a biasing factor in sampling procedure.

As a result of analysing responses to questions about personal background, the following points were made.

(i) It was decided that a follow-up procedure should be introduced for subjects who did not return the questionnaire within two weeks. A reminder should be given to each group of the sample by their own tutors.

^{1.} McNemar, Q. (1940), Sampling in Psychological Research. Psych.Bulletin, Vol.37, p.331-363.

^{2.} McNemar, Q. (1946), Opinion - Attitude Methodology. Psych. Bulletin 43, pp.p.2

^{3.} Lundberg, G.A.: Larson, O. N. (1949) Characteristics of Hard to Reach Individuals in Field Survey, Public Opinion Quarterly, vol. 13, pp. 487-494.

^{4.} Ford, R. N. Zeisel, H. (1949) Bias in Mail Surveys cannot be controlled by one mailing, Public Opinion Quarterly vol.13, p.495.

- (ii) It was decided that a direct contact between the college of education and the investigator should be made in an attempt to obtain a higher rate of response.
- (2) The Questionnaire on Occupations:-
- Examination of the responses to the Questionnaire on Occupations:

 Examination of the responses to these questions suggested that
 subjects had had no overt difficulties in understanding the questions.
 One occupation needed to be changed and replaced by another; one
 question needed to be excluded and three questions needed to be added
 to the questionnaire. The occupation that had to be changed was that
 of Agricultural Engineer: Results suggested that subjects were not
 familiar with this occupation: Some of them excluded it from their
 ranking, and others commented that this occupation was not known in
 England as a university graduate's career. (It had been included as
 a career popular with Egyptian graduates.) Hence this occupation was
 replaced by another occupation in the revised version: Veterinary
 surgeon (Vet).

Degree of Satisfaction with the Teaching Profession: Results indicated that subjects were unwilling to express their own feelings. Some commented that they did not know yet, as they were still students, and others mentioned that the matter was a personal one. It was therefore thought advisable to replace this question by another question which could indirectly reveal their opinion about the degree of their satisfaction.

In the revised version subjects are asked to choose five occupations from the list given, which they think would give the greatest amount of personal satisfaction. To find out more about their attitudes to

teaching, in the revised version subjects are also asked to choose five occupations from the list given which they think are the most valuable to society. They are also asked to choose five occupations from the list given which they think would give an individual the best opportunity to use his or her abilities fully. These three criteria were added in that they probably are the criteria people use in evaluating occupations: they have also been used in other researches, e.g. (1)
Rossi, and Inkeles (1957), Garbin and Bates (1961).

- (b) Analysing The Results of the Questionnaire on Occupations.
- (i) The ranking of occupations according to status:

The mean, median, and mode are very similar measures if distributions are normal. The mean was chosen as a basis for rankings.

Inspection of the distribution suggests that no violent distortion was caused by individual responses that lay at the extremes. This can be seen from an inspection of the distributions of the rankings of the 20 occupations given in the list in Appendix C, table 10.

Scores were obtained by computing the average of the ranks given to each occupation. A rank of 1 was assigned to the occupation having the lowest mean score in the total samples, a rank of 2 to the next and a rank of 20 to the occupation having the highest score. Thus higher positions are indicated by lower mean scores and lower positions are indicated by higher scores. Table 5.2 shows the rank order of occupations according to status in the total sample. As may be seen from the table, doctor was ranked highest in status, librarian was ranked lowest and in the middle stood the civil servant (10) and the pharmacist (11).

^{1.} Rossi, P.H. and Inkeles, A. (1957) op.cit. pp.234-251.

Table 5.2: Ranking of Occupations According to Status by the Pilot Sample

	Occupations	Mean Scores	Ranks	SD.
1	Doctor	2.26	1.	1.844
2	Lawyer	3.50	2	3.911
3	University Teacher	6.16	3	3 • 775
4	Architect	6.50	4	4:250
5	Dentist	6:53	5	3:753
6	Professional Engineer	8.81	6	4.057
7	Accountant	9:26	7	8.450
8	Radio/TV Announcer	9:50	8	5.279
. 9	Banker	9.60	9	5.197
10	Civil Servant	10.31	10	4.820
11	Pharmacist	10.69	11	4.714
12	Secondary School Teacher	11.08	12	4.248
13	Agricultural Engineer	11.60	13	5.045
14	Army Officer	12.49	14	5.402
15	Journalist	12.89	15	4.776
16	Primary School Teacher	13.16	16	4.862
17	Nurse	14.22	17	5.674
18	Social Worker	14.78	18	4•499
19	Management Trainee	15.39	19	4.180
20	Librarian	16.04	20	3.995

(ii) The Rankings of the Status of the Teaching Profession :-

From a study of the rankings of different levels of teaching (see Table 5.2) it can be seen that the university teacher was ranked in the top section as 3rd, that the secondary school teacher was placed about half-way down the rank order 12th and that near the bottom was the primary school teacher 16th. We note that university teacher was ranked among the highest occupations which require a long period of education and/or training, the primary school teacher was ranked near the bottom with occupations which don't have such length and costly training.

(iii) The Ranking of Occupations according to Salary in the First Year.

Subjects were asked to rank five occupations from the list of occupations given on the basis of the salary in the first year of work. Subjects' choices were weighted as follows: Occupations which were ranked first were assigned 5 points; those ranked second 4 points; and so on down to the fifth rank, one point. The total weighted scores received by each occupation were then calculated and occupations placed in rank order on the basis of these weighted scores. Table 11 in Appendix C presents the distribution of the subjects' ranking of occupations according to salary. As may be seen from Table 5.3, in which are presented the total weighted scores for each occupation and the rank order of occupations, lawyer was ranked highest in salary, librarian and primary school teacher were ranked lowest; in the middle stood accountant and pharmacist.

(iv) The Relationship between Ranking Occupations According to Status and Salary.

The association between the two ranks of status and salary as measured by rank correlation was .84. This indicates that there is a very close relationship between them, but there were differences in ranking some occupations according to the two criteria (see Table 5.4),

Table 5.3: Rankings of Occupations According to Salary by the English Pilot Sample Salary

Occupations	Ranking	Weight Scores
1 Lawyers	1	134
2 Doctor	2	133
3 Engineer Prof	3	116
4 Radio/TV Announcer	4	108
5 Dentist	5	90
6 Army Officer	6	86
7 University Teacher	7	78
8 Civil Servant	8	77
9 Architect	9	69
10 Accountant	10	53
11 Pharmacist	11	52
12 Banker	12	26
13 Agricultural Engineer	13	24
14 Managerial Trainee	14	22
15 Sechondary School Teacher	15	16
16 Nurse	16	11
17 Social Worker	17	6
18 Journalist	18	3
19 Primary School Teacher	19	-
20 Librarian	19	_

Table 5.4: Comparison between Rankings of Occupations according to Status and Salary

Occupations	Status ranks	Salary ranks
Doctor	1	2
Lawyer	2	1
University Teacher	3	7
Architect	4	9
Dentist	5	5
Prof. Engineer	6	3
Accountant	7	10
Radio/TV Announcer	8	4
Banker	9	12
Civil servant	10	·-8
Pharmacist	11	11
Secondary School Teacher	12	15
Agricultural Engineer	13	13
Army Officer	14	6
Journalist	15	18
Primary School Teacher	16	19
Nurse	17	16
Social Worker	18	17
Management Trainee	19	14
Librarian	20	19

in which are presented the rankings of occupations according to status and salary. Army officer was assigned 6th rank by salary and 14th rank by status, architect was ranked 9th by salary and 4th by status, radio and T.V. announcer was ranked 4th by salary and 8th by status. It may be interesting to note that the three levels of teaching occupations were assigned a relatively higher rating according to status than their rating according to salary.; University teacher was assigned 3rd rank by status and 7th by salary, secondary school teacher was ranked 12th by status and 15th by salary, primary school teacher was accorded 16th rank by status and 19th by The closest rankings occurred for dentist, pharmacist and salary. agricultural engineer. However, results suggest that there is generally a close relationship between the two variables, social status and salary.

(v) The subjects' rankings of the various levels of Teaching according to their first preferences in teaching.

A further list of various levels of teaching was ranked by subjects on the basis of their personal preferences. Mean scores were chosen as a basis for the rankings of teaching. Inspection of the distribution suggests that no violent distortion was caused by individual responses that lay at the extremes. (See Table 12 in the Appendic C for the distribution of rankings of the levels of teaching according to preferences).

A rank of 1 was assigned to the type of teaching having the lowest mean scores, a rank of 2 to the next and a rank of 6 to the type of teaching having the highest score, - Thus first choices are indicated by lower scores and last choices are indicated by higher scores.

Table 5.5 presents the rank order of various levels of teaching according to preferences.

Table 5.5: Rankings of the Different Levels of Teaching according to Subjects' preferences

Types of Teaching	Mean Scores	Ranks
Secondary Education Further Education Primary Education Higher Education Adult Education Nursery Education	2.027 3.041 3.338 3.419 3.716 4.905	1 2 3 4 5

This table shows that the secondary school teacher was accorded the first choice, the teacher in further education was second choice, and the nursery school teacher was rated sixth.

(vi) The Rankings of the Levels of Teaching according to Public Esteem:-

The same list was ranked by the subjects on the basis of public esteem. A five point scale was provided, with ratings of excellent, average, below average and low. The occupation rated as excellent was assigned as score of 5, one rated good was assigned, a score of 4, and so on down to the lowest rating which was scored 1. The total weighted score assigned to each occupation was then calculated and occupations were placed in rank order on the basis of the weighted scores. In Table 13 in Appendix C are presented the distributions of each level of teaching on these rankings.

Table 5.6 : Rankings of the Levels of Teaching according to Public Esteem

The Types of Education	Weighted Scores	Rankings
Higher Education	312	1
Secondary-Education	274	2
Further Education	26 5	3
Primary Education	231	4
Adult Education	228	5
Nursery Education	191	6

As may be seen from Table 5,6, where the total score and the rank order received by each level of teaching are given, teaching in higher education was accorded the highest rank, followed by secondary school teaching. Nursery education was given the lowest rating.

Simple comparison between the ranking of the different levels of teaching on the basis of public esteem and preferences in teaching indicate that Secondary School and Primary School teaching were ranked higher according to preference than they were in public esteem.

Perhaps this may be explained by the fact that subjects were aware of the limits of their qualification in permitting them to teach at different levels.

Table 5.7: Comparison between the ranks of the levels of Teaching according to Public Esteem and Personal Preferences

Different Levels of Teaching	Public Esteem Ranks	Preference Ranks
Higher Education	1	4
Secondary Education	2	1
Further Education	3	2
Primary Education	4	3
Adult Education	5	5
Nursery Education	6	6

Table 5.7 presents the rankings of levels of teaching by public esteem and subjects personal preferences.

(vii) The Ranking of the Teaching Profession according to Present Status and the Status it should have.

Subjects were asked to rate the teaching profession according to its social status. A five-point scale was provided, with ratings of excellent status, good, average, below average and low status. The significance of these replies becomes more apparent when replies to a

further question are considered; this question asked the subjects to rate the same profession on the basis of the status they thought teaching ought to have. Table 5.8 shows the percentage of ratings in each category according to the present status of the occupation and the status it ought to have.

Table 5.8: Comparison between what people think about the present status of teaching and the status they think it ought to have

Ratings	Present status : Percentage rating	Status it should have: Percentage rating
Excellent	-	27.0
Good	. 39.2	56 . 8
Average	4 8 . 6	8.1
Below average	10.8	2 . 7
Low	-	_
I don't know	1.4	5.4

Examination of the results indicates that nobody gives the teaching profession a rank of excellent according to present status. Only 27% give the status it ought to have as excellent. This suggests that subjects are clearly aware of the position of teaching with reference to other occupations. 39.2% give the present status of teaching as good and 56.8% give good as the status it ought to have. It appears that there is some agreement between the two positions. This suggests that subjects are - realistic in their views about the status of teaching.

Degree of Satisfaction with the Teaching Profession

Subjects were asked to express the extent of their satisfaction with teaching by ticking one of the following five statements: very well satisfied, fairly well satisfied, well satisfied, not very well satisfied and not at all satisfied. Analysis of responses suggests that this question was inappropriate. 66.2% of subjects did not answer it, commenting that they were still students.

Table 5.9 gives the percentage of answers in each category.

Table 5.9: Satisfaction with the Teaching Profession

Rating categories	Percentage rating		
Very well satisfied	1.4		
Fairly well satisfied	8.1		
Well satisfied	5.4		
Not very well satisfied	14.9		
Not at all satisfied	4.0		
Did not answer question	66.2		

(3) The Oliver Questionnaire

Examination of the responses to the questions on The Oliver Questionnaire suggested that subjects had had no overt difficulties in understanding the questions, or using the answer sheet: a few comments that were made referred to the out-of-date nature of some of the items, e.g. "the raising of the school leaving age to 16". "Comprehensive schools to be the normal form of secondary education": Other comments were concerned with the objections to the contents of particular items as being unsatisfactory statements of educational aims. Those items were: "Schools should teach social studies rather than history or geography". One comment was: "Schools should teach both": "The teacher should not stand in the way of a child's efforts to learn in his own way". - The comment was : "Child can learn in his own way but with teacher guidance". Comments were also made on part III, question 4: "Reasons for Religious Instruction": for instance, that "it is difficult to answer some of the questions when one may have strong personal views on the area, i.e. question 4 will depend on the age of the group of children you are teaching. If you believe in God you would like to think the knowledge of God would meet a deeply felt need, but it will depend on the child, and his response to what you tell him, and that will depend on your belief" ...

Table 5.10: The Scores on the Three Scales made by Pilot Sample, Using Likert Scoring

Likert Scoring	Mean	S. D.	Median	Mode	Maximum possible score
N Scale	32.01	4.98	32	33	50
R Scale	43.10	6.23	43	43	60
T Scale	44.9	8.53	44	39	70

Table 5.11: The Score on the Three Scales made by the Pilot Sample
Using Factorial Scoring

Factorial scoring	Mean	S. D.	Median	Mode	Maximum possible score
N Scale	60	6.25	60.50	61	82
R Scale	71	8.11	71.50	72	93
T Scale	83	12.98	82	79	118

A separate discussion of the factor structure of the Oliver questionnaire for the pilot and main English samples and the Egyptian sample will be presented in Chapter VII but it may be of interest to present the scores of the pilot sample on the three scales in terms of Oliver and Butcher scoring. Figures 1, 2, 3 in Appendix C show the distributions of the score by Likert scoring for the N, R. T scales respectively.

In Tables 5:10 and 5.11 are presented the mean scores and S.D's. of the sample on the three scales, using Likert and factorial scoring. Since there are two forms of the questionnaires, the original form and the shortened one, and two types of scoring were used in previous studies, as was mentioned in Chapter IV, comparison between previous research and the present study was not possible. It was not considered worth while to break down the subjects scores by such variables as age,

sex, type of course, since numbers in each of the sub-groups were relatively small.

However, inspection of the mean scores and S.D's on the three scales, as shown in Table 5.10 and 5.11, suggests wide variation of the scores as indicated by the large S.D. of the sample scores.

At this early stage of analysing the responses to the Oliver

Questionnaire it is difficult to suggest any explanation of the large

standard deviation. A factorial analysis, both for the 32 and 59 items,

was carried out. Results of this analysis will be reported in chapter

VII, with results of other factor analyses. The analysis of the

responses for the preliminary sample, showed a rather different factor

structure from that of Oliver and Butcher, but it indicated that the

scale could give useful results.

SECTION II: THE EGYPTIAN PILOT INQUIRY

The main divisions of this section are as follows:

- (1) The translation of the questionnaires from English into Arabic.
- (2) Sample.
- (3) Procedures followed in collecting data.
- (4) Difficulties of administering tests.

The pilot enquiry aimed at answering the following questions.

- (i) Do the respondents understand the purpose of the inquiry?
- (ii) Are the instructions in the two questionnaires clearly understood?
- (iii) Are the procedures for collecting the data suitable?
- (iv) How much time does it take for the respondents to complete the questionnaires?
- (v) What proportion of the respondents answer the questionnaire?

(1) The Translation of the Questionnaire: Egyptian Forms

The Egyptian questionnaires were basically direct translations into Arabic of the same instrument as those used in England, namely, The Oliver Questionnaire and the Questionnaire on Occupations.

However, some items that did not prove satisfactory in Egypt were eliminated and some new ones were added. These changes will be described later in this section.

In order to ensure a satisfactory translation which would indicate that the questionnaires had as far as possible the same meaning in the two countries, the following procedure was followed:-

Since the two questionnaires were originally written in English, they were translated into Arabic by the researcher whose mother tongue is Arabic. Secondly, the translations of the two questionnaires were given to two other bilinguals who were asked to translate the questionnaires back into English and to suggest improvements (this device of back translation has been widely utilized in cross-national comparisons (1)). The Arabic translations were amended after the discovery of some errors which had crept into the translation. Finally, the two questionnaires were tried out with a number of Egyptian students in Egypt and some modifications were made in the instructions for the two questionnaires. These will be discussed later.

A copy of the Egyptian forms and the answer sheet are provided in Appendix B.

(2) Sample

The pilot testing was carried out in the winter of 1977 at the Women's College, Ain Shams University. There was a major reason for this choice. The investigator is an employee of that college, and

^{1.} Whiting, W.J. (1950) Methods and problem in cross cultural research in Lindzey, G, and Aronson, E. (eds). The Hand Book of Social Psych., vol.2, chapter 17.

it was easy to obtain co-operation and assistance from the staff, especially in the early stages of administering the tests.

To help me to get my pilot sample one colleague allowed me to use his lecture-time to administer the questionnaire. Here two groups of students were approached on a non-random basis. The first group was composed of fifty third-year students specialising in Arabic; the second group consisted of one hundred fourth-year students specialising in History; both groups were preparing to teach in secondary schools.

To ensure anonymity for the responses of subjects, identity numbers were assigned as follows: the students in each group were numbered according to the full list of names in alphabetical order.

They were each given a note of their number and were asked to bring it with them and to keep it in mind in the second testing session so that anonymity could be preserved.

(3) Procedures followed in collecting the data :-

Two procedures were followed; (a) Administration of the questionnaires in the presence of the investigator; (b) Administration of the questionnaires in the absence of the investigator.

- (a) Administration of the questionnaires in the presence of the investigator.
- (i) Subjects from the Arabic group were prepared by their own lecturer who stressed the importance of their cooperation and assistance in the research project. The investigator then outlined the purpose of the research and the work that would be required.
- (ii) Subjects were asked to read the Oliver Questionnaire without answering any of the questions. There was a discussion of any

difficulties in the content of the questionnaire, in the use of the answer sheet and the use of students' identity numbers.

- (iii) Subjects completed the questionnaires, which were then collected.
- (iv) Two days after the administration of the first questionnaire, the same group was asked to complete the questionnaire on ranking occupations.

Unfortunately, few were able to remember their identity numbers. Hence these numbers were dispensed with. In consequence, it was impossible to discover whether there was any relationship between the results from the two questionnaires.

- (v) Subjects were instructed to read the questionnaire as before and to comment on any difficulties in understanding and completing it.(vi) Subjects completed the questionnaire which was then collected.
- (b) Administration in the absence of the Investigator.
- (i) The second group, the History Students, was prepared for the questionnaires by the same lecturer as the first group, and the investigator spoke to them on the aim of the research. The group had an opportunity to read through the questionnaires and to raise any difficulties in understanding and completing them.
- (ii) Subjects were asked to complete the questionnaires anonymously in their own homes.

The questionnaires had been numbered to make collation and analysis possible.

Table 5.12 presents the number of returned questionnaires in each group.

Table 5.12: The Number of the sample in each group and the Number of Questionnaires returned by the two procedures follows (Egyptian pilot sample)

Subject of Study	No. of questionnaire given out.	Year of Study	Procedure followed	No. of question- naires returned
Arabic Group	50	Third year	Administration in the presence of invest- igator	4 5
History Group	100	Fourth year	Administration in the Absence of investi- gator	22

It needs to be pointed out that, owing to the impossibility of using a computer in Egypt and the short time the investigator was allowed to stay in the country, the analysis of data had to be confined to a qualitative analysis of responses to the two questionnaires.

(4) Difficulties in Administering Tests:-

The pilot inquiry revealed that there were problems concerning the content and the language of questionnaires. In addition, students had difficulties in using the answer sheet of the Oliver Questionnaire, in completing the information sheet of the occupational rank questionnaire, and in using the identify numbers. These may be summarized as follows:

(i) The Oliver Questionnaire:-

At the beginning of the study it did not seem appropriate to use Colloguial Arabic in the translation as it is a rule that any written material of a formal character should be in the classical language. However, some of the classical words made both the instructions and the questions more difficult for the students to understand. Therefore, as a result of the examination of the completed questionnaires, some words in the items and all the instructions were changed into their equivalents in Colloquial Arabic. The actual words which were changed

into Colloquial Arabic were: 'handicapped', 'sense of wonder',
'comics', 'resentment' and 'comprehensive'. With these words it
was necessary to give examples to illustrate their meaning. The
classical words were still given, but in brackets; their meanings
were also explained in colloquial words.

(b) The questionnaire on Occupations.

Only two abstract terms in the questions were changed to colloquial Arabic. Those were: 'Public esteem' 'Personal satisfaction'.

(ii) The Content of the Questionnaires

Students also had problems in understanding some of the educational terms in the Oliver Questionnaire and some of the occupations in the Questionnaire on Occupations.

(a) Oliver Questionnaire

Some terms had to be explained indirectly by getting the lecturers who were teaching the subjects to discuss them within their normal course of education lectures. These were: 'international understanding', 'comprehensive School', 'propoganda' and 'comics'. Difficulties had arisen for the following reasons:

- (1) 'International Understanding': This concept has only a short history in the Egyptian Curriculum as there are still antagonistic attitudes toward some countries. Although international understanding is given attention in our shoools, some children don't accept it as a principle, having been brought up in an atmosphere of hostility to some foreign countries.
- (2) <u>Comprehensive Schools</u>: This term was difficult to understand because all our secondary education is provided in four separate kinds of schools: Grammar, Technical, Commercial and Agricultural. The prestige of these schools varies, and it is necessary for a child to pass an examination to enter them.

(3) <u>Comics</u>: In Egypt comics tend to mean magazines that contain stories of violence and sex. These are imported from other countries and would not be thought suitable for children. There are also children's magazines produced in Egypt which would be regarded as equivalent to English children's comics. It was explained that the term could include both types.

(4) Propaganda

'Propaganda' has a different meaning in Egypt from the one it commonly has in England. In England it is mostly used in a derogatory sense: the diffusion of a doctrine, political ideology or practice in such a way that those to whom it is passed on will accept it without question. In Egyptian schools all teaching is supposed to support government policy. All education must work for the one-party state. Hence the possibility of teaching of an "unsuitable" kind does not arise in Egyptian schools.

(b) Questionnaire on Occupations

It appeared from the discussion with the students that two occupations needed to be changed and replaced by other occupations and that an item of information on the personal background sheet had been excluded. These two occupations were "management trainee" and "architect".

- (1) Management Trainee :- In Egypt, there are no differences between the functions of an accountant and a manager: these two occupations require the same qualifications, all these workers are graduates of the Faculty of Commerce, and they are prepared to do the work of either a management trainee or an accountant.
- (2) <u>Architect</u>: This occupation is considered as equivalent to that of an Engineer. Two occupations were substituted because of their importance in the Egyptian labour force.

- (1) <u>Geologist</u>: Recently this occupation has acquired great importance, following the development of industry in general and the encouragement of the mining industry in particular.
- (2) <u>Translator</u>: This career was given attention in education after the introduction of the new international policy of the Egyptian government and the opening of the country to foreigners in the last five years. Two language colleges have been opened in Egypt, the Alson College of Language and the Leonardo da Vinci College, in addition to language departments in the Faculty of Arts in each of the following universities Cairo, Alexandria, Tanta Assuote, Mansoura, and the Colleges of Education in Ain Shams, Alexandria, Tanta, and Mansoura. Foreign languages (French and English) are also taught now at El Azhan University.

Mother's Occupation

The majority of the subjects were unwilling to mention their mother's occupation. Therefore, this question was excluded.

(iii)Difficulties in administering the questionnaires:-

These difficulties arose from the inexperience of Egyptian students in this kind of situation. It was the first time they had been asked to complete a questionnaire, to mark their answers to the questions; and to use an answer sheet and identify numbers.

(a) Oliver Questionnaire

Subjects found difficulty in answering the questions by means of the answer sheet, therefore new examples with additional instructions were set out on the blackboard to explain to them how to give their answers on the answer sheet for the three parts of the questionnaire.

The actual examples which were used in explaining were: (for the first part;) "Parents should not stand in the way of their children who wish to choose their career"; (for the second part) "Sex education

in all secondary schools"; (for the third part) "Reasons for physical education in schools. (a) It develops the child's enjoyment of movement (b) It makes children responsive to discipline, (c) A fit boy is an asset to the nation (1). These last two examples were taken from the original enlarged form of the Oliver Questionnaire.

(b) Questionnaire on Occupations

Subjects found difficulty in completing the information sheet of the questionnaire on Occupations and answering the questions about ranking the occupations by filling the spaces and marking the answers.

Therefore, additional examples were set out to show them how to complete the information sheet and to rank the occupations.

Comments on procedure :-

As a result of the pilot inquiry, the following procedures were used in collecting data in the main inquiry.

- (1) The two questionnaires were amended to eliminate the language and the content difficulties, as mentioned earlier in this chapter.
- (2) The main sample was given the questionnaires in the presence of the investigator in their different sub-groups, because of the low proportion of the responses when questionnaires were completed in the absence of the investigator.
- (3) The same lecturer attended each of the administrations to help create a good and orderly atmosphere.
- (4) Although the condition of anonymity would seem more likely to ensure honest responses, difficulties arise when it is necessary to measure the relationship between teachers' perceptions of the status of teaching and their attitudes to education, particularly in a fairly large sample.

^{1.} Oliver R.A.C. (1955) Survey of Opinions about Education. Unpublished form.

As was indicated earlier, identity numbers proved unsatisfactory as a means of preserving a students anonymity and making possible the collation of questionnaires from the sample. Thus, it was decided to ask subjects to give their names on the questionnaires. some evidence has been provided by Corey (1937)⁽¹⁾. Ash (1950)⁽²⁾. and Hartne# and Seligsohn (1967) , that signed responses to opinion questionnaires may differ very little from anonymous responses.

Two separate periods of time for completion of each of the two questionnaires by each sub-group in the total sample were arranged with the cooperation of lecturers who allowed me to use some of their lecturing time for administering the questionnaire.

Corey, S. (1937) "Signed versus unsigned Attitude Questionnaire" 1.

Journal of Education Psych. 28, pp. 44-1483.
Ash, P., Abramson, E., (1950) The Effect of Anonymity on Attitude
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CHAPTER VI

DESCRIPTION OF TESTING

Since the design of the inquiry was influenced by its aims, it seems appropriate here to state briefly what its aims were.

- (1) To study the relationships between the perception of the teaching profession by English student teachers and their attitudes toward education.
- (2) To study the relationship between the perception of the teaching profession by Egyptian student teachers and their attitudes toward education.
- (3) To compare the relationship between the status of the teaching profession and their attitudes toward education of English and Egyptian student teachers.

This chapter is divided into two sections. Section I deals with the English main inquiry; Section II deals with the Egyptian Main Inquiry.

SECTION I: THE ENGLISH MAIN INQUIRY

The main divisions of this section are :

- (1) The composition of the sample.
- (2) Procedures.
- (3) Personal and Background Data of Members of Sample.

(1) Sample:

Testing was carried out in the autumn of 1978 in Yorkshire.

The sample was mainly drawn from two groups of student teachers: student teachers at two colleges of education and graduates taking the Post-graduate Certificate in Education at Leeds University. It was

thought also that it might be of interest to compare the student teacher groups with two contrasting groups, the first, experienced teachers who were doing postgraduate studies in Education and the second, experienced teachers who were not working for any further qualifications in Education. Thus our main sample was composed of four kinds of groups. The choice of the sample for the following four groups was determined by the availability of students, and the willingness of the subjects to co-operate. Since participation of the students in the pilot study had been relatively poor because of the difficulty of persuading them to complete the questionnaires, it did not seem possible to choose samples on a random basis. Whole groups were asked to complete questionnaires.

- (i) The first group consisted of student teachers who were in the third or fourth year of study for the B.Ed. degree. The sample came from two colleges of Education whose staff allowed access to their students. In college A the whole of the third and fourth years were invited to complete the questionnaires at a given time, in a hall in the college. The numbers of students in the third and fourth years were respectively 137 and 249, but not all of them attended at the times the questionnaires were administered. Only 156 in all did so. In college B the total of the third and fourth year students was quite small 40 students. All of them completed the questionnaires.
- (ii) The second group was composed of students from the School of Education, Leeds University who were working for the Post Graduate Certificate in Education. The whole group of 303 was invited to complete the questionnaires; only 103 students did so.
- (iii) The third group was composed of students who had experience of teaching and were following a part time course for the degree of Master of Education (M.Ed.). Forty-two students were approached because they were easy to contact; 30 responded.

(iv) For the fourth groups an attempt was made to obtain a group composed of teachers who were not working for a further qualification. It was suggested to the M.Ed. students that they should each give a copy of the questionnaires to a colleague in their school and ask him/her to complete them. Only 16 teachers responded.

The main inquiry produced 300 correctly completed questionnaires after excluding the respondents who had not properly completed the questionnaires. Table 6.1 shows the number in each group and the number of the questionnaires properly completed.

Table 6.1 : The composition of the English main sample and the number of questionnaires properly completed.

Population studied	College of Grou	of Education aps B	P.G.C.E. Group	M. Ed. Group	Experienced Teacher Group
The number of quest- ionnaires sent out	386	40	303	42	42
The number responding in each group	156	40	103	31	16
Percent of those responding	40	100	34	73	3 8
Not completed properly	12	_	9	4	2
Late returns	-	-	16	1	2
Completed properly	144	40	7 8	26	12
Percent completed	37	100	26	61	28

Table 6.1 shows that over 40% of the questionnaires were returned from College A: This was not a high response rate. Although it was anticipated, in the light of the results of the pilot inquiry, that a low rate of responses might be obtained from the colleges of education, it was thought that a large group would provide a reasonable number of respondents, but the response rate was poor, perhaps because the testing sessions were held towards the end of the first term and some students

had already gone home. In college B, the rate of response was very good; the whole group of forty students completed the questionnaires; possibly the close relationship between the small groups and their tutors had helped to get a good response. In the P.G.C.E. group the response was 103 out of 303, but the actual number used was only 78 after exclusion of those questionnaires which were returned later and those not completed properly. Again the low rate of response of this group was poorer than had been expected, particularly as their response rate on the pilot inquiry had been reasonably satisfactory (72%). The low response rate was posssibly caused by students being asked to complete the questionnaire at the end of term, in their own time. Some empirical evidence suggested that a low response rate is not likely to be a biasing factor in the sample. Lundberg and Larson (1949) (1) on a follow-up sample found that those who did not respond to their questionnaire were not markedly different from those who had responded, to the questionnaire the first time it was given out, with regard to personal characteristics and responses. Other studies. Stephan (1936)⁽²⁾, Choppin (1974)⁽³⁾ claimed that sampling may be biased by the refusal of infermants to co-operate. We believe, however, that the low rate of response from our sample was due to their being asked to answer the questionnaires at the end of term.

The number of the respondents in these two groups seems large enough to provide a basis for statistical analysis. Even if further samples had been obtained from different universities, to get a larger number of subjects, the number replying from each university would probably have been low, since there is no way to compel subjects to

^{1.} Lundberg, C. A: Larson, O.N. (1949) Op.cit. pp.487-494.

^{2.} Stephan, F.P. (1936) "Practical Problems of Sampling Procedure" American Sociological Review, vol.1, p.578.

^{3.} Choppin, B. (1974) "Interpreting Research: Sampling "Educational Research Vol. 16, 3 pp. (218-221)

complete questionnaires. Dependence on good will is not to be relied on if one wants to get representative samples. (1)

The attempt to get a reasonable number of experienced teachers to complete the questionnaires so that comparisons could be made between their responses and those of student teachers was not successful. Only 26 out of the M. Ed. group of 42 completed the questionnaires; and of their colleagues in schools who returned questionnaires (16 in all) only 12 completed them properly. Perhaps this was because of the very indirect contact between the investigator and the latter group. My assumption that all the M. Ed. group would answer the questionnaires, as they said they would, was wrong. The relatively small number in those two groups made it difficult to generalize about these sections of the teaching profession. It was therefore decided that these groups were too small to serve the contrast purpose, but that they should be included in the whole sample.

(2) The Procedure followed in Collecting the Data :-

Each student was provided with an envelope containing the two questionnaires. College A students completed questionnaires at a set time in the college, a college lecturer being responsible for organizing the sessions: students in other groups completed questionnaires in their own time.

A follow-up procedure was introduced for subjects who did not return the questionnaires within two weeks. The non respondents in each group were reminded about the questionnaires by their tutors.

^{1.} McNemar, Q.(1940), Sampling in Psychological Research, Op.cit.p.364.

(3) Personal background data :-

The following Tables 6.2 to 6.6, give the classification of data about personal background according to sex, age, teaching subject, subject of course, father's occupation. Details of the sample classified according to religion, place of primary education, place of secondary education, qualification obtained, length of experience, type of secondary school, mixed or single sex school, and mother's occupations are provided in Tables 1:8 in Appendix D. It is, however, necessary to point out that, when our sample is classified according to each of these variables, it does not reflect proportions in the whole student teacher population of England and Wales.

Table 6.2: Classification of English sample by sex.

Sex	Number of subjects	Per cent
Men	87	29
Women	213	71
Total	300	100

Table 6.3: Classification of English sample by age

Age Groups	Number of subjects	Per cent
20–24	246	82.0
25–29	24	8.0
30 and over	29	9•7
Not stated	1	0.3
Total	300	100

Table 6.4: Classification of the English Respondents according to Main Teaching Subject(s)

Teaching Subjects	Number of Subjects	Per cent
Arts	198	66.0
Science	70	2 3. 3
Non-academic subjects (e.g. P.E, Crafts,		
and Music)	28	9.4
Not stated	4	1.3
Total	300	100

Table 6.5: Classification of English Subjects according to Subject of their Course

Length of Course	Number	Per cent
Four-Year Course (B. Ed.)	184	61.3
One-Year Course (P.G.C.E.)	78	26.0
Two-year Course (M. Ed.)	26	8.7
Not registered for a course	12	4.0
Total	300	100

Table 6.6 : Classification of English Respondents by Father's Occupation

Father's Occupation	Number	Per cent
Class I	126	42.0
Class II	45	15.0
Class III	70	23.3
Class IV	26	8.7
Class V	5	1.7
Not stated	28	9•3
Total	300	100

The previous tables have summarized the characteristics of the English main sample in terms of sex, age, religion etc.

A few points should be noted for thes sub-groups.

- (1) The relatively small number of some of the sub-groups in the sample, e.g. the last two age-groups in Table 6.3, the non-academic group (Table 6.4) and the M.Ed. and Experienced Teacher groups (Table 6.5) inevitably restricts generalization about these sections of the population.
- (2) The classification of the occupations of the subjects' parents followed the same procedure as that used with the English pilot sample (Registrar-General's Classification in England and Wales, 1967).
- (3) When the subjects' responses were broken down by such variables as religion, the small sub-groups were combined into one category to provide a well-balanced group, and some of these small groups were excluded from the sample, when it was not possible to combine them, with a relevant group. This will be explained further later when the responses of subjects on the two questionnaires are analysed.

It cannot be claimed that the people who answered the questionnaires are a reliably representative cross-section sample of student teachers and serving teachers in England and Wales. At the same time it is worth pointing out that there is no obvious reason to consider the groups of College of Education and P.G.C.E. students as untypical of student teachers in England. It may be noted that 57% of our English sample had fathers whose occupations were in Social Classes 1 and 2: the current research at Leicester University has found 60% of their group which is drawn from 30 university departments of England and Wales (1), to have fathers occupations in these social classes: so in this respect our sample seems fairly representative.

^{1.} Patrick, H., Reid, K. (1980). Look at the Kinds of Students attracted to Postgraduate teacher training, Class of the 1980s Time Higher Education Supplement, 26-6.1980, p.12.

SECTION II: THE EGYPTIAN MAIN INQUIRY

The main divisions of this section are:

- (1) The composition of the sample.
- (2) Procedures.
- (3) Personal and background data.

(1) The composition of the sample:

Testing was carried out in the winter of 1978, in the Cairo and Alexandria areas. The sample was mainly drawn from student teachers. But there were also contrast groups, a group of post-graduate teachers and a group of serving teachers. Those three groups can be described as follows:

(i) The undergraduate group:

These were following a four-year course in Education leading to a B.Sc. or B.A. in Education and a teaching subject and were preparing to teach in preparatory and secondary schools.

(ii) The diploma graduate group:

These were teachers who were following an advanced course leading to the special Diploma in Education and who have had a first degree in Education and a teaching subject.

(iii) Serving teachers group:

These were not working for a further qualification or taking an advanced course beyond their first degree.

The first two groups of the sample came from three colleges which allowed the investigator to carry out the research with their students. These colleges were:

(a) The Women's College: (single sex) associated with Ain Shams University in Cairo. This college is divided into two parts: The Education

Department and the General Department. The first gives a B.A. or B.Sc.

in Education and a teaching subject; the second gives a B.A. or B.Sc.

in an appropriate subject area.

- (b) The College of Education also associated with Ain Shams University in Cairo. This has male and female students, gives its graduates only a B.A. or B.Sc. in Education and a teaching subject.
- (c) The Alexandria College of Education, associated with Alexandria University. This has male and female students and gives its graduates a B.A. or B.Sc. in Education and a teaching subject. In addition, the three colleges provide postgraduate studies in Education at Diploma, Master's and Doctorate levels. Students from these three colleges are prepared for teaching in the preparatory schools (ages 12-15) and secondary schools (ages 15-18).

To obtain the third group, one public secondary school was chosen because the principal was willing to co-operate in the research.

There is no suggestion that this group of teachers is a representative sample of teachers in Egypt, but the school is a fairly typical Egyptian public (i.e. state) school.

(a) Women's College Samples:-

(i) The Undergraduate groups: Two groups were chosen from the third and fourth year. From every group in each year two sub-groups were chosen, not on a random basis but according to whether lecturers allowed me to administer the questionnaire in their lecture time. All the students in the sub-groups were asked to complete the questionnaires. The third year was composed of students specializing in mathematics and social studies. The fourth year consisted of students specializing in in science and Arabic studies. The total number in each group was intended to be 50 students, but not all who completed the questionnaires could be identified as not all gave their names. Furthermore, some of the students walked out and others did not hand in the questionnaires so hence the total was again reduced.

(ii) <u>Diploma graduate group</u>: Because of the small number of the Diploma graduate students in the Women's College, all students were asked to complete the questionnaire. The number in this group was 30.

(b) The College of Education Sample

- (i) Undergraduate groups were chosen from the third and fourth year: from every group in each year, two sub-samples were chosen. It was not possible to select on a random basis. Choice of subjects was determined by accessibility as before. The third-year group was composed of students specializing in mathematics and social studies; the fourth year group was composed of students specializing in science and social studies. The expected size of each group was 40, although as before not all who completed gave their names. It was thus impossible to identify their completed questionnaires. Hence their responses had to be excluded, thus reducing the group total.
- (ii) Diploma graduate group: Two groups whose lecturers allowed me to use their lecture time completed the questionnaire: the actual number of the first was 25 and the other was 20. So the actual total of the two groups was 45.

(c) The Alexandria College of Education Sample

One group from the third year and another from the fourth year, specializing in French and English, were chosen according to accessibility. The sample was kept small as it was difficult for me to travel frequently to Alexandria.

Group of Experienced Teachers: Eighty teachers of the chosen school were approached by an acquaintance of mine who is a teacher in this school. They completed the questionnaires in their own homes. These were collected two weeks later by a colleague: only 42 questionnaires were completed.

The main inquiry produced 500 correctly completed responses after excluding those respondents who had not properly completed the questionaires, as, for example the person who left a whole page unanswered. In addition all returns from subjects who were of other nationalities were excluded. Questionnaires which could not be identified for collation purposes were also excluded. Table 6.7 shows the number in each group and the number of questionnaires properly completed.

Table 6.7: The composition of the Egyptian sample and the number of questionnaires properly completed.

Population studied	Undergraduate student teacher group			Diploma graduate group		Serving Teachers
	A	В	C	A	В	
	Women's	Ain	Alex-	Women's	Ain Shams	ĺ
	College	Shams	andria	College	University	<u> </u>
Number of quest- ionnaires sent out	400	320	50	30	45	82
Number responding in each group	341	183	29	26	3 8	49
Not completed properly	8	15	2	6	2	2
Other nationalities	22	46	4	7	6	-
Not identifiable	11	19	7	2	2	5
Completed properly	300	103	16	11	28	42
Per cent completed properly	7 5	32	3 2	37	62	51

From an examination of the rate of responding in each group given in Table 6.7 it is evident that the rate of response of some groups was relatively low. In the case of undergraduate subjects, the rate of response of students from the Women's College was higher (75%) than that of the College of Education (32%) and the Alexandria College (32%), possibly because the College of Education had a relatively larger number of other nationalities and also because the investigator was stranger to the University and the staff. Besides, there was difficulty in

keeping order in the groups and persuading subjects to cooperate, without assistance from the staff.

Considering the rate of response in the post graduate groups, the rate was low in college A (37%) and reasonably high in the case of college B (62%), possibly because in the former college, questionnaires were completed in the students' own time. The rate of response of the experienced teachers was (51%). It had been hoped to approach more than one school, but difficulties arose in persuading teachers to respond.

Moreover, official permission was needed to administer the questionnaires. The school used seems to be a typical Egyptian school but we must add the reservation that we are not claiming that the serving teachers in the present sample are reliably representative of a cross section of the population of teachers in Egypt.

Our comments on the reasons for the low response rate of some of the Egyptian sub-groups would be similar to those given earlier for the English sample. We would again add that the low response did not seem to be a biasing factor in the sampling procedure. (1)

(2) Procedures follows in collecting the data.

All the undergraduate groups completed the questionnaire in the presence of the investigator. Subjects in the other groups were provided with an envelope containing the two questionnaires and were asked to complete them in their own time and return them to a particular lecturer who had undertaken to collect them.

(3) Personal and background data

Tables 6.8 to 6.12 give the classifications of personal background data according to sex, age, teaching subject. subject of course and

^{1.} Stephan, F. F. (1936) Practical problems of sampling procedure, American Sociological Review, 1, pp.569-580.

father's occupation. Details of the sample classified according to religion, place of primary education, place of secondary education, type of secondary school, type of school (mixed or single sex), qualification obtained and length of experience are provided in Table 9 to 15 in Appendix D.

The Classification of the Occupation of Students' Parents

As far as I know, there is no official classification of occupations into social classes in Egyptian society, but occupation is a very distinctive criterion in determining the social class, economic level and also the educational level of individuals. Hence we based our grouping of occupations on the categories shown in Table 6.12.

(1) Professional Occupations:

These occupations which require a highly specialized education (university or college qualification), e.g. doctors engineers... secondary school teachers...etc.

(2) Semi professional occupations:

All occupations requiring qualifications beyond secondary school level but lower than university level, e.g. training college graduates, technicians, primary school teachers..., police officers.

(3) Skilled Occupations:

All occupations requiring a minimum training in skill, and education below secondary level, e.g. clerks, drivers, electricians, blacksmiths, small business men, shopkeepers, factory workers.

(4) Unskilled Occupations:

Those occupations which do not require a minimum level of education, e.g. manual cleaners, housekeepers, watchmen, barbers, carpenters, farmers. (most of whom are illiterate). In Egypt plumbers, carpenters and barbers are not skilled occupations.

Table 6.8: Classification of Egyptian Subjects by Sex.

Sex	Number	Per cent
Male	149	29.8
Female	351	70.2
Total	500	10.0

Table 6.9: Classification of Egyptian Subjects by Age Groups

Age Groups	Number	Per cent
20 - 24	427	85.4
25 – 29	30	6
30 and over	43	8.6
Total	500	100

Table 6.10: Classification of Egyptian Respondants by main teaching subject

Main teaching subject	Number of sample	Per cent
Science group	123	24.6
Mathematics group	103	20.6
Social Studies and Arabic Group	232	46.4
Language group (French, English)	42	8.4
Total	500	100

Table 6.11: Classification of Egyptian Respondants by subject of course

	Number	Per Cent
B. Ed. group	419	83.8
Postgraduates	39	7.8
Serving Teachers	42	8.4
Total	500	100

Table 6.12: Classification of Subjects by Father's Occupation

Father's Occupation	Number	Per cent
Professional	133	26.6
Semi professional Skilled	167 126	33.4 25.2
Unskilled	73	14.6
Not stated	1	0.2
Total	5 0 0	100

The previous Tables have summarized the characteristics of the Egyptian Main Sample in terms of sex, age, religion, etc.

A few points should be noted about these sub-groups:-

- (1) As with the English sample, the relatively small number of some of the sub-groups in the sample, e.g. age categories (Table 6.4), Crafts and Physical Education group (Table 6.10) makes generalization about those sections unreliable.
- (2) We recognize that the present Egyptian sample does not represent the general population in Egypt, since students in Egyptian Universities tend to be drawn heavily from the upper and middle socio-economic classes. On the other hand, student teachers in an Egyptian University are likely to be more representative of the semi-professional and skilled occupation classes than the professional groups.

Table 6.13: Comparison of the groups in the English and Egyptian
Samples expressed in Percentages for each group

Variables	Groups	English	Egyptian
	•	Sample	Sample
Total		300	300
Sex	Male	29.0	29.8
DCY	Female	71.0	70.2
	20–24	82.0	85.4
Age	25–29	8.0	6.0
	30 and over	9.7	8.6
	Not stated	0.3	_
	Undergraduate College/P.G.C.E.	87.3	83.8
Type of	Postgraduate degree or diploma	8.7	7.8
Course	Not studying (experienced		0.4
	teachers)	4.0	8.4
	No experience	87.0	83.8
Length of	One year	1.7	3.0
experience	2-4 years	4.3 7.0	3.0
	5 years and over	23.3	10.2
Manahim	Science	66.0	45.2 53.6
Teaching	Arts Others (Crafts, music, P.E)	9.4	1.2
subject	Not stated	1.3	1.2
Place of	Village	24.6	21.2
Primary	Town	51 . 7	14.8
Education	City	23.7	64.0
Place of	Village	4.7	8.4
Secondary	Town	70.0	24.0
Education	City	24.7	7 7.6
	Not stated Class I (Prof)	0.6 42.0	26.6
Father's	Class I (Prof) Class II (Semi-Prof)	42.0 15.0	20.0 33.4
Occupation	Class II (Semi-Froi) Class III (Skilled)	23.3	25.2
	(1) TV	8.7	14.6
	Class IV) (Unskilled)	1.7	
	Not stated	9.3	0.2
Religion	(Islamic)	-	84
	Christian (Protestant)		- •
	Protestant (Christian)	65 .7	16
	Catholic	12.0	· · ·
	Christian (Catholic)		
	No religions	15.7	
	Other religions	6.6	
Type of	Independent	6.7	6.0
Secondary	Comprehensive	27.0	-
School	Secondary modern	10 .0	
	Grammar (public school)	48.3	87.8
	Grant aided (lang.school)	5•3	5•4
	Technical	2.0	
	Not stated	0.7	0. 8
Mixed or	Co educational	57.0	14.8
single	Boys' school	12.7	24.4
sex school	Girls' school	30.0	60.4
	Not stated	0.3	0.4

Summary and Comments:

It may be interesting for purposes of comparison between the two countries to summarize the main characteristics of the two main samples (the English and Egyptian). In Table 6.13 are presented in percentages the various sub-groups of the English and Egyptian samples. be noted that religion and type of secondary school are different in the two countries. Egypt has only two religion groups; Moslems and Christians, and only two types of secondary school; government and However, from the figures given in Table 6.13, it would independent. appear that there is a good match in the proportions in English and Egyptian samples in respect of males and females, age, length of course and length of experience, but there are considerable differences in the following variables: place of primary and secondary education, father's occupation and main subject of teaching. Egyptian subjects tended to be drawn from city and town rather that from villages.

Because England is a highly urbanised country, one expects a representative sample of students teachers to come from towns or cities. The high proportion of town and city dwellers in the Egyptian sample was probably due to the fact that the two colleges were located in Moreover, students from cities in Egypt are more likely to go cities. on to higher education than those from villages. Comparison between fathers' occupations in the two countries shows that the English sample includes a higher proportion of representatives from Class I and fewer from the other social classes than the Egyptian sample. The Egyptian sample has more representatives of Class II and Class III. perhaps due to the fact that professional people in Egypt tend to send their children to study medicine, engineering, etc., but not It must, however, be said that the two samples are teaching. remarkably similar in the main variables that are likely to influence their attitudes to teaching and education, viz. age, sex and perhaps also. level of education.

It must be admitted that having to rely on the availability and willing co-operation of student teachers and teachers, on the one hand, and having to restrict ones research to one geographical area in England - Yorkshire - and to two cities in Egypt, on the other hand, made it impossible to get a representative sample. To have got such a sample, however, would have required the efforts of a team: It could not be obtained by one person, single-handed.

We recognise that the findings of the study cannot be generalised to the whole population of student teachers and serving teachers in England or in Egypt. What may be claimed is that, although our sample may not be representative, there is no evidence that any serious bias has been introduced which would make it different from the whole population of student teachers in England or Egypt.

CHAPTER VII

FACTOR ANALYSIS OF THE ENGLISH AND EGYPTIAN RESPONSES TO THE OLIVER QUESTIONNAIRE

The aims dealt with in this chapter may be summarised in terms of an attempt to check (1) how far the factor structure of the Oliver questionnaire when administered to these new groups was similar to that found by Oliver and Butcher; (2) how far satisfactory factors were found on which to base an attitude measure for the individual teacher in England; (3) how far satisfactory factors were found on which to base an attitude measure for the individual teacher in Egypt; (4) how far the factor structure of the Oliver questionnaire differs from culture to culture when compared in the English and Egyptian samples.

The sample: The following analysis is based on three samples.

- (1) The English pilot sample 74 student teachers and teachers;
- (2) the English main sample 300 student teachers and teachers;
- (3) the Egyptian sample 347 student teachers and teachers.

 Some groups of subjects answered the questionnaire at a meeting of their group in college time; others did it in their own time, as described in Chapters 5/6. In the text, the questionnaire items are referred to by names of the variables used in the computer: thus, item 1, part 1, is variable 74, item 2,75 and so on to variable 132 item 10d, par 3. Scoring on each item was on a five-point scale.

The assumption of normalised distribution underlying the five responses to each item is important because it makes possible the application of all parametric measures including the product-moment correlation coefficient.

Inspection of the 177 distributions of the scores for the responses of the three samples suggested that distributions were varied in character and tended to be J, L, M or W shaped rather than normal and also sometimes markedly skewed. Sixteen examples were selected to illustrate these variations. These can be seen in figures 1 to 16 in Appendix E.

Since it was not possible to normalise the distributions, the problem was tackled by recoding some of the variables to counteract the effect of the extreme forms of the distribution for the individual variables. Thus, when very small numbers occurred in any category, these were collapsed into an adjoining category. In Appendix E, tables 1 to 3 present the distributions of the scores before and after recoding for the English pilot, English main and Egyptian samples respectively.

The Analysis of the Recoded and Unrecoded Data

In order to test the effect of the modifications of the distributions on the factors extracted, the recoded and unrecoded data were subjected to a principal component analysis. Inspection of the variance accounted for by the factors suggested that at most four meaningful factors could be extracted.

In identifying each of these four factors, the items with the highest loadings in each factor were examined separately. The loadings of the first factor accepted for the three samples were varied; for the English main and pilot samples the lowest were above 0.325; for the Egyptian sample, the lowest loadings were above 0.400. For the subsequent factors the lowest loadings accepted for the three samples were above 0.300. It should be noted that this rule was discarded with the third part of the questionnaire

where four responses had to be made to each statement: if the loading of each of the four responses was greater than the lowest level accepted, only the two highest items were taken. This rule was also followed by Butcher (1959). In Appendix E, Tables 4 to 9, are presented the factor patterns for the English pilot, English main and Egyptian samples on the unrecoded and recoded data.

Comparison of the results of the analysis of the unrecoded and recoded data for the three samples suggested that there were close correspondences in the percentage of variance accounted for by each factor. This can be seen from Tables 7.1 to 7.3, where the items on each of the four factors with loadings greater than .300 are presented for the unrecoded and recoded data from the English pilot sample. the English main sample and the Egyptian sample respectively. The four factors together accounted for 30.5% of the variance for the unrecoded data, and also of the variance for the recoded data for the English pilot sample; 26.2% of the variance for the unrecoded data and 25.7% for the recoded data for the English main sample. For the Egyptian sample, the percentage of variance for the unrecoded data was 26.0, and 25.6 for the recoded data. (Appendix E, Tables 4 to 9 present the factor patterns on the unrecoded and recoded data for the English pilot, English main and Egyptian Secondly, the factor structures were similar in that samples.) the high loading items on each factor for the unrecoded data tended to be loaded in approximately the same manner as the corresponding factors for the recoded data. In some cases, as shown in Tables 7.1 to 7.3, they share the same rank order, but there were also small differences in the loadings of some variables on each factor and in their relative rank order. However, these did not appear of major importance, since the recoded data are considered to be more

^{1.} Butcher, H.J. (1959), op. cit.

Table 7.1: Comparison Between the Unrecoded and Recoded Data, English Pilot Sample, P.C. Analysis, 59 Items

Variable			or I				or II				r III			Fact	or IV	
No	Unred		Reco		Unrec		Reco		Unrec	oded	Reco	ded	Unrec	oded	Reco	ded
74:132	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R
74	-402				+416	12	-511	3							+377	4
75	+478	9	+516	8	,	1		_		1	+399	3	+366	6	'/''	-
76	-343	20	-356	21				1			.,,,,		1,700]	i
77		1		1	l	1		1	+418	4				1	+314	9
79	-383	19	-398	18					,4.5						7714	
80		_	"		- 321	16		1								
81			j	}	+345	15	İ]]	1		}	}]	1
82			1	1	-349	14	-344	9				1	+441	4	+351	9
83		ł		1	777	ļ '¬		1	-318	13			-422	5	- 489	2
84				Ì	+423	10	-413	7	- 318	12	•		-422		-409	ا ا
85		1		1			7.7	['	-364	10	+361	5	ĺ	ĺ		ĺ
86	1	1	ļ		+587	1	-551	2)04		+306	11	į	1		
87		1			+583	3	-456	6			7,00	' '				
88	1	1	1	1	+439	9	-478	4					i	ł	1	
89	l .	1	-337		+584	2	-340	14] .		l		
90	-306	21	-//	1	+418	111	- 740	1 '4	-371	7	+354	6				l
91	- 700	-'	-340	21	+495	5	-352	1	-)//	1 '	+554		ļ	1]	1
92		1	-740	21	T47 0	'	+479	6	-465	5	ļ				Ì	
94	-471	10	-485	12	+371	13	-366	111	7405)						
95	- 526	6	-629	1	T 7/1	'	-)00	1''	+312		-389			}]	1
96	-)20	1	-029	'		1	[1		6		4		·		ĺ
97					+453	8	-354	12	+381	"	-410	2		1		ł
98	454	4.7	-466	147	+422	°	-224	'2			744					ļ
99 99	-454	13	-400	13	. 460	1 -	400		+444	8	-314	8	ľ	1		İ _
100	407	1.5	100	45	+468	7	-400	8	+369	8		1		l	+343	7
100	-407	15	-426	17										_		
102	707	1	477	1.0		1]						+523	3	+374	5
104	-383	144	-437	16		1								1		
104	-464	11	-523	7												
105	-489	8	-536	6			1]	j	-579	1 1	-481	3
107	-525	7	-510	9		1	1 .			1			-527	2	-557	1
.01	1	1					,			1			+314	9		'

Table 7.1: (Continued)

Variable	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R
109	-435	14	-443								+320	7				
111	-528	5	-580	2		İ										
114 116	- 406	16	-443	15		\							ļ			
117	-353	4	-572	3							-314	10	ļ			
118		4	-)12			1					-714	10				
119	+606	1	- 558	5	1	}					-320	11				
120	1000	'				1)	' '	ł			
121	ļ	j			-507	4	+582	1	- 367	9						
122]	ł	' '	•	374	10	- 512	1	+488	1				ļ
123	-339	22			ľ	İ	717	'	, , ,	'		'	'		1	ĺ
124					1		ļ		-441	3	+382		ļ			
125	-461	12	- 505	10		1			} ``				1		1	ł
126			-386	19					+417	5	-376				ł	
127	-397	18				1	Ì						ł		+304	10
129	- 586	2	- 559	4]		1							i
130		1				1			ł	1					+324	8
132	-545	3	- 496	11	l	}			l				l			
% Variance	12.7		12.7		7.4		7.5		5.5		5.4		4.9		4.9	
Variance Unrecoded Variance	30.5		·													
Recoded	30.5												•			

Table 7.2: Comparison Between the Recoded and Unrecoded Data, the English Main Sample, Principal Component Analysis, 59 Items

Variable 74:132	Three		or I	3.3	77		or II				r III				or IV	
59 items	Unred	R		oded	Unrec				Unrec		Reco		Unrec		Reco	
Jy I tems	Toad	I I	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R
75		1							+331	5	+226		+184		+318	6
78	ł	1			-315	15	-321	15	1			1	+480	1	+425	2
80	-325	20	-307	18						1			. ('	140	~
84]]]	-451	7	+464	5		1]
85				1 1	-499	3	-442	9		1				1		
86		1			-413	9								[1
87	Ì	1			-508	2	-484	3	ľ					1		1
89		}	ł	İ	- 496	5	-482	4		1				ł		
90		1		1	-517	1	-528	1						ļ		1
91		}		j	-496	4	-514	2								
94					-292	'	-348	11								
96	-432	19	-454	8		1										-
97	, , ,		'-'		-417	10	-445			1						
98	-407	5	-480	4	' '	ł	1112		ł					1		
100	-407	10	-387	11		ł							+395	3	+417	3
101	- 458	8	-470	6		j			-304	1	-356	3	. ,,,,		1411	
102	-426	9	-407	10												Ì
103					-299		-324	14								
105				1 1		1			-459	2	-471	2				
106	-430		424	9		1			-572	1 1	-616	1 1		1		1
107	-481	6	-457	7		1				1			1	1		
108	-498	4	-445]	,]			1			
110									+328	6	+229					
111 [-355	15	-330	17												
112	-383	13	-369	14												
1		1		1		1			ł	1		1 1		l i		l

Table 7.2: (Continued)

Variable	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R
114 115 116 117	-344 -343 -467	18 17 7	-354 -366 -467	16 15	-339	14	-315						-311	8	- 251	
118 119 120	- 509 - 453	3	-484 -473	3 5	-280	12	-344	12	+395 +446	4 3	+279 +327	4	·			
121 122 123 124	-402 -348	11 16	-364 -348	,	+454 +369	6 2	+442 +358	10	,				- 332	5	+259	
125 126 127	-392 -374	14	-384 -342	12	-409 +354	11 13	-377 +327	13					-386	4	-327	5
128 129 131	-398 -587 -553	12 1 2	-373 -562 -523	13 1 2									+258 +426	2	+377 +488	4
132													+312	7	+269	
% of Variance Variance % for	10.6		10.2		7.2		7.3		4.5		4.4		3•9		3. 8	
Unrecoded Variance % for	26.2															
Recoded	25.7															

Table 7.3: Comparison Between the Unrecoded and Recoded Data, the Egyptian Sample, Principal Component Analysis, 59 Items

Variable			or I				or II			Fact	or III		Factor IV				
74:132	Unred		Reco		Unred	oded	Reco	ded	Unrec		Reco	ded	Unrec		Reco	ded	
59 items	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	F	
78					+322	13	-323	12							 	十	
80	- 345	17	-422	16	- 381	7	+352	111		1			i	ł	1	1	
81	7.7	1.,			- 386	6	7772	' '			Ì				1		
82		İ	[1			- 304	14		1		[1	1		
83		1	1	1	+315	15	-504	'4		1	l			ļ	İ	1	
84	- 419	12	-470	12	7717	١'/]	j]]	j	
86	- 368	14	- 349	'~	ļ	1				1	į				}	ł	
87	- 355	15	- 355	j		1		}		ł			ł			1	
90	-370	13	- 470	17						1]		}	
91	-210	' '	-470	1 ' '	. 740	140	000			1			1	į			
	440	144	577	1 -	+340	12	- 292	1		ļ		i i		l		1	
94	- 442	111	- 537	5	- 490	1				1				}]	
95	7.40	}	1		- 409	4				1	+411	4		1		1	
96	-34 0	1	-441	14	- 499	1	+462	2		1	ł			ł	1	1	
97					+351	97		1		1	j]]		1	
99	- 573	2	- 532	6				1		1	ļ				1	1	
100	- 473	8	-479	11	_ : _ :	1				1	į	} ;		l	ł	1	
101				•	+300	17	- 421	1		1	j]]					
102	- 557	3	- 606	2		1		1		1	Ì	1					
103	- 508	6	- 507	9 3						1	ł			1	1	1	
108	- 531) .	- 556	3		1		1			ļ	1 1				j	
107	- 598	1 1	- 619	1 1		1					ļ			İ			
108	- 540	5	- 549							İ	l	1			1	1	
109		j				1			- 300	}	1	1				}	
110	- 361		- 486	10	- 351	10	+316	13							1	1	
111	- 353		- 433	15						1	1			İ		l	
112	-]]			1	- 365	9	-467	2	+310	7		l	1		
113]]	- 359	8			- 361	5	+435	3				l	
114			1			1			- 343	16	+364	6		İ		1	
115)					- 365	10	''	1	','					1	
116			ł	1 1	- 358	9)))	'	i		1	1 1				i	

Continued/.....

Table 7.3: (Continued)

Variable	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R
117 118 119 120 121 122 123 124	-488 -486 -548	7	-373 -468 -511	18 7	+321 +498 - 455	4 2 3	- 500	1	+362 - 561 - 374	1 4	+393 +451 +542 +309	5 2 1				
125 126 127 128 130 131 132	-350 -343 -463 -442	16	-316 -462 -543 -510	13 4 8	+307 +400	5	-384 -433 -453	8 4 3	- 426	3	+306	8				
% of the Variance	13.6		12.7		5•6		5•7		3•9		4.1		2.9		3.1	***************************************
Variance % for the Unrecoded	26. 0															ļ
Variance % fo the Recoded	r 25•6					-										

suitable from a statistical point of view; the recoded data formed the basis for all the subsequent analysis of the three samples.

Analysis of the Recoded Data

A large variety of different forms of factor analysis was available from the Leeds computer. This would have allowed up to eighteen different solutions, excluding the variety which could be influenced by varying the number of factors extracted. It was not practicable in terms of time to explore all possible solutions, but, on the basis of the data from the pilot sample only, a total of ten solutions was obtained on the basis of (a) 3, and (b) 4 factors. There appeared in fact to be very little difference in the constitution of these factors according to type of factor analysis solution. It was therefore decided to limit analysis of the data from the main samples to four forms:

- (i) a principal component analysis for four factors without rotation
- (ii) varimax rotation on the four principal component factors
- (iii) a principal factor analysis for four factors
 - (iv) an oblique rotation on the four principal factors.

First: The Analysis of the 32 Items

The thirty-two items in this set were formulated by Oliver and Butcher (1962). (1) on the basis of the three factors they had extracted, the Tenderminded-Toughminded Factor, the Radical-Conservative Factor and the Naturalism-Idealism Factor. The responses of the English pilot sample were subjected to four types of analysis. From these analyses three factors were extracted. Results of the factor analysis showed that the factors extracted were not very

^{1.} Oliver, R.A.C. and Butcher, H.J. (1962), op. cit.

helpful in identifying the three dimensions hypothesised by Oliver and Butcher. Therefore the analysis of thirty-two items was not repeated for the English main sample and the Egyptian sample.

Tables 10 to 13 in Appendix E give the factor patterns for the four forms of factor analysis listed above.

A comparison of the corresponding factors on the four types of analysis is relevant to the question of their stability and identification. In Appendix E, Tables 14 to 16, present the corresponding factors on the four types of analysis with item loadings greater than ± .300 (loadings below this figure were omitted). The four solutions were largely similar except for slight differences between the unrotated factors (the principal component factor and the principal factor) and the rotated factors obtained by the varimax and oblique methods of analysis. Subsequent discussion is therefore based on the principal component analysis as a reasonable solution.

Table 7.4: Factor I: The Tendermindedness-theoretical Factor, 32

Items, English Pilot Sample

The content of the items	The present study Loading	Butcher's (1959)		
Reason for the teaching of the English language in schools: A person who uses English incorrectly is handicapped in his career	- 590	T	 50	
Argument in favour of secondary technical education: Technical education is a good investment for an industrial country	- 563	T	 68	
Reason for teaching science: The study of science is satisfying to one's intellectual curiosity	- 556	т	 76	
Argument in favour of secondary technical education: A technical school training gives a boy or girl a good start in the competition for jobs	- 535	Т	 75	
Reason for teaching science: The progress of industry demands workers equipped with scientific techniques	-5 21	т	71	

Table 7.4: (Continued)

The content of the items	The present study Loading		tcher's 959)
The time to begin reading lessons is when the children feel the need for them	+501	R	 03
Direct moral instruction does little to improve children's characters	+471	N	02
Reason for training of teachers: A teacher must acquire efficient techniques of teaching his subjects	- 447	T	 51
Reason for excluding propaganda from schools: Propaganda might get into the wrong hands	- 433	T.	4 8
School courses in parenthood	- 427	R	+•22
Reason justifying the cost of special schools: Handicapped children can be troublesome in ordinary schools	- 426	т	 55
Naturalness is more important than good manners in children	+365	T	+•03
Character training is impossible if there is no final standard of right or wrong	- 342	N	 05
Argument in favour of retention of corporal punishment: Some children will not respond to any other form of discipline	- 338	TR	 35
Comprehensive schools to be normal form of secondary education	+335	RT	 02
You cannot expect children to write good English unless they have a good foundation in grammar	- 332	N	14
Reason for religious instruction: It helps to keep children from wrong-doing	- 308	RT	 43

Source: Butcher, H.J. (1959), The Opinions of Teachers and Student Teachers about Education, Unpublished Ph.D. Thesis, University of Manchester

Factor I accounts for 12.2 per cent of the total variance which is very close to the figure of 14.7 reported by Oliver and Butcher (1962). However, discounting effects due to the differences between the two samples, some discrepancy was to be expected since the questionnaire was constructed in 1955.

^{1.} Oliver, R.A.C. and Butcher, H.J. (1962), op. cit. p. 68

Factor I corresponds with the Tender-mindedness factor of Oliver and Butcher. In Table 7.4 the items with the highest loadings are given along with the corresponding loadings for items in Butcher's sample (1959). (1) Ten items of the fourteen items of the T scale were among those with the highest loadings: loadings greater than .309 with the same sign.

Although this factor includes items from the other scales, three from the N scale and four from the R scale, this content seems to suggest that they are consistent with Oliver and Butcher's 1962 concept of tender-mindedness which

"regards children and others as persons to be treated as ends in themselves rather than as serving the interests of others as represented, for example, by the demands of vocational efficiency or the interests of the state."

This factor may be defined for the English pilot group as a tendermindedness-theoretical attitude in education. The items defining this factor, as shown in Table 7.4, lay stress on disapproval of the following issues:

- a) Material advancement for the country and the individual, as indicated by the negative loading items favouring technical education because it is a good investment for an industrial country; favouring the teaching of science because it offers good prospects for a career; favouring technical education because it gives a boy or girl a good start in the competition for jobs; teaching science because the progress of industry demands workers equipped with scientific techniques.
- b) Formal discipline in teaching subjects and morals as indicated by disagreement with reasons for training teachers to acquire

^{1.} Butcher, H.J. (1969), op. cit.

efficient techniques of teaching. (The opposite sign (positive) suggests the same trend in approving that "the time to begin reading lessons is when the children feel the need for them", that "direct moral instruction does little to improve children's characters", and the statement that comprehensive schools should be the normal form of secondary education.)

c) Firm control, indicated by items excluding propaganda, because of the possibility that it may get into the wrong hands, justifying the cost of special schools because of the trouble the handicapped may cause for ordinary schools, favouring corporal punishment, because some children will not respond to any other form of discipline.

The items listed above do not suggest a tender-minded attitude to education; they also imply another trend which can be called a theoretical versus practical attitude to education.

Nevertheless we may argue that these two trends do not contradict each other. Hence this factor can be labelled as a tender-mindedness-theoretical versus toughmindedness-practical attitude to education.

Table 7.5: Factor II. The Progressive-Radical Factor, 32 Items, English Pilot Sample

Content of Items	The Present Pilot Sample Loadings	Sample (1959	
More nursery schools	+729	R	+57
Bigger allowance for play material in primary schools	+554	R	+61
A higher proportion of the national income to be spent on education	+477	R	+46
School courses in parenthood	+474	R	+4 8
Comprehensive schools to be normal form of secondary education	+433	R	+57
Some children will not respond to any other form of discipline	-41 8	TR	+44
More education for international understanding	+400	R	+48
Arguments in favour of secondary technical education: a technical school training gives a boy or girl a good start in the competition for			
jobs	+361	T	+02
Increased expenditure on adult education	+348	R	+53
Less corporal punishment in schools	+318	R	+50

Source: Butcher, H.J. (1959), op. cit.

Factor II accounts for 8.9 per cent of the variance. This is also close to the figure of 11 per cent reported by Oliver and Butcher (1962). The items defining this factor may be seen in Table 7.5. Their loadings ranged from .729 to .31%. This factor also appears to be satisfactory insofar as it corresponds with Oliver and Butcher's R Scale, since n'ne out of the twelve items on that scale were among those with the highest loadings and the signs of the loadings are similar in the two studies. In the same table, the loadings of items on Oliver and Butcher's R scale are compared with those of the present sample. As Table 7.5 shows, only three items of the Oliver and Butcher R scale do not appear

with high loading items on this factor. Those were: (1) "fewer free school meals", "the raising of the school age to 16" and "the time to begin reading lessons is when children feel the need for them". The last item was found in the present study to be a measure of factor I (the Tenderminded-theoretical factor) rather than of factor II.

This factor may be defined as progressive-radical versus traditional-conservative attitudes in education, since it lays stress on the following points:

- a) Generous educational provision as indicated by positive attitudes towards more nursery schools; bigger allowance for play material; a higher proportion of the national income to be spent on education and increased expenditure on adult education.
- b) Opposition to corporal punishment as indicated by positive loading of "less corporal punishment in schools" and the negative loading item expressing diagreement with retention of corporal punishment because some children will not respond to any other form of discipline.
- c) A favourable attitude to education for international understanding.

Table 7.6: Factor III. The Liberal-Authoritarian Factor, 32 Items, English Pilot Sample

Content of Items	The Pilot Sample Loadings	Sampl	er's (1) e (1959) Loadings
Way of dealing with the problem of comics: Parents should not allow their children to read such comics	- 476	T	-13
Direct moral instruction does little to improve children's character	- 460	N	- 53
The raising of the school age to 16	+448	R	+07
Way of approaching international understanding: A study of international affairs should show which countries are our friends	-4 28	T	-1 7
Reason for teaching science: A scientific training offers good prospects for a career	+394	T	- 03
Fewer free school meals	- 386	R	- 05
Reason for excluding propaganda from schools: Propaganda might get into the wrong hands	-341	T	-11
Way of dealing with the problem of comics: The sale of harmful comics should be prohibited	- 332	T	- 06
Argument in favour of retention of corporal punishment: Some children will not respond to any other form of discipline	-322	TR	-17

Source: Butcher, H.J. (1959), op. cit.

Factor III accounts for 7.3 per cent of the variance. This figure is slightly higher than the figure of 7.1 reported by Oliver and Butcher (1962). The items defining this factor are presented in Table 7.6. Their loadings ranged from .476 to .322. Two of them had a positive loading. This factor appeared to be difficult to interpret in accordance with the Oliver and Butcher pattern, since it includes items from the three scales, three from the R scale, one from the N scale, and six from the T scale.

This factor may be defined as liberal versus authoritarian attitudes in education. Its high loading items lay stress on the following points:

- a) Disapproval of firm control and discipline at school as indicated by a negative attitude to adult authority in dealing with the problem of comics and disagreement with corporal punishment.
- b) A favourable attitude towards the raising of the school leaving age and teaching science as a preparation for a career. Those two items, having the opposite sign from the others, are consistent with the liberal aspect of the factor.
- c) A favourable attitude towards equality as indicated by opposition to fewer free school meals. But the negative items expressing agreement with the use of direct moral instruction to improve children's characters seemed inconsistent with the general liberal trend of this factor.

Summary and Comments

To summarise the interpretation of the three factors derived from the factorial analysis of the scores for the responses made to the 32 scored items: the first factor was defined as a tender-minded-theoretical attitude in education, the second factor as a radical-conservative attitude in education and the third factor as a liberal attitude in education.

The results of our factorial analysis are not fully consistent with Oliver and Butcher's formulation which postulates three dimensions, the N, R, and T factors. Their third hypothesised factor, Tendermindedness, is the one we have most clearly identified. Their second hypothesised factor, Radicalism, is also satisfactory but less strongly defined. Their first hypothesised factor, Naturalism, is the least satisfactory; it fails to accord with the alternative factor, (liberal-authoritarian) derived from analysis

of the scores from the English pilot sample. It should be noted that the N scale reported by Oliver and Butcher (1962) had been found least satisfactory of the three in terms of reliability and validity. Oliver stated that

"the dimension of naturalism might prove to be altogether inapplicable and merely the resultant of radicalism conservatism with tendermindedness-toughmindedness."(1)

So far, the preceding analysis suggests that the factors extracted for the pilot sample fail to accord with the pattern set by Oliver and Butcher particularly with regard to the N scale. is possible and even probable that what have been thought to be meaningful dimensions are not so in fact, either because they were not correctly identified originally or the sample on which the data were based was different from that described by Oliver and Butcher. The present sample was drawn from student teachers PGCE, College of Education and Diploma students. Oliver and Butcher's sample was drawn from a population of primary school teachers. Moreover, the data were gathered in 1977, whereas Oliver and Butcher's data belonged to the late 1950s. Nevertheless, the factors appeared sufficiently meaningful and coherent to justify use of the questionnaire in further study, but it was thought that a fresh analysis of all the 59 items would be necessary to see whether they gave a better factor pattern than the 32 selected by Oliver and Butcher.

Second: The Analysis of the 59 Items

The responses of the English pilot sample, the English main sample and the Egyptian sample to the Oliver questionnaire were submitted to four types of analysis and four factors were extracted. Tables 5, 17, 18 and 19 in Appendix E give the factor patterns on

^{1.} Oliver, R.A.C. and Butcher, H.J. (1962), op. cit., p. 68

the principal component, principal factor, varimax and oblique solutions for the English pilot sample. Tables 7, 24, 25 and 26 in Appendix E give the factor patterns for these four solutions for the English main sample. Tables 9, 31, 32 and 33 give the factor patterns for these four solutions for the Egyptian sample.

The same methods as had been used in analysing the factor structure of the responses of the English pilot sample to the 32 items were used in analysing the factor structures of the 59 items for the three samples. Tables 20, 21, 22 and 23 in Appendix E give the corresponding factors on the four types of analysis, with those items whose loading was greater than ±0.3, for the English pilot sample; Tables 27, 28, 29 and 30 for the English main sample; and Tables 34, 35, 36 and 37 for the Egyptian sample. Loadings below ±0.3 were omitted.

These results suggested that the principal component and principal factor solutions are very similar to the varimax and oblique solutions. Each pair yields the same factor structure, though both pairs yield slightly different results. Discussion is based upon the principal component analysis for the three samples.

(1) The Factor Structure of the English Pilot Sample Where 59 Items Were Analysed

The factor pattern of the English pilot sample are shown in Appendix E, Table 5, the pattern is very similar to that obtained from analysing the 32 items.

Factor I: The tender-minded-theoretical factor

Factor 1 accounts for 12.7 per cent of the variance. The items defining the factor are arranged in order of loading in Table 7.7.

The high loading items stress child needs and individual differences, regard children as persons to be treated as ends in themselves rather than as serving the aims of the country. attitude is indicated by the belief that the reason for training teachers is to help them to understand children's needs and by the negative loading of items emphasising subject-matter, e.g. reason for teaching English language: an aid for a career; reason for training teachers: helping them to acquire efficient teaching techniques of teaching subjects; reason for technical education: an industrial country needs workers equipped with scientific techniques. Other indicators of a tender-minded attitude are disapproval of firm control and direct moral instruction, a sympathetic attitude towards handicapped children, approval of religious instruction as a means of developing a sense of spiritual values and meeting a deeply felt need in children and a favourable attitude towards the development of international understanding.

Thus this factor may again be identified as a tender-minded-theoretical versus a tough-minded-practical attitude to education.

Its resemblance to the Oliver and Butcher factor suggests the stability of the factor.

Table 7.7: Factor I. The Tenderminded-theoretical Factor, English Pilot Sample, 59 Items

Content of Items	Loadings
Reason for the teaching of English language in schools: A person who uses English incorrectly is handicapped in his career	- 629
One suggested way of dealing with the problem of comics: Try to cultivate interest in other kinds of reading matter	- 580
Reason for the training of teachers: A teacher must acquire efficient techniques of teaching his subject	- 572
Argument in favour of secondary technical education: A technical school training gives a boy or girl a good start in the competition for jobs	- 559
Another reason for training teachers: A teacher must learn to understand children's needs	- 558
Reason for religious instruction: It develops a sense of spiritual values	- 536
One suggested way of approaching education for inter- national understanding: Knowledge of achievements of other countries engenders respect for them	- 526
Direct moral instruction does little to improve children's characters	+516
Reason for religious instruction: The knowledge of a living God meets a deep-felt need in children	- 5 1 0
One justification of the cost of special schools: It is only fair that a child unfortunate enough to suffer from handicap should be compensated by special educational treatment	- 505
Argument in favour of secondary technical education: His future work is naturally one of the main interests of an adolescent	– 496
Reason for the teaching of English language in schools: It cultivates enjoyment in the use of the language	- 485
Argument in favour of secondary technical education: The progress of industry depends on workers equipped with scientific techniques	- 466
Reason for excluding propaganda from schools: It is better to aim at sound knowledge and fair-minded attitudes	-44 3
The problem of comics: See children can get the better comics	-44 3
Another way of approaching education for international understanding: Contact between other peoples of	
different countries makes them feel they are alike at heart	- 437

Table 7.7: (Continued)

Content of Items	Loadings
Reason for teaching science: A scientific training offers good prospects for a career	-4 26
Character training is impossible if there is no final standard of right or wrong	- 398
Another justification of the cost of special schools: Handicapped children can be very troublesome in ordinary schools	- 386
History should make children familiar with the great figures of the past	- 356
Per cent of variance 12.7	

(2) Factor II, the progressive radical factor

Factor II of the English pilot sample accounts for 7.5% of the variance. The items defining this factor are presented in Table 7.8. Their loadings ranged from .582 to .35%. The high loading items stress a favourable attitude towards generous educational provisions (Bigger allowances for play materials in primary education, more nursery schools); a favourable attitude towards teaching methods centred on the child's needs and interests; a favourable attitude to international understanding and comprehensive schools, and negative attitudes towards corporal punishment and firm control and fewer free school meals.

The factor may be defined as expressing progressive radical attitudes in education. This factor also resembles Oliver's Radical factor but to a lesser degree.

Table 7.8: Factor II. The Progressive Radical Factor. 59 Items. English Factor Sample

Content of Items	Loadings
Corporal punishment: Some children will not respond to any other form of discipline	+582
School courses in parenthood	- 551
The time to begin reading lessons is when the children feel the need for them	- 511
Comprehensive schools to be normal form of secondary education	- 478
Less corporal punishment in schools	- 465
Bigger allowances for play materials in primary schools	- 456
More education for international understanding	- 413
Reason for teaching science: The study of science is satisfying to one's intellectual curiosity	- 400
Fewer free school meals	- 394
Corporal punishment: No other type of punishment is over so quickly or leaves so little resentment	+374
Reason for the teaching of English language in schools: It cultivates enjoyment in the use of language	- 366
Reason for teaching science: The child's sense of wonder is a good starting-point for the development of his interests	- 354
Reason for training teachers: A teacher must learn to understand children's needs	- 346
More nursery schools	- 340
Reason for excluding propaganda from schools: Propaganda might get into the wrong hands	+319

Factors 3 and 4

Examination of the items with the highest loadings on factors 3 and 4 suggests that they are rather heterogeneous and difficult to interpret and name. Factor 3, as indicated by the items with the highest loadings (see Table 38 in Appendix E) related to orientation to subject-matter, restrictive discipline and a favourable attitude to corporal punishment, but there are other items which seemed inconsistent with the traditional trend as expressed in the following items: "Higher proportion of the national income to be spent on education", "School courses in parenthood".

Factor 4 is also difficult to identify and interpret. The highest loading items are given in Table 39, Appendix E. They relate to religious instruction: "It develops a sense of spiritual values"; the promotion of international understanding: to show which countries are our friends; the teaching of science: to satisfy one's intellectual curiosity. The differences between the signs of the loadings of items indicative of the factor, reflect the inconsistencies of the trend of the factor. The last two factors were therefore discarded.

(2) The Factor Structure of the English Main Sample, Using 59 Items

The four factors accounted respectively for 10.7%, 7.3%, 4.4% and 3.8% of the variance. These are lower than the figures of 12.2%, 7.5%, 5.5% and 4.9% derived from the English pilot sample. The differences might be affected by the fact that the pilot sample included a fair number of Diploma students with the PGCE and College students, whereas the main sample consisted of PGCE, College of Education and a few M.Ed. students.

When the highest loading items on each factor of the English pilot sample were compared with the highest loading items on each factor in the English main sample (Appendix E, Table 40), results showed that there is a considerable similarity between the first two factors in the two samples to identify them as the tender—mindedness—theoretical and the progressive—radical attitudes in education. Factors 3 and 4 were difficult to identify. This suggests that the structure of the instrument is satisfactory and stable in respect to the first two factors and unreliable for the last two factors. Examination of the factor pattern of the English main sample, given in Appendix E, Table 7 suggests that the first

two factors are meaningful and interpretable compared with the last two factors which were difficult to interpret and to name because their items were heterogeneous. Hence it was decided to use the first two factors as measures of teachers attitudes in the two dimensions and to discard the last two factors. But it was thought a further refinement of the factors could be made to improve the location of the factor loadings. The procedure used was that of submitting the highest loading items on factor I and factor II to a further principal component analysis. The interpretation and scoring of the factors were based on these "purified forms". The following section related to the results of this further refinement.

Factor I: The tenderminded-theoretical factor

The items defining the factor after the further 'purifying' analysis are shown in Table 7.9, accounting for 21.3 per cent of the variance. The loadings ranged from .646 to .311, all of them in the negative direction. This factor appears to correspond to Oliver and Butcher's tendermindedness factor. The factor may be defined as a tendermindedness-theoretical attitude in education, placing stress on the following points:

- (1) A negative attitude to material advancement indicated by beliefs that the reasons for teaching science and technical education are an aid for the individual career and the progress of the country.
- (2) A negative attitude to emphasis on subject-matter.
- (3) A negative attitude to firm control and order in schools.
- (4) Opposition to a cautious attitude towards international understanding.

A few items on this factor seem to be less consistent with each other. Such items are: "A teacher must learn to understand children's needs", and "A teacher must know how to control children"; the item expressing a sympathetic attitude towards the handicapped and the item justifying the cost of special schools to prevent the handicapped from becoming a charge upon society later. "The knowledge of a living God meets a deep felt need in children" seems inconsistent with the belief that religious instruction is to develop a sense of duty.

Table 7.9: Factor I. The Tenderminded Theoretical Factor: Purified Form. The English Main Sample

The Content of the Items	Loadings
One argument in favour of secondary technical education: A technical school training gives a boy or girl a good start in the competition for jobs	- 646
Argument in favour of secondary technical education: Technical education is a good investment for an industrial country	- 593
Reason for teaching science: The progress of industry demands workers equipped with scientific techniques	- 565
Reason for the training of teachers: A teacher must know how to control children	- 513
Reason for the teaching of English language in schools: Children must acquire proficiency in spelling, punctuation, and grammar	- 505
Another reason for religious instruction: It instils a sense of duty	-4 85
Reason for teaching science: A scientific training offers good prospects for a career	-481
Reason for excluding propaganda from schools: Instruction in one's duties to the state should come later	- 466
Education for international understanding: A study of international affairs should show which countries are our friends	- 466
One suggested way in approaching education for international understanding: Respect for one's own country is the best foundation for one's attitude to other countries	- 451
other countries	-451

Table 7.9: (Continued)

The Content of the Items	Loadings
Reason for the training of teachers: A teacher must learn to understand children's needs	- 431
Reason for justifying the cost of special schools: The training provided may prevent the handicapped from becoming a charge upon society later	- 422
Another reason justifying the cost of special schools: It is only fair that a child unfortunate enough to suffer from a handicap should be compensated by special educational treatment	- 389
Reason for religious instruction: The knowledge of a living God meets a deep-felt need in children	- 375
Suggested way of dealing with the problem of comics: The sale of harmful comics should be prohibited	- 366
Reason for excluding propaganda from schools: Propaganda might get into the wrong hands	- 361
One suggested way in dealing with the problem of comics: See that children can get the better comics	- 324
You cannot expect children to write good English unless they have a good foundation in grammar	- 311

We have, however, a fair number of items which can be considered as expressing a tough-minded practical attitude in contrast to a tender-minded-theoretical attitude in education.

Factor II: The progressive radical factor

Factor II accounts for 19.7% of the variance. The items defining this factor are presented in Table 7.10. Their loadings range from .558 to .299. This factor appears to correspond to Oliver and Butcher's Radicalism-Conservatism factor.

The factor, identified as a progressive radical attitude in education, stresses the following points:

Table 7.10: The Progressive Radical Factor: Purified Form, The English Main Sample

The Content of the Items	Loadings
A higher proportion of national income to be spent on education	+558
Bigger allowances for play materials in primary schools	+544
Smaller classes in primary schools	+533
Less corporal punishment in schools	+520
More nursery schools	+514
More education for international understanding	+512
Corporal punishment: Some children will not respond to any other form of discipline	- 505
Increased expenditure on adult education	+475
Reason for teaching science: the child's sense of wonder is a good starting-point for the development of his interests	+458
Corporal punishment: No other type of punishment is over so quickly or leaves so little resentment	- 370
Naturalness is more important than good manners in children	+363
Reason for teaching English language in schools: It cultivates enjoyment in the use of language	+331
One justification of the cost of special schools: Handicapped children can be very troublesome in ordinary schools	-326
Reason for training of teachers: The teacher should not stand in the way of a child's efforts to learn in his own fashion	+316
Another reason for the training of teachers: A teacher must learn to understand children's needs	+302
Education for international understanding: Contact between the people of different countries makes them realise they are alike at heart	+299

- (1) Generous educational provision centred on the child and education generally, as expressed by approval of items such as the spending of a higher proportion of the national income on education, bigger allowances for play materials in primary schools, smaller classes, more nursery schools and increased expenditure on adult education.
- (2) Opposition to corporal punishment and restrictive discipline in schools, and to such arguments in support of corporal punishment as: some children will not respond to any other form of discipline; no other type of punishment is over so quickly; that the justification for special schools for handicapped children is the problem of order if they are in the ordinary schools.
- expressed in such terms as: the child's sense of wonder is a good starting-point for the development of his interests; naturalness is more important than imposing good manners in children; the teacher should not stand in the way of the child's efforts to learn in his own fashion; the reason for training teachers is to help them to understand children's needs; teaching English is an aid to cultivating enjoyment in the use of language.
- (4) A favourable attitude to education for international understanding through contact between the peoples of different countries.

(3) The Factor Structure of the Egyptian Sample, Based on 59 Items

In the same manner as was used in refining the factors of the English main sample, the items with the highest loadings in the Egyptian sample were subjected to a further principal component analysis. The items defining factor I are shown in Table 7.11; this factor accounted for 28.3% of the variance. The loadings ranged from .656 to .445, all in a negative direction. This factor seemingly indicated that education should achieve both idealistic and realistic values, through teaching techniques, curriculum and training of teachers. It may be defined as one of commitment to education, insofar as it emphasises the following points:

- (a) Religious instruction is seen as a means of developing a sense of duty, on the one hand, and of meeting the child's need for know-ledge of a living God, on the other. Although those two items seem different from each other, they reflect the Muslim religion in balancing and affecting a compromise between the practical and materialistic and the spiritual aspects of life.
- (b) International understanding is referred to in two different ways. One item suggests that a study of international affairs should show which countries are our friends, while another commends the development of international understanding through contacts between peoples of different countries and the elimination of feelings of difference. The two trends, one restricting the development of international understanding and the other seeking to foster it, are consistent with Egyptian policy towards the outside world. A restrictive relationship towards other countries was characteristic of the period of Nasser's rule, 1952-1970. Since Sadat became ruler of Egypt, he has gradually changed this policy to developing relationships with other countries and encouraging education for international understanding.

Table 7.11: Factor I, The Commitment to Education, Purified Form, Egyptian Sample, 59 Items

Content of Items	Loadings
Education for international understanding may be approached in the following way: A study of international affairs should show which countries are our friends	- 656
One reason for religious instruction: It instils a sense of duty	- 648
One reason for the teaching of Arabic language in schools: It cultivates enjoyment of use of the language	- 599
One reason for religious instruction: The knowledge of a living God meets a deep-felt need in children	- 590
Education for international understanding may be approached in the following way: Contact between the people of different countries makes them feel they are alike at heart	- 553
Reason for teaching science: A scientific training offers good prospects for a career	- 531
Reason for teaching of Arabic language: Children must acquire proficiency in spelling, punctuation and grammar	- 524
More education for international understanding	- 522
Reason for the training of teachers: A teacher must know how to control children	- 520
Reason for teaching science: The study of science helps to satisfy one's intellectual curiosity	- 515
One of the agruments in favour of secondary technical education has been as follows: With some children the best approach to general education is through their technical interests	- 512
Reason for excluding propaganda from schools: Pupils should be free to form their own opinions	- 511
One reason for favouring secondary technical education: His future work is naturally one of the main interests of the adolescent	- 498
Reason for training teachers: A teacher must learn to understand children's needs	-4 98
Reason for excluding propaganda from schools: Propaganda might get into the wrong hands	- 469
A higher proportion of the national income to be spent on education	- 463
One justification for expenditure of special schools: Handicapped children can be very troublesome in ordinary schools	- 462
You cannot expect children to write good Arabic unless they have a good foundation in grammar	- 445

- (c) Teaching science and promoting technical education are justified on the grounds that science is an aid for a career and also a means of satisfying one's curiosity. Again the practical and theoretical approaches to teaching are combined. This appears in items relating to teaching methods and aims in Egyptian education.
- (d) Subject and child centred orientations are indicated when reasons for teaching the Arabic language are said to be: "to acquire proficiency in spelling, punctuation and grammar" and "to cultivate enjoyment in the use of language". Reasons for training teachers are to help them control children, on the one hand, and to help them understand children's needs, on the other. Firm control and the authority of the adult are combined with indulgence. A similar combination is found in reasons for the exclusion of propaganda from schools and justification for the cost of special schools.
- (e) A favourable attitude towards educational provision is indicated by demand for a higher proportion of the national income to be spent on education. The factor items suggest commitment to education centred on the efficiency of teaching and expressing the characteristic features of Egyptian culture and philosophy in education, bringing together traditional and progressive methods, using theoretical and practical approaches and combining old and new trends.

Table 7.12: Factor II. The Unsentimental Efficiency Factor:
Purified Form, The Egyptian Main Sample, 59 Items

The Content of the Items	Loadings
One reason for training of teachers: A teacher must understand how to develop children's interest in their studies	- 636
Reason for training of teachers: A teacher must acquire efficient techniques of teaching his subject	- 592
One argument in favour of secondary technical education: Technical education is a good investment for an industrial country	- 573
Way suggested to approach education for international understanding: Respect for one's own country is the best foundation for one's attitude to other countries	- 547
Reason for justifying the cost of special schools: It is only fair that a child unfortunate enough to suffer from a handicap should be compensated by special educational treatment	- 535
Reason for justifying the cost of special schools: The training provided may prevent the handicapped from becoming a charge upon society	- 517
One way suggested to approach education for international understanding: Knowledge of the achievements of other countries engenders respect for them	-4 87
The problem of comics: The sale of harmful comics should be prohibited	- 468
Reason for justifying the cost of special schools: Handicapped children can be very troublesome in ordinary schools	- 425
Fewer free school meals	- 387
One way of dealing with the problem of comics: See children can get the better comics	- 345
Percentage of variance 25.9	

Factor II: The Unsentimental Efficiency Factor

Factor II accounts for 29.9% of the variance. The items defining this factor are presented in Table 7.12. Their loadings ranged from .636 to .345: they are all in the same direction.

The items seemed to be proposing an unsentimental efficiency approach to education. Stress on practical utility is indicated by

the beliefs in training teachers as an aid for developing children's interests in their studies and mastering efficient techniques in teaching subjects. Technical education is regarded as a form of investment. Education for international understanding is to be through respect for one's own country and knowledge of the achievements of other countries. A moderate, unsentimental attitude towards equality is indicated by support for fewer free school meals and a realistic, unsentimental approach to dealing with the problem of comics, combining authority and leniency. Similarly, reasons for justifying the cost of special schools combine the sympathetic and tough-minded attitudes towards the handicapped.

Table 7.13: Factor III, The Conventionality Factor, Egyptian Sample, 59 Items

The Content of the Items	Loadings
Parents should not allow their children to read such comics	638
No other punishment is over so quickly or leaves so little resentment as corporal punishment	628
Some children will not respond to any other form of discipline	6 1 8
Try to cultivate interest in other kinds of reading matter than comics	585
A person who uses Arabic incorrectly is handicapped in his career	486
It is better to aim at sound knowledge and a fair-minded attitude (use of propaganda)	366
Handicapped children can be very troublesome in ordinary schools	293

Factor III: Conventionality

The items defining this factor are given in Table 7.13. It accounts for 28% of the variance. Its loadings ranged from .638 to .293. The factor identifies a set of items relating to firm control,

and restrictive order in school, parents' authority in dealing with the problem of comics, and formal methods in teaching the Arabic language. It may be defined as a conventional attitude in education. Agreement with the content of the items indicates conventionality and disagreement suggests unconventionality.

One item which seemed to be less consistent with the general trend of the factor was: "It is better to aim at sound knowledge" as a reason for excluding propaganda from schools; this is possibly due to the different connotations of the term 'propaganda' in Egypt, as was explained in Chapter V.

Table 7.14: Factor IV. The Allocation of Resources to Education.

Egyptian Sample, 59 Items

The Content of the Items	Loadings
Bigger allowances for play materials in primary schools The raising of the school leaving age to 16	-624 -616
More nursery schools	- 579
Smaller classes in the primary school Percentage of variance: 35.3%	- 552

Factor IV: Allocation of Resources to Education

The items defining this factor are shown in Table 7.14. It accounts for 35.3% of the variance. The items of the factor stress generous educational provisions centred on the child, the need for bigger allowances for play material in primary schools, more nursery schools, smaller classes in primary schools and the raising of the school leaving age to 16. It may be defined as allocation of resources to education.

(4) Comparison Between the Factor Structure of the English and Egyptian Samples

Comparison between the factor structures of the main English sample and the Egyptian sample aimed at finding answers to the following questions:

- (1) How does the factor pattern of the Oliver questionnaire differ from culture to culture ?
- (2) What similarities of factor pattern are there between English and Egyptian culture ?
- (3) What inferences might one derive from any discovered differences of pattern between the two cultures?

In this comparison we are not using the "purified form" of the factor pattern since these "purified forms" do not produce data that can be used to make comparisons. Here we are using the results obtained from the principal component analysis, based on 59 items. Comparison between the factor patterns of the English main sample and the Egyptian sample shows marked differences between the two. (Tables 7 and 9 in Appendix E give the factor patterns of the two samples.) Factor I of the English sample was found to contribute 10.6% to the total variance, whereas this factor contributed 13.6% to the total variance of the Egyptian sample. The next three factors of the English sample were found to contribute more to the total variance of that sample than they did to the total variance of the Egyptian sample. For the English sample the contributions of the three factors were, respectively, 7.3%, 4.4% and 3.8%. corresponding percentages for the Egyptian sample were, respectively, 5.6%, 3.9% and 2.9%.

The differences in the percentage of the total variance accounted for by each factor in the two samples are clearly indicated in the manner in which each factor operates in the factor patterns of the English and Egyptian samples. The responses of the English sample produced two interpretable factors. These were defined as tenderminded-theoretical and progressive-radical attitudes to education. The responses of the Egyptian sample produced four meaningful factors: (1) commitment to education; (2) unsentimental efficiency; (3) conventionality; (4) allocation of resources to education. Although some similarities were found in item loadings on Factor I, in both samples, they differed in their relative importance in each group. (See Tables 7.9 and 7.11.) These common items were concerned with one reason for the teaching of the English language (Arabic in Egypt). viz. to acquire a high standard of linguistic accuracy in the language; with one reason for teaching science, viz. as an aid to a career; with the restriction of international studies to knowing which countries are friendly to England/Egypt; with reasons for religious instruction, viz. to develop a sense of duty and to meet children's need for knowledge of a living God; with an authoritarian approach to the treatment of propaganda and authoritarian reasons for training teachers. These similarities between some of the items may be explained by suggesting that they express common needs and responsibilities for the education of a country, whatever the differences between the two countries. I am not suggesting, however, that the similarities between items with high loadings in the two samples imply that the English and the Egyptians share the same attitude to education, as these items interact differently with other items in each culture. These interactions give the English factor of tendermindedness-theoretical and the Egyptian factor, commitment to education, their distinctive characters.

Thus it was concluded that a different pattern was operative in the two cultures. Many possible explanations may be given for the differences between the factor structure of student teacher attitudes in the two countries.

First, the difference in the factor structure of teacher attitudes may be related to differences between England and Egypt in extent of modernisation and industrialisation, on the one hand, and between historical experience and social structure, on the other. Consequently the needs of each country and the demands they make upon its educational system will be different. It is not surprising that a highly industrialised country like England should place great emphasis on educational views expressing a child-centred orientation. and advocating scientific progress, generous provision for education and special schools for handicapped children, whereas a developing country like Egypt with a rapidly increasing population and limited economic resources should lay stress on educational views concerned with special provision for the handicapped or special things such as free school meals. Also because of its cultural heritage, Egypt stressed giving religious instruction and teaching the Arabic language and training teachers to control children. Historical factors, too, would seem to account for differences in attitude to international understanding and to propaganda in school.

Secondly, another possible explanation lies in differences between the educational background of the English and Egyptian samples, from early school to their teacher training courses, between the types of education they have received, the nature of the courses they have followed, the kinds of books they have read, their school environments and the ways in which education is administered. In sum, one would expect social environment, economic circumstances, cultural influences, political factors, historical background,

educational goals and policies to determine distinctive attitudes towards education.

Thirdly, the difference between the English and Egyptian patterns may be accounted for partly by the different connotations of some of the terms in the Oliver questionnaire, e.g. "comics" and "propaganda" do not have the same meanings in Egypt as they have in England.

Moreover, such issues as the comprehensive school, school courses in parenthood and raising the school leaving age to sixteen are likely to have been unfamiliar to Egyptian student teachers and teachers.

In short, the evidence of this study suggests that the educational attitudes of English and Egyptian student teachers are not formulated and organised in the same manner. Our results must, however, be considered only exploratory until further evidence is produced about the factor structure of teacher attitudes in Egypt. More work needs to be done with different items and different samples and on a bigger scale.

On the basis of the results of the comparison between the factor structure of the English and Egyptian samples, it was decided that the English and Egyptian data should be treated separately when it came to investigating the relationships between the subjects' perception of the status of teaching and their attitudes to education.

Summary

Analysis of responses on the 59 items of the Oliver questionnaire produced two meaningful factors for the English pilot and English main samples: a tender-minded-theoretical attitude to education and a progressive-radical attitude to education. These results to some

extent confirm Butcher and Oliver's analysis based on 32 items which produced the tender-mindedness and the radical scales. Analysis of the Egyptian scores showed a different pattern. This suggests four meaningful factors: (1) commitment to education; (2) unsentimental efficiency; (3) conventionality; and (4) allocation of resources to education.

CHAPTER VIII

THE RESULTS OF RANKING DATA ON OCCUPATIONS

This chapter is divided into three sections:

Section I deals with the English responses

Section II deals with the Egyptian responses

Section III is concerned with comparison between the English and Egyptian data.

Section I: The English Responses

In this section data were used to answer the following questions:

- (1) How do the English samples rank the selected occupations according to status, salary, personal satisfaction, using abilities fully and value to society?
- (2) How is the teaching profession ranked by the English sample as to status, salary, etc.?
- (3) How do subjects perceive teaching at different levels in terms of public esteem ?
- (4) How do subjects rank teaching at different levels in terms of their personal preferences?
- (5) How is the teaching profession perceived by subjects in terms of public esteem and the status it ought to have ?

(1) The ranking of occupations by the English main sample

Three hundred subjects ranked twenty occupations in relation to each other according to status. The mean was chosen as a basis for the ranking. Inspection of the distributions of rankings of the twenty occupations by the sample (see Table 1 in Appendix F) suggests

at the extremes. There was a close correspondence between the mean and median ranks for each occupation. It is evident from Table 2 in Appendix F, in which the mean and median ranks for each occupation are given, that rankings would have been identical if the median had

Table 8.1: The Rankings of Occupations by the Main English Sample on the Basis of Status

Occupations	Mean Scores	S.D.	Ranks 300 Subjects
Doctor	2.35	2.122	1
Lawyer	3•54	4.08	2
Architect	6.43	4.00	3
Dentist	6.49	3.62	2 3 4 5 6
University Teacher	7•19	4.19	5
Accountant	8.38	4.19	
Vet	9.03	4.98	7 8
Engineer	9.63	4.34	8
Secondary Teacher	10.26	4.06	9
Pharmacist	10.99	4.48	10
Banker	11.31	5.14	11
Primary Teacher	11.58	4.92	12
Journalist	12.76	4•43	13
Army Officer	12.91	5.13	14
Nurse	12.97	5.19	15
Radio/TV Announcer	13.51	6. 33	16
Civil Servant	13.64	4•53	17
Social Worker	14.32	4.79	18
Librarian	15.30	3.80	19
Management Trainee	16.20	3.93	20

been used instead of the mean. As was described in Chapter V, a rank of 1 was assigned to the occupation having the lowest mean scores in the total sample and a rank of 2 to the next lowest and so on. A rank of 20 was assigned to the occupation having the highest mean scores. Table 8.1 presents the mean scores and the standard deviations with the rank order for each occupation.

Doctor was ranked first, management trainee was ranked lowest; and in the middle came pharmacist (10) and banker (11). Inspection of the standard deviations for the ranking of each occupation suggests that there is greater consensus about some occupations than about others. We cannot say arbitrarily that a given standard deviation represents a satisfactory level of consensus: we can simply note those occupations between which overlap is greatest. This becomes evident if we examine the values of the S.D. given in Table 8.1. The highest S.D. was 6.33 (for TV Announcer), the lowest, 2.12 (for Doctor). The large variance in ranking may in some cases be due to the ambiguity of the name of the occupation. For instance, the term "Radio/TV Announcer" might include people who are highly qualified and others with limited qualifications. Hence ranking of a particular occupation will depend on a subject's interpretation of the title of the occupation rather than on knowledge of the occupation itself.

In studying the extent of agreement about the status attached by the sample to various occupations, the following sub-categories were used: (1) sex; (2) religion; (3) age; (4) teaching subject(s); (5) course student was following (e.g. B.Ed., P.G.C.E., M.Ed.): (6) father's occupation.

In the same manner as had been employed with the total sample, the rankings of occupations were determined by the order in size of the mean ratings of the various sub-groups. Table 8.2 presents the rank order of occupations of the entire sample and the various sub-groups. The extent of agreement in ranking occupations by the sub-groups was measured by Kendall's Coefficient of Concordance. (1) With the male and female groups the Spearman rank coefficient of correlation was used. Table 8.3 gives the correlations based upon rankings in columns through the various sub-groups on each of the

^{1.} Siegal, S. (1956), Nonparametric Statistics for the Behavioral Sciences, McGraw Hill Book Co, Inc., pp. 213-229

Table 8.2: Ranking Occupations by the English Whole Sample and Sub-Groups of Sample According to Status

Occupations	Total	Se	ex		Age			Religion		Su	bject of	Teaching
	Sample 300 *	Male 87	Female 213	20 – 24 246	25 – 29 24	30 & Over 29	Protestant 197	Catholic 36	Non Religion 47	Arts 198	Science 70	Non Academic 28
Doctor Lawyer Architect Dentist University Tchr. Accountant Vet Eng.Prof. Sec.Sch.Tchr. Pharmacist Banker Primary Sch.tchn Journalist	13	1 2 5 3 4 9 6 8 7 11 10 12 14	1 2 3 4 5 6 7 8 9 10 11 12 13	1 2 3 4 5 6 7 8 9 10 12 11 13	1 2 5 3 4 7 6 8 9 12 10 11	1 2 3 4 5 6.5 9 6.5 10 13 8 12	1 2 4 3 5 6 8 7 10 9 11 12 15	1 2 4 5 3 6 7.5 7.5 9 10 11 13 12	1 2 5 3 4 8 6 7 9 11 10 13.5	1 2 3 4 5 6 7 8 11 10 9 12 14	1 2 4 3 5 6 7 8 9 10 12 11 15	1 3 2 4 6 5 8 7 9 10 12 11
Army Officer Nurse R/TV Announcer Civil Servant Social Worker Librarian Management Trainee	14 15 16 17 18 19	17 13 15 16 18 19	14 15 16 18 17 19	15 14 16 17 18 19	14 13 17 16 20 18	11 16 17 14 19 18	13 14 16 17 18 19	14 15 17 16 18 19	17 13.5 15 16 18 19	13 15 16 17 18 19 20	18 13 17 14 16 19	14 16 13 17 17 20

In some cases the number of the sub-groups of the sample do not add up to 300 respondents because of non respondents in some variables or the exclusion of small numbers for statistical comparison.

Continued/.....

Table 8.2: Continued

Occupations	C	ourse of	Study		Father's Occupation				
	B.Ed. 184	P.G.C.E. 78	M.Ed. 26	Serving 12	Class I 126	Class II 45	Class III 70	Classes IV & V 31	Not Stated 28
Doctor	1	1	1	1	1	1	1	1	1
Lawyer	2	2	2	2	2	2	2	2	2
Architect	3	5	3	4	3	3	4	4	4
Dentist	4	3	4	3	4	4	5	3	3
Univ.Tchr.	5	4	5	6	5	7	3	5	5
Accountant	6	7	6	8	7	6	6	6	6
Vet	7	8	9	7	6	8	8	7	8
Eng.Prof.	8	6	7	5	8	5	7	9	7
Sec.Sch.Tchr.	9	9	10	10	9	9	10	8	9
Pharmacist	10	11	12	9	10	11	12	10	11
Banker	12	10	8	11	13	12	9	11	10
Prim.Sch.Tchr.	11	12	15	14	11	10	11	12	12
Journalist	13	17	14	13	12	14	14	14	14
Army Officer	15	16	11	15	14	13	13	15	13
Nurse	14	15	17	12	16	15	15	13	17
R/TV Announcer	16	13	16	20	15	16	16	18	18
Civil Servant	18	14	13	16	17	17	17	16	16
Social Worker	17	19	20	18	19	18	18	17	15
Librarian	19	18	18	17	18	19	20	19	19
Management Trainee	20	20	19	19	20	20	19	20	20

Table 8.3: The Degree of Agreement in Ranking the Occupations by Various Sub-Groups of the Sample in England

Variables	No in the Groups	Results of Statistical Analysis
Sex Men Women	87 213	•97
Age Groups The younger group (20-24) The middle groups (25-29) The older groups (30 and over)	246 24 29	•92
Religion Protestant Catholic No religion	197 36 47	•93
Subject of Teaching Arts Science Maths	198 70 28	•95
Course of Study B.Ed. P.G.C.E. M.Ed. Serving teachers	184 78 26 12	•96
Father's Occupation Class I Class II Class III Class IV Non Respondents	126 45 70 36 28	•89

In each case the correlation is significant at the .01 level. This shows a very marked similarity in the rankings of occupations. The general conclusion to be drawn from the table of rankings of occupations, and the values of correlations is that, although there are slight differences in ranking occupations which arise from differences in the sex, age. subject of course etc., of respondents, these variables do not affect their attitudes to any marked degree.

Previous studies (1,2,3) have shown repeatedly that there is a firmly held hierarchy of occupations that is largely common to members

Davis, A.F. (1952), Prestige of Occupations, Brit.J.Soc., Vol. 3, pp. 134-47 2.

Hall, J.R. and Jones, D.C. (1950), op. cit.
Haller, Archibald, D. and Davis, M.L. (1966), The Hypothesis of Intersocietal Similarity in Occupational Prestige Hierarchies', American Journal of Sociology, Vol. 72, pp. 210-216

of various groups irrespective of sex, age, education and occupation within a society

The relatively small difference between attitudes expressed by various sub-groups of the sample may be explained if we assume that subjects may have had much opportunity to learn culturally defined evaluations thought appropriate for many occupations. These attitudes take the form of stereotypical judgments that are conveyed to members of society, irrespective of their positions in the social structure. Such factors as the mass media, the educational system of the country, and direct and indirect interaction with certain occupational groups appear to be instrumental in promoting the close similarities.

Table 8.4: Ranking of Occupations by the English Sample According to Status, Salary, Personal Satisfaction, Using Abilities Fully and Value to Society

Occupations	Status	Salary	Personal Satisfaction	Using Abilities Fully	Value to Society
Doctor Lawyer Architect Dentist University Teacher Accountant Vet Prof.Engineer Sec.Sch.Teacher Pharmacist Banker Primary Sch.Tchr. Journalist Army Officer Nurse Radio or TV Announcer Civil Servant Social Worker Librarian Management Trainee	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	4 1 5 7 6 10 3 16 15 12 18 13 8 20 2 11 19 17	1 8 7 11 9 14 5 12 4 17 18 2 10 14 3 19 6 13 19 6	1 4 8 12 11 16 7 10 3 20 19 2 9 15 6 17 14 5 18	1 8 9 5 12 16 10 7 4 12 11 2 18 16 3 15 14 6 19 20

In ranking occupations to salary, personal satisfaction, using abilities fully and value to society, respondents were asked to choose five of the twenty occupations in the list and rank them in descending order on each of the four dimensions. Students' choices were weighted as follows: the occupation ranked first was assigned 5 points, the one ranked second, 4 points, and so on down to one point for the occupation ranked fifth. The occupations were placed in rank order on the basis of the total average scores. As may be seen from Table 8.4, in which are presented the rank orders of each occupation according to status, salary, personal satisfaction, using abilities fully, and value to society, lawyer was accorded the first rank in terms of salary, and the nurse the lowest. In terms of personal satisfaction doctor was accorded the highest rank, management trainee and civil servant. the lowest. In terms of Using Abilities Fully, doctor was again ranked highest, whereas pharmacist was ranked lowest. In terms of Value to Society, doctor was also rated top and management trainee was given the lowest rating. It was not considered worthwhile to break down the sample by such variables as sex, age, etc., since results showed a high agreement in ranking occupations for status.

In an effort to assess the extent of the agreement between the rankings of the characteristics of the occupations the data were summarised in the way that had been suggested by Rossi and Inkeles. (1) The ranking of each occupation on each of the dimensions was scored plus, zero or minus, according to whether it was among the top six, the middle eight or the lowest six (see Table 8.5 which gives the rating profiles of selected occupations). Results suggest that, although a trend towards consistency emerged in ranking some of the occupations according to two, and in some cases three of the dimensions used, knowledge of an occupation's ranking on only one dimension would hardly

^{1.} Rossi, P.T. and Inkeles, A. (1957), op. cit.

allow prediction of its ranking on all three dimensions. Only one occupation (doctor) had the same profile score on all dimensions. It is interesting to note from Table 8.5 that occupations implying caring and human attributes such as social worker, nurse and primary school teacher were lifted from the lower categories in terms of status and salary to the higher categories of ranks in terms of personal satisfaction, value to society and using abilities fully.

Table 8.5: Rating Profiles for Occupations by English Sample

- + indicates occupation ranks among the top 6 (1-6)
- 0 indicates occupation ranks among the middle 8 (7-14) indicates occupation ranks among the lowest 6 (15-20)

The occupations are listed in order of status.

1. Doctor	Occupations ranked according to status	Status	Salary	Personal Satisfaction	Using Abilities Fully	Value to Society
Trainee - 0 - 0 -	1. Doctor 2. Lawyer 3. Architect 4. Dentist 5. Univ.Teacher 6. Accountant 7. Vet 8. Prog. Eng. 9. Sec.Sch.Tchr. 10.Pharmacist 11.Banker 12.Prim.Sch.Tchr. 13.Journalist 14.Army Officer 15.Nurse 16.R/TV Announcer 17.Civil Servant 18.Social Worker 19.Librarian 20.Management	+ + + + 0 0 0 0 0 0 0 0	++00+0+1101001 +	00000+0++00++	+000-+0++0-+	00+0-00+00++

To ascertain whether the subjects' rankings varied independently or merely reflected the halo of the occupation's general status, the associations between the perceived status and each of the four dimensions and between each of the dimensions were measured by means of a rank correlation coefficient (Table 8.6). Results indicate that the two

dimensions, using abilities fully, and value to society, are highly correlated with the amount of personal satisfaction was .89; the coefficient of correlation between using abilities fully and between value to society and personal satisfaction it was .75. We should bear in mind that these relationship do not imply that using abilities fully and value to society are likely to be the only ingredients in personal satisfaction, but it could mean that there is a tendency for occupations which have a high rank on personal satisfaction to rank high in using abilities fully or value to society. The relationship between the full use of abilities that subjects think that certain occupations give and the value to society they think that occupations have was .73.

Table 8.6: The Inter-correlations Between the Subjects' Perceptions of Occupations as to Status, Salary, Personal Satisfaction, Using Abilities Fully and Value to Society

	Status	Salary	Personal Satisfaction	Using of Abilities Fully	Value to Society
Status Salary Personal Satisfaction Using Abilities Fully Value to Society	-	•59	•40 •12	•36 ••05 •89	•48 ••06 •75 •73

When the relationships between status and each of the four dimensions are studied, rank correlations show that social status is related more closely to salary (.59) than it is related to value to society, personal satisfaction, or using abilities fully (.48, .40, .36 respectively). This means that these groups of subjects consistently associate the status and salary they think occupations should give more closely than they associate social status with value to society, personal satisfaction or using abilities fully. The lowest correlation coefficients were between the salary subjects think certain occupations

earn and satisfaction (+.12), full use of abilities (-.05), value to society (-.06). Such low correlations indicate that subjects rank occupations independently on different dimensions and do not associate salary to any marked extent with satisfaction or full use of abilities or value to society.

On the basis of the results reported in this table, it would appear that the halo effect of the status of occupations is slight, since such an effect presumably would operate to produce high positive relationships between all variables. We may see from the correlations between the rankings on dimensions that this is not the case.

Our findings run counter to those of Asch, Block and Hartzmann (1938)⁽¹⁾ and Osgood and Stagner (1941)⁽²⁾ who found that there is a frame of reference or general stabdard which leads individuals to assign similar standing to any given occupation regardless of the dimension rated.

The negative correlation between value to society and income contradicts the hypothesis derived from Davis and Moore's (1945)⁽³⁾ theory of stratification in that perceived economic return and social contribution are positively related. The higher correlation between salary and status corroborates the findings of Ramsey and Smith (1960),⁽⁴⁾ and Sarapata and Wesolowski (1958).⁽⁵⁾

^{1.} Asch, S.E., Block, H. and Hartzmann, M. (1938), op. cit.

Osgood, C.E. and Stagner, R. (1941), op. cit.
 Davis, K. and Moor, W.E. (1945), Some Principles of Stratification, American Sociological Review, X, pp. 242-49

American Sociological Review, X, pp. 242-49

Ramsey, E.C. and Smith, R.J. (1960), op. cit.

Sarapata, A. and Wesolowski, W. (1958), op. cit.

Diagram 8.1: The Ranking of the Teaching Profession (University Teacher, Secondary Teacher, Primary Teacher) as to Status, Salary, Job Satisfaction, Using Abilities, Value to Society in England Status Salary Job Satisfaction Using Abilities Value to Society 2 Rankings 10 11 12 13 14 15 16 17 18 19 20 University Teacher Secondary Teacher Primary Teacher

(ii) The ranking of the teaching occupations as to status, salary, personal satisfaction, using abilities fully and value to society

Diagram 8.1 shows the relative ranking of the teaching occupations in terms of status, salary, using abilities fully and value to society.

If we consider the rankings of university teacher, secondary school teacher and primary school teacher in comparison with the occupations given in the list, in Diagram 8.1, it is evident that these levels of teaching occupy three different positions with regard to perceived status, salary, personal satisfaction, using abilities fully and value to society (see Table 8.4).

As to social status university teacher was accorded the highest rank, 5, secondary school teacher was accorded a rank of 9 and primary school teacher a rank of 12.

As to salary, university teacher was also ranked highest (7), while secondary school teacher and primary school teacher were ranked 16th and 18th respectively. As to personal satisfaction, using abilities fully and value to society, it is interesting to note that the rank order was reversed. Primary school teacher gained second position on personal satisfaction, using abilities fully and value to society; and was followed by secondary school teacher who was ranked on the three dimensions 4th, 3rd and 4nd respectively, whereas university teacher was ranked 9th, 11th and 12th respectively. Results suggest that the perceived status of teachers at different stages is not closely related to personal satisfaction, using abilities fully and value to society. Perceived salary was valued lower than the ranking according to status. However, the ranking of perceived salary shows the same hierarchy as perceived status. The university teacher was ranked highest; next came the secondary school teacher and lowest of all three, the primary school teacher.

Personal satisfaction is more closely related to both the full use of abilities and value to society than to either perceived status or salary as the ranking of primary school teacher in terms of personal satisfaction, using abilities fully and value to society shows complete agreement, and rankings for the secondary school teacher are almost identical, viz. 4th, 3rd and 4th respectively. The rankings of the university teacher were about the middle on the three dimensions: 9th, 11th and 12th respectively.

(iii) The rankings of the teaching profession according to public esteem

A further list of the various levels of teaching was presented for subjects to state which they thought are regarded highly by the public. A five-point scale was provided with ratings of Excellent, Good, Average, Below Average, Iow. As was described in Chapter V, occupations were ranked on the basis of the total score.

Table 8.7 presents the total score and the rank order of the various levels of teaching (See Appendix F, Table 3, for the distribution of the subjects on each category of ranking).

Teaching in higher education was accorded the highest status, and teaching at nursery stage the lowest. Thirdly came the secondary school teacher and fourthly the primary school teacher.

Essentially, these results parallel and confirm those recorded in Table 8.4. The existence of a definitely established hierarchy among the various levels of teaching is also clearly marked.

Table 8.7: The Ranking of the Teaching Profession at Different Levels by the English Main Sample According to Public Esteem

	Total Scores	Ranks
Higher Education	1 239	1
Further Education	1082	2
Secondary Education	1 038	3
Primary Education	1012	4
Adult Education	936	5
Nursery Education	838	6

(iv) The rankings of the various types of teaching according to subjects first preferences

The same list of the various levels of teaching was ranked on the basis of subjects' first preferences in teaching. Mean scores were chosen as a basis of rankings. In the same manner as employed with the English pilot sample (Chapter V) a rank of 1 was assigned to the type of teaching having the lowest score, 2 to the next and 6 to the type of teaching having the highest score. Thus, first choices are indicated by lower scores, and last choices are indicated by higher scores. Table 8.8 presents the rank order of various types of teaching which subjects stated they preferred: secondary teacher was accorded the first preference followed in order by primary school teacher and last by teacher of adults.

Table 8.8: The English Subjects' Ranking of the Various Levels of Teaching According to their First Preferences

The Types of Teaching	Mean	S.D.	Ranks
Secondary Education Primary Education Higher Education Further Education Nursery Education Adult Education	2.403	1.48	1
	2.430	1.71	2
	3.750	1.56	3
	3.817	1.30	4
	4.127	1.76	5
	4.337	1.40	6

To what extent the ranking of the perceived status was influenced by subjects' preferences is indicated from simple comparison between both ranks in Table 8.9. This suggests that, although subjects rank teaching in higher education in the first position in terms of public esteem, they place it in third position in terms of their preferences in teaching. Further education was ranked second in terms of status but fourth in terms of preference, while secondary school teacher was accorded the first rank in preference and ranked third in terms of status and primary school teacher was ranked second on the basis of preferences but fourth on the basis of status (rank correlation between them was .49).

Table 8.9: Comparison Between the Ranking of the Teaching Profession at Different Levels, by English Main Sample According to Preferences and Public Esteem

Teaching Types	Preferences Ranks	Public Esteem
Secondary Education	1	3
Primary Education	2	4
Higher Education	3	1
Further Education	4	2
Nursery Education	5	6
Adult Education	6	5

However, the results reported in Table 8.9 suggest that subjects may be aware that their own qualifications, training and education will in most cases prevent them from attaining the high status occupations and they may be settling for occupations that suit their qualifications and training. It is, of course, also possible that they have chosen to train for these occupations because they expected to be happy and successful in teaching at these levels.

(v) The subjects' ranking of the teaching profession according to present status and the status it should have

Subjects were asked to rate the teaching profession according to its present status. A five-point scale was given with rating status as follows: excellent, good, average, below average and low. The significance of subjects' replies becomes more apparent when replies to a further question are considered. This question asked the subject to rate the same profession on the basis of the status they thought teaching ought to have. Table 8.10 shows the percentage of rating in each category according to present status and the status it ought to have.

Table 8.10: Comparison Between the Ranking of the English Sample of Teaching According to Public Esteem and Status it Should Have: in Percentages

Categories of Ranks	Actual Situation No 300	Ideal Situation 300
Excellent	-	28.3
Good	48.7	60.3
Average	44•7	10.3
Below Average	3.0	0•3
Low	1.6	-
I don't know	2.0	0.8

Examination of the results indicates that nobody gave the teaching profession a ranking of excellent according to the actual situation, while only 28.3% gave it a status of excellent according to their ideal rankings. This suggests that subjects were clearly aware of the position of the teaching profession in relation to other occupations. 48.7% gave teaching a rank of 'good' and 44.7% gave it average rank in the actual situation, but 60.3% gave it a rank of 'good' and 10.3% gave it average rank in the ideal situation. Results suggested a tendency towards consistency since 93.4% of the subjects ranked teaching in the

two categories 'good' and 'average' in the actual situation, and 70.6% placed it in the same categories in the ideal situation. Results suggest that subjects were realistic in their assessment of the actual status of teaching and relatively modest in their claims for it. The reason why only 28.3% placed teaching in the excellent category cannot be reliably deduced: perhaps the subjects were assuming that it would be unrealistic to say that teaching should enjoy excellent status, or perhaps they think other occupations are better than teaching and therefore teaching should not go in the top category.

Section II: The Egyptian Responses

(i) The ranking of occupations by the Egyptian main sample

Five hundred subjects ranked a list of twenty occupations in relation to each other as to status.

The mean was chosen as a basis for ranking since inspection of the distributions of rankings of the twenty occupations by the whole sample, as shown in Table 5 in Appendix F, suggests that no violent distortion was caused by individual responses at the extremes. There was also correspondence between the mean and median rank for each occupation (see Table 8.11)

It is evident that rankings would have been almost identical if the median had been used instead of the mean: in fact, only one case of variance in order (primary school teacher) is observed.

In the same manner as with the English sample, occupations were ranked on the basis of status by the whole sample and the analysis was made for the total sample and for sub-groups. Table 8.11 presents the order of occupations with mean scores and standard deviations. Doctor was ranked highest in status; librarian was ranked lowest; in the middle were the lawyer 10th and the geologist 11th.

Table 8.11: Ranking of Occupations by Egyptian Sample on the Basis of Status

0ccupations	Mean	Median	Mode	Ranking	S.D.
Doctor	4•484	2.418	2.000	1	1.850
Univ. Teacher	4•830	3•254	1.000	2	4•457
Engineer	5•802	5.008	3.009	3	3•873
Pharmacist	6.286	5•238	5.000	4	4.138
Dentist	7•446	6.526	5.000	5	4.223
Journalist	8•750	8.627	9.000	6	4.314
Army Officer	9.110	8 . 92 1	4.000	7	5 .1 09
Radio/TV Announcer	9•432	9.081	7.000	8	4•951
Sec. Sch. Teacher	9•472	9•769	8.000	9	5•207
Lawyer	9.892	9.904	10.000	10	4•441
Geologist	10.152	10.789	12.000	11	4.668
Agric. Engineer	10.470	10.853	10.000	12	4.266
Accountant	10.602	10.691	9.000	13	4•133
Translator	10.704	11.064	11.000	14	5•287
Vet	12.116	12.500	16.000	15	4.878
Social Worker	13.260	15.112	17.000	16	5 .1 99
Primary Sch. Teacher	14.810	17.711	20.000	17	6.313
Administrator	15.088	16.161	17.000	18	4.270
Nurse	15.820	17-280	20,000	19	4.805
Librarian	15.692	17.336	19.000	20	4.626

Inspection of the standard deviations for the rankings of each occupation suggests that there is greater consensus about some occupations than about others. We cannot say arbitrarily that a given S.D. represents a satisfactory level of consensus: we can simply note these occupations in which overlap is greater.

However, overlapping between occupations is considerable. This is evident from the values of the S.D. shown in Table 8.11. The lowest S.D. was 1.85 for doctor, the highest S.D. was 6.31 for primary school teacher. The large variance in ranking may in some cases be attributed to the uncertain status of some occupations, for instance, primary school teacher, social worker. These occupations have been subjected

to change during the last decades, the qualification required and salary paid are specifically defined. Hence ranking of a particular occupation would depend on subjects' perception of the occupation rather than on the actual position of the occupation itself. It is possible also to study the extent of consensus by breaking down the sample into sub-groups according to social background data.

The attitudes of the subjects, when one takes into account the following variables: sex, age, religion, teaching subject and father's occupation

The rankings assigned to each occupation by various sub-groups and the total sample are presented in Table 8.12.

Examination of this table shows a remarkable agreement between subgroups: on the whole, the rankings assigned by the sub-samples are parallel with those assigned by the total sample. All groups gave higher places to doctor, university teacher and engineer and lower ranks to librarian, nurse and administrator. Variation in ranking occupations was one to two points in the upper part of the ranking and one to three points in the lower part. Greater variation was noted in the middle, e.g. army officer varied from 6th in rating by the male sub-group to 10th in rating by the female sub-sample, and lawyer from 7th in rating by the mathematics group to 14th in rating by the diploma group. Our findings seem to support Davis's (1952)⁽¹⁾ point that

"there is more agreement in ranking of occupations near the top and bottom ends of the range of occupations than in ranking those in the middle part of the range".

The extent of agreement in ranking by various sub-samples was measured by Kendall's coefficient of concordance, with male and female and religious groups, the Spearman rank correlation coefficient

^{1.} Davis, A.P. (1952), op. cit. p. 142

Table 8.12 Ranking Occupations by the Egyptian Whole Sample and Sub-Groups of Sample According to Status

Occupations	Total	Sex	C		Age		Rel	igion	Sul	bject o	f Teachir	ja.
	Sample 500	Male 149	Female 351	20–24 427	25 – 29 28	30 & Over 45	Muslim 420	Christian 80	Science 123	Maths. 103	Social Studs. 232	Language 42
Doctor University Tchr. Prof. Engr. Pharmacist Dentist Journalist Army Officer R/TV Announcer Sec.Sch.Tchr. Lawyer Geologist Agric.Engr. Accountant Translator Vet Social Worker Prim. Sch.Tchr. Admin.Official Nurse Librarian	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	2 1 3 4 5 7 6 10 8 12 9 33 11 14 15 16 18 17 20 19	1 2 3 4 5 6 0 9 7 8 3 1 1 4 2 5 6 7 8 19 0	1 2 3 4 5 6 7.5 7.5 9 0 1 1 3 1 4 1 2 1 5 1 6 1 7 8 1 9 20	1 2 3 4 6 5 7 9 8 10 14 1 13 16 12 19 17 20 18	1 3 4 2 5 10.5 7 8 6 10.5 9 13 14 15 12 16 20 18 19 17	1 2 3 5 4 6 9 7 8 10 11 13 12 15 14 16 18 17 20 19	1 32 4 5 8 7 6 9 12 10 11 13 14 15 17 18 19	1 2 3 4 5 7 8 9 6 10 12 11 13 15 14 16 17 20 18	1 2 3 4 5 10 8 3 6 7 11 2 9 15 14 16 17 18 19 20	1 2 4 3 5 7 6 8 11 10 12 9 14 3 15 16 18 17 20 19	2 1 3 4 6 5 7 8 12 11 9 4 13 10 16 17.5 17.5 19 20

Continued/.....

Table 8.12: Continued

Occupations	Subject of Course			Father's Occupation			
	B.Ed. 419	Diploma 38	Serving 42	Prof. 153	Semi Prof. 167	Skilled 126	Unskilled 73
Doctor Univ.Tchr. Prof.Engr. Pharmacist Dentist Journalist Army Officer R/TV Announcer Sec.Sch.Tchr. Lawyer Geologist Agric.Eng. Accountant Translator Vet Social Worker Prim.Sch.Tchr. Admin.Official Nurse Librarian	1 2 3 4 5 6 7 8 9 10 11 3 14 12 15 16 17 18 19 20	1 2 4 3 5 6 7 8 9 14 11 10 13 15 12 16 17 19 20 18	1 2 3 4 5 13 7 10 6 9 8 12 11 15 14 16 20 17 19 18	1 2 3 4 5 8 7 9 6 10 11 3 12 14 15 16 17 19 18	2 1 3 4 6 5 7 10.5 12 9 8 13 14 10.5 16 15 17 20 19 18	1 2 4 3 5 6 7 8 10 13 12 9 14 15 11 16 17 19 20 18	1 2 4 3 5 13 7 9 6 10 8 11 12 15 14 16 18 17 19 20

Table 8.13 gives all the correlations between the various sub-groups. In each case the correlation is significant at the 0.01 level, showing a very marked similarity in ranking of occupations. The general conclusion to be drawn from the table of rankings and the value of correlations is that, although there are slight differences in ranking occupations which arise from differences in sex, age, religion, subject of teaching, these variables do not affect subjects attitudes.

Table 8.13: The Degree of Agreement in Ranking the Occupations by the Various Sub-Groups of the Sample in Egypt

Variables	No. in the Groups	Results of Statistical Analysis
<u>Sex</u> Men Women	149 351	•95
Age Group Younger group (20-24) Middle age group	427	
(25-29) Older group (30 & over)	28 45	•96
Religion Moslem Christian	420 84	•96
Teaching Subject Science Maths	123 103	
Social Studies & Arabic Language	232 42	.87
Subject of Course B.Ed. group Diploma group Serving teachers	419 39 42	•94
Father's Occupation Professional Semi-professional	153 167	•94
Skilled Unskilled	126 73	

marked degree. The very high correlations between the sub-groups of the total sample again correspond to the similarities found previously for prestige rankings.

On the whole, all the subjects and sub-groups of the sample were alike in assigning such occupations as doctor, engineer, university teacher, higher ranks and librarian, nurse and administrator, lower ranks. This may be explained by comparing the characteristics of jobs toward the top with those of jobs toward the bottom. We can identify certain dimensions, the criteria of a profession and the length of training required, the salary paid, the scarcity of personnel in the occupation. in terms of the country's need and recruitment bases. These characteristics are most definitely to be found in occupations at the top in contrast to occupations near the bottom within Egyptian society. We suggest that the interaction of these dimensions determines the status that an occupation has in the minds of the Egyptian subjects. Our findings, may to some extent appear to support Thomas' (1962)(1) that ranking of occupational status may depend largely on such factors as financial rewards, education and professional training, service to society.

Table 8.14: The Egyptian Subjects' Ranking of Occupations as to Status,
Salary, Job Satisfaction, Using Abilities Fully and Value to
Society

Occupations	Status	Salary	Satisfaction	Using Abilities	Value to Society
Doctor	1	1	1	1	1
Univ. Teacher	2	2	2	4	6
Professional Engr.	3	3	4	6	3
Pharmacist	4	5	8	14	11
Dentist	4 5	12	14	17.5	16
Journalist	6	9	6	3	9
Army Officer	7	4	9•5	8	5
R/TV Announcer	8	6	7	7	12.5
Sec.Sch. Tchr.	9	8	3	2	2
Lawyer	10	10	9•5	5	10
Geologist	11	11	15	9	8
Agric. Eng.	12	16	18	13	7
Accountant	13	13	· 16	15	18
Translator	14	7	11	12	17
Vet	15	15	19	17•5	15
Social Worker	16	17	5	11	14
Pr.Sch.Tchr.	17	14	12.5	10	4
Admin.Official	18	20	20	20	20
Nurse	19	18	12.5	16	12.5
Librarian	20	19	17	19	19

^{1.} Thomas, M. (1962), op. cit.

In ranking occupations according to salary, personal satisfaction, using abilities fully and value to society, the same procedure was followed as with the English sample.

Since the results indicate that there is considerable agreement in the ranking patterns of the status of occupations by the various sub-groups which made up the sample, it was thought that the ranking of occupations on the basis of salary, satisfaction, ... etc., could be presented as a whole rather than by sub-groups. Table 8.14 presents the rank order of occupations on all the dimensions. Doctor was accorded the highest rank on all the dimensions, administrator was accorded the lowest rank in terms of salary, job satisfaction, using abilities fully and value to society, but 18th in terms of status.

It is interesting to note that, although there is complete agreement about the top occupations on each dimension and almost identical ranking for the lowest occupations, variations in the hierarchy of ranking on each dimension were observed.

To assess the extent of the consensus which exists between the rankings of the characteristics of occupations, data were summarised in the manner employed with the English sample. Table 8.15 shows the rating profile of the occupations on each dimension. This table shows that, although some occupations have a consistent ranking on all the dimensions, this does not mean that there is a general standard which leads respondents to assign similar rankings to any given occupation regardless of the dimensions; it is evident that particular occupations do not have a consistent standing on all dimensions.

Table 8.15: Ranking Profile for Selected Occupations by Egyptian Sample as to Status, Salary, Satisfaction, Abilities, Value to Society

Occupations	Status	Salary	Satisfaction	Abilities	Value to Society
Doctor	+	+	+	+	+
Univ. Teacher	+	+	+	+	+
Prof.Engineer	+	+	+	+	+
Pharmacist	+	+	0	0	0
Dentist	+	0	0	-	-
Journalist	+	0	+	+	0
Army Officer	0	+	0	0	+
R/TV Announcer	0	+	0	0	0
Sec.Sch. Teacher	0	0	+	+	+
Lawyer	0	0	0	+	0
Geologist	0	0	-	0	0
Agric. Engineer	0	-	- .	0	0
Accountant	0	0	-	-	-
Translator	0	0	0	0	-
Vet	-	-	-	-	-
Social Worker	-	-	+	0	–
Prim. Sch. Teacher	-	0	0	0	+
Admin. Official	-	-	_	-	-
Nurse	-	-	0	-	0
Librarian		-	-	-	-

As instances of occupations that share the same score profile, we may cite three occupations in the top six: doctor, university teacher, and professional engineer; in the lowest part of the scale were vet, administrative official, and librarian. In the middle of the scale four occupations come close to consistency; radio/TV announcer, and lawyer had four "zero's" and one "plus", geologist and translator had four "zero's" and one "minus". The occupations with the most inconsistent profile scores were dentist with one "plus", two "zero's" and two "minuses"; and social worker and primary school teacher, each with three "zero's", one "plus" and one "minus".

A study of the hierarchy of profile scores on each dimension, given in Table 8.15 shows that there were changes in the rank order of certain occupations according to the dimensions on which they were being rated. The social worker, for instance, was raised from a low

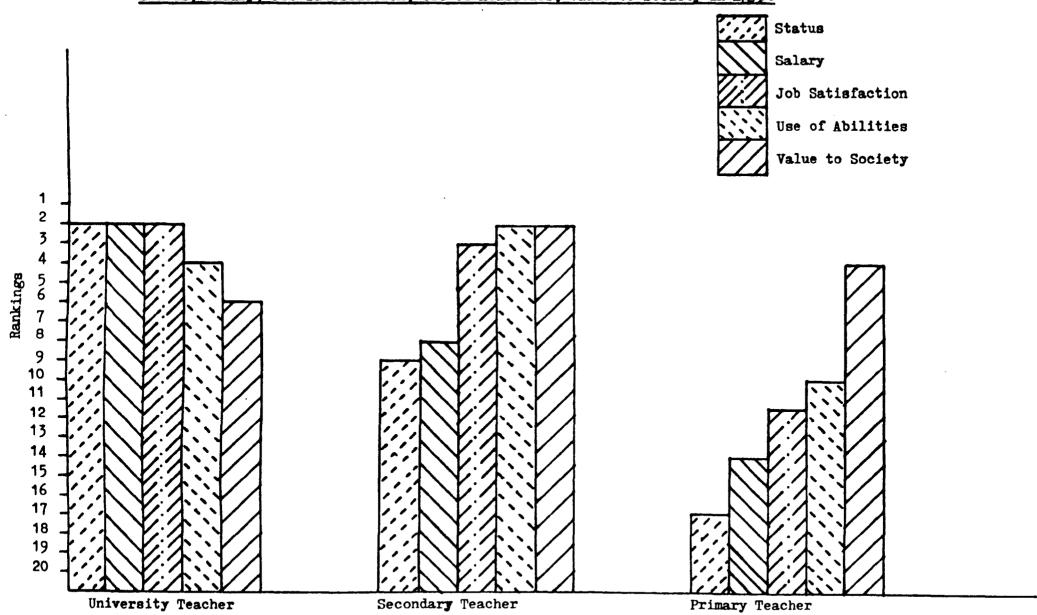
category to a higher one on job satisfaction; the secondary school teacher was raised from the middle category to a higher category on job satisfaction, use of abilities and value to society. The lawyer, like the secondary school teacher, was raised to a higher category on the full use of abilities. The primary school teacher was raised from a relatively low category on status and salary to high category on value to society. Those changes in the ratings of these occupations could be attributed to the importance of their functional value for the respondents. Results as a whole, however, show a great consistency in ranking on the status and salary dimensions. This suggests that high prestige occupations are likely to be those which are the best paid.

Table 8.16: The Correlation Matrix Between the Various Sets of Rankings as to Status, Salary, Personal Satisfaction, Using Abilities and Value to Society

	Status	Salary	Personal Satisfaction		Value to Society
Status Salary Satisfaction Full Use of Abilities Value to Society	-	•88	•68 •76	.65 .74 .84	•58 •62 •64 •81

Multi-dimensional ranking may also be analysed by means of a correlation approach. In Table 8.16 are presented the rank correlations between the perceived status and the other dimensions, e.g. salary, job satisfaction. The highest relationship was between salary and status, 88, job satisfaction and full use of abilities, 84, and full use of abilities and value to society, 81. In other words, occupations ranked high in status were also, on average, rated high on salary, occupations ranked high on use of abilities were also ranked high on value to society, but it should be borne in mind that this relationship did not mean salary is the only criterion for assessing status

Diagram 8.2: The Ranking of the Teaching Profession (University, Secondary and Primary Teachers) According to Status. Salary. Job Satisfaction. Use of Abilities. Value to Society in Egypt



or status is the only criterion for assessing salary. When we consider the relationships between perceived status and the other dimensions, we note that correlations show that social status is related more closely to salary .88 than it is related to job satisfaction .68, using abilities .65, or value to society .58 as shown in Table 8.16.

The close relationship between status and salary .88 and between perceived salary and satisfaction .76, seem to be consistent with the situation in a developing country like Egypt. Since money is the important factor in helping an individual to achieve a modernised way of life, western civilisation can easily be adopted through having money. Possibly subjects could not separate satisfaction in doing the work from satisfaction with the salary received.

More studies need to be made to answer the question of the important factors in determining the status of occupations.

On the whole, although the high correlation between the various sets of rankings, may be partly attributed to the halo effect possibly produced by the questionnaire this cannot be the entire explanation. For this to be the case it would be necessary for any occupation to have the same rank on each dimension; in fact, some discriminations are made as shown in Table 8.15 and indicated by the intercorrelation of the ranking dimensions of occupations reported in Table 8.16.

(ii) The ranking of teaching occupations as to status, salary, personal satisfaction, using abilities fully and value to society

Diagram 8.2 shows the relative ranking of teaching occupations in terms of status, salary, using abilities fully and value to society.

When rankings of the university teacher, secondary teacher, and primary teacher are compared with the occupations given in the list as shown in Diagram 8.2, it is evident that the three types occupy three different positions on the bases of perceived status, salary, personal satisfaction, using abilities fully and value to society.

In social status the university teacher was assigned the highest rank 2; in the middle the secondary school teacher was assigned rank 9, and the primary school teacher was ranked 17th.

On salary, the university teacher was also ranked 2nd, while the secondary school teacher and primary school teacher were ranked 8th and 14th respectively.

As to personal satisfaction, the university teacher was ranked 2nd, followed by the secondary school teacher who was ranked 3rd. The primary school teacher was accorded the rank 12.5. In this dimension secondary school teachers were raised to a higher category than on the status and salary dimensions, as can be seen from the diagram.

As for using abilities fully and value to society it is interesting to note how the hierarchy of ranks was changed. The secondary school teacher was ranked in 2nd position, on using abilities fully, he was followed by the university teacher, 4th, and the primary school teacher 10th.

The secondary school teacher was also ranked 2nd on value to society.

Then came the primary school teacher 4th, and last the university

teacher 6th.

Results suggest that the perceived status of teaching is highly related to salary. It is clear that status and personal satisfaction are related to each other. For instance, the university teacher was

accorded the same rank 2 on the bases of status and satisfaction; but the secondary school teacher was accorded different ranks on status 9 and satisfaction 3, and the primary school teacher was accorded a higher rank, 12, on satisfaction. Even so, the order of precedence is maintained although the distances between university teacher and the others are reduced almost to vanishing point, in comparison between university teacher and secondary school teacher on personal satisfaction. Personal satisfaction is more closely related both to using abilities fully and value to society than to either perceived status and salary as the rankings of the secondary school teacher and university teacher in terms of the three dimensions were almost similar: 3, 2, 2 respectively for the former, and 2, 4, 6 for the latter.

In the case of the primary school teacher, rankings were 12.5 and 10 in terms of using abilities fully and personal satisfaction, but the primary school teacher was raised to fourth position in terms of use to society.

Results as a whole suggest that perceived status is closely related to salary and to some extent to personal satisfaction and, to using abulities, while its relation to value to society is not clear.

Table 8.17: The Egyptian Subjects' Ranking of the Levels of Teaching According to Public Esteem

Types of Teaching	Total Scores	Rank Order
Higher Education Secondary Education Technical Education Primary Education Nursery Education Adult Education		1 2 3 4 5 6

(iii) The ranking of the teaching profession according to public esteem

A further list of various levels of teaching was given to the subjects to state how they thing these are regarded by the public. As with the English samples, the various types of teaching were ranked on the total scores received. Table 8.17 (on the previous page) presents the total scores and rank order of the teaching occupations.

As may be seen from this table, teaching in higher education was given the highest status, followed by teaching in secondary education, while teaching in adult education and nursery education were rated fifth and sixth respectively. In the middle stood technical education, 3, and primary school teaching, 4.

The ranking of teaching seems to be related to the degree to which the occupations call for qualifications which enable the incumbents to follow a higher standard of living or to move from their social class to a higher class, e.g. teaching in higher education would offer a higher standard of living and would promote people to the highest social class. It was accorded the highest status. The case of adult education is quite different, since it is provided only by agencies outside the government.

Two institutions of adult education were recently opened in Cairo and Alexandria; no special qualifications or training courses are required for entry to courses, no defined courses are given. The function of the two institutions is limited to reducing illiteracy among the people. The majority of teachers are either volunteers or graduate teacher females doing their social service for the state.

Teachers are paid token salaries for their work. For teaching in nursery schools, the majority of teachers are unqualified. Most of them are from the lower social classes. Salaries are very small compared with those for other teaching occupations. Teaching in nursery school tends to be perceived as equivalent to domestic work and keeping children clean and tidy. Although there are numerous nursery schools in Egypt, most of them are run by private agencies. Only one college in Egypt

has been opened in the last five years for training teachers to teach in nursery schools.

It is difficult in any case to be sure about the reasons for ranking teaching at the nursery level and teaching adults as having lower status; the answers to this question are beyond our limited sources of information. Results, however, accord with the findings of the rankings of occupations.

(iv) The rankings of the various types of teaching according to subjects' first preferences

The same list of the various types of teaching as given to the English sample was given to the Egyptian sample who were asked for their first preferences in teaching. As was described earlier, mean scores were chosen as a basis of rankings. Table 8.18 presents the rank order of the various types of teaching which subjects stated they preferred.

Table 8.18: The Egyptian Ranking of the Preferences for Teaching at the Different Levels

Teaching Types	Mean Scores No of Sample 300	Rank order
Secondary Ed. Higher Ed. Primary Ed. Technical Ed. Adult Ed. Nursery Ed.	2.108 2.360 3.606 3.836 4.302 4.528	1 2 3 4 5 6

The secondary school teacher was accorded the first preference, the university teacher the second. Last came the nursery school teacher.

To what extent the ranking of perceived status was influenced by ranking according to preferences is indicated by a simple comparison between both ranks in Table 8.8. Though subjects rank teaching in

higher education in the first position in terms of public esteem, they place it in the 2nd position in terms of their preferences in teaching. Secondary education was ranked second in terms of public esteem but first in order of preference, while adult education was ranked 6th for the former and 5th for the latter and nursery education was ranked 5th for the former and 6th for the latter; the correlation between the two sets of rankings was .84. It would seem from the results that there is a relationship between the perceived status and the preferences of the subjects, but this relationship is not perfect.

Table 8.19: Comparison Between the Ranking of Teaching Profession According to Preference and Public Esteem by Egyptian Sample at Different Levels of Education

Stages of Education	Ranking by Esteem 500	Preference Ranking 500
Higher Education Secondary Education Technical Education Primary Education Nursery Education Adult Education	1 2 3 4 5 6	2 1 4 3 6 5

(v) The ranking of the teaching profession according to present status and the status it should have

Subjects were asked to rate the teaching occupation according to its present social standing on a five-point scale ranging from excellent to good, average, below average to low. The significance of their replies became more apparent when replies to a further question were considered. This question asked the subjects to rate teaching on the basis of the status they thought it ought to have. Table 8.20 shows the percentage of ratings in each category according to present status and the status they thought the profession ought to have.

The examination of this table shows that 8% gave the teaching profession the status of excellent in the actual situation among the

public. On the other hand, 81% rated the status it ought to have as "excellent", 6% gave it a rank of "good" in the actual position and 13% gave it good status according to the ideal position, 41% gave it below average rank and 11.4% gave it low rank. Average small proportion (2) did not give any answer in ranking in the actual situation and on the ideal situation (1.8%).

Table 8.20: Comparison Between the Ranking of Egyptian Sample of the Status of Teaching Profession According to Public Esteem and the Status it Should Have

Categories of Rank	Actual Rank %	Ideal Rank %
Excellent Good Average Below Average Low No Answer	8.0 6.0 41.0 31.6 11.4 2.0	81.0 13.0 3.6 - 0.6 1.8

These findings seem to be consistent with the findings of the relative rankings of the teaching profession among other occupations. The secondary school teacher was accorded ninth rank among occupations, and about 72.6% of the whole sample gave teaching an average rank in the middle of the scale, viz. between good and low. It would seem from the ratings of the status teaching ought to have that the majority of respondents were dissatisfied with the actual status of the profession. 81% thought teaching ought to have 'excellent' status and only 13% thought it ought to have 'good' status. The numbers putting it in the below average or low categories were insignificant.

Section III: Comparison Between the English and Egyptian Data

(i) Comparison in rankings occupations between England and Egypt

Since only 17 of the 20 occupations given to the two samples were the same, the occupations were re-ranked according to their relative position in each country after excluding the non-comparable ones. The non-comparable occupations were Banker, Architect and Management Trainee in England, Agricultural Engineer, Translator, and Geologist in Egypt.

Table 8.21 presents the rank order assigned to each occupation in England and Egypt in terms of status, salary, personal satisfaction, using abilities fully and value to society.

Table 8.21: Ranking of the Common Occupations According to their Status.

Salary, Personal Satisfaction, Abilities and Value to Society
by the English and Egyptian Samples

Occupations	Sta	tus	Sal	ary	P.Sa	tis.	Usin	g Ab.	Valu	e
Ranked. No of Subject	Eng. 300	Egy. 500	Eng. R	Egy. R	Eng. R	Egy. R	Eng. R	Egy• R	Eng. R	Egy. R
Doctor Lawyer Dentist Univ. Teacher Accountant Vet Engineer Sec.Sch.Tchr. Pharmacist Pr.Sch.Tchr. Journalist Army Officer Nurse R/TV Announcer Civil Servant Social Worker Librarian	1 2 3 4 5 6 7 8 9 0 11 12 14 15 16 17	1 10 52 11 12 39 4 46 7 7 8 5 15 16	4 1 36 5 9 3 13 12 15 11 7 7 17 2 10 14	1 40 21 13 37 52 8 4 56 7 14 16	1 7 10 8 13 5 11 4 16 2 9 13 3 15 17 6 12	1 10 13 14 16 4 3 8 12 6 9 11 7 7 7 5 15	1 4 11 10 14 7 9 3 7 2 8 13 6 15 2 5 16	1 5 14 4 12 14 6 2 11 9 3 8 3 7 7 10 16	1 8 5 10 14 9 7 4 10 2 16 14 3 3 12 6 17	1 8 14 6 15 13 3 2 9 4 7 5 10 17 12 16
R. Correlation	0	.62	0.	59	0,	•34	0.	. 50	0	-50

(a) Status

As may be seen from Table 8.21, the respondents in the two countries evaluate the status of occupations somewhat differently. The rank

correlation between the two cultures was .62. In England, the lawyer, accountant and vet enjoy high rank being 2nd, 5th and 6th respectively, but they are ranked 10th, 11th and 12th respectively by the Egyptian sample.

The English sample accorded the engineer, pharmacist and R/TV announcer 7, 9, 14 ranks in order whereas the Egyptian sample, accorded the Engineer 3rd rank, the pharmacist 4th rank and the radio/TV announcer 8th rank.

In both countries, the doctor and civil servant are accorded similar ranks, first for the former and fifteenth for the latter.

(b) Salary

The rank order given by the English and Egyptian samples in terms of salary are shown in Table 8.21. The rank correlation between the two sets of ranks was .59. Again there are several striking differences between the two cultures. In England, the lawyer is accorded the highest position in salary, whereas in Egypt the doctor is accorded the first rank. The English sample assigned the R/TV announcer, the accountant, the vet and the civil servant, 2nd, 5th, 9th and 10th ranks respectively, but they are ranked 6th, 11th, 13th and 17th in Egypt. The English sample assigns the university teacher, the pharmacist and the secondary school teacher ranks $\frac{1}{2}$ 2 and 13, and the Egyptian sample accords these occupations ranks of 2, 5 and 7. In both countries engineer is accorded 3rd rank. The relatively low correlation reflects the differences in the actual incomes received in the two countries.

(c) Personal satisfaction

The ranks assigned to occupations by the English and Egyptian samples on the personal satisfaction dimension are shown in Table 8.20. Comparison of the two sets of ranks gave a rank correlation of .34. There are striking differences in the personal satisfaction evaluations. In fact, this difference represents the greatest discrepancy in rank assignments found in all the comparisons made between the two countries. In England, the primary school teacher, the nurse and the vet were accorded 2nd, 3rd and 5th ranks respectively, but they were accorded ranks of 12, 11 and 16 by the Egyptian sample. The English sample place the university teacher, the engineer and the radio/TV announcer at 8th, 11th, 15th respectively, whereas the Egyptian sample assign these occupations ranks of 2, 4 and 7. In both countries the doctor was accorded highest rank.

(d) Using abilities fully

As shown in Table 8.21, the respondents in the two countries perceive the occupations on the 'using abilities fully' dimension somewhat differently. The rank correlation between the two countries was .50. In England, the primary school teacher, the social worker and the nurse are assigned ranks of 2, 5 and 6 respectively, but they were accorded ranks of 9, 10 and 13 by the Egyptian sample. Whereas the English sample assigned the journalist a rank of 8, the pharmacist a rank of 17, the army officer a rank of 13, the university teacher a rank of 10 and the radio/TV announcer a rank of 15 these occupations were raised to ranks 3, 11, 8, 4 and 7 respectively by the Egyptian sample. The doctor was again accorded the highest rank in the two cultures. The comparison suggests that the perception of the term 'using abilities fully' is different in the two countries. In Egypt, it seemed related to the educational level and achievement of the incumbent of

those occupations and the length of course and the qualification requirement of these occupations. However, the data do not give any information about the determinants used by subjects in ranking the occupations as to using abilities fully.

(e) Value to society

As may be seen from Table 8.21, there are striking differences in ranking occupations as to value to society in the two countries. The rank correlation between the two cultures was .50. The English sample ranked the dentist 5th, the social worker 6th, and the radio/TV announcer 13th. These occupations were assigned ranks of 14, 12 and 10 respectively by the Egyptian sample. In England, the engineer, the army officer. the university teacher and the journalist were assigned ranks of 7, 14, 10 and 16 respectively, whereas in Egypt they were raised to ranks 3, 5, 6, 7. The doctor and the lawyer were assigned similar ranks, first for the former and 8th for the latter. The differences in ranking seemed to reflect the functional importance of such occupations in the two countries. Engineers, journalists and university teachers are given high rating on account of their important occupational role in developing and modernising the country. The army officer is assigned a rank of 5 in Egypt for value to society because of the important part he is playing in building the army and defending the country.

Cross-cultural comparisons of the ratings of the various occupations on status,

provide evidence in favour of the "oulturalist"
position, which holds that

"within each country or culture the distinctive value system would result in substantial — and, indeed, sometimes, extreme differences in the evaluation of particular jobs in the standardised modern occupational system."(1)

^{1.} Hodge, R.W., Siegal, P.M. and Rossi, P.H. (1964), op. cit. p. 310

These comparisons provide little evidence in support of the "structuralist" position which holds that

"there is a relatively invariable hierarchy of prestige associated with the industrial system, even when it is placed in the context of larger social systems which are otherwise differentiated in important respects."(1)

The present study found a correlation of .62 between the English and Egyptian rankings of the status of the similar occupations in contrast to Inkeles and Rossi (1956)(2) and Hodge et al (1964)(3) who found correlations of over .90 between prestige evaluations of a wide range of occupations in different societies. Our findings also do not support Thomas's (1962)⁽⁴⁾ proposition that common attitudes towards sub-dimensions of prestige are important determinants of high similarities between the prestige evaluations of different occupations, no matter what stage the industrial development of a country has reached.

We believe, however, that the cross-cultural comparison of evaluations of the status of the similar occupations in England and Egypt may be elucidated by comparing the correlations between the perceived status and other dimensions in the two countries.

Table 8.22, which presents the inter-correlations between the ratings of occupations on the five dimensions in England and Egypt. shows that perceived status is more closely related to salary in the Egyptian sample - rank correlation .88 - than in the English sample rank correlation .59.

Perceived status is more closely associated with personal satisfaction in Egypt than in England; the respective rank correlations were .68 and .40.

Tbid., p. 310 1.

Inkeles, A. and Rossi, P.H. (1956), op. cit. 2.

Hodge, R.W., Siegal, P.M. and Rossi, P.H. (1964), op. cit. Thomas, M. (1962), op. cit. 3•

Table 8.22: Comparison of the Inter-correlations Between the Occupations in Terms of the Status, Salary, Personal Satisfaction, Using Abilities Fully, and Value to Society in England and Egypt

No of	Status	Salary		Satisfaction		Ability		Value		
Occupat- ions (17)		Egypt	England	Egypt	England	Egypt	England	Egypt	England	
Status Salary Satis- faction Ability Value to Society		•88	•59	.68 .76	•40 •12	.65 .74	•36 ••05 •89	•58 •62 •64 •81	•48 -•06 •75 •73	

No. of English sample 300 No. of Egyptian sample 500

The 'using abilities fully' rating is more strongly correlated with status in Egypt than in England; the respective rank correlations were .65 and .36.

The correlation between status and value to society in the two countries was closer; .58 in England and .48 in Egypt.

Comparison between the correlations in the two countries reflects differences in the evaluation of selected occupations in terms of the dimensions cited above, e.g. using abilities fully and personal satisfaction are not of equal importance in each country. The data do not provide us with the determinants of status or the frame of reference used in rating the occupations in the two countries. The variations as a whole, however, may be explained in terms of the relationship between status and the determinants of status in each country.

In short, we view the similarities and differences between the ratings given to occupations by the English and Egyptian samples in terms of the interaction of several factors affecting the minds of the

subjects. Such dimensions as using abilities fully and personal satisfaction are not of equal weight in determining the status of a particular occupation.

Another possible explanation for the differences may be social and political differences between the two countries. The need for, and supply of, qualified people for a particular occupation may, for instance, be one influential factor. Over-production of qualified people may reduce the status of a particular occupation. The demand for more engineers in Egypt has tended to raise the status of engineering there. It does, however, need to be borne in mind that the production of a large number of people for a particular occupation does not always lower the status of that occupation.

Comparison with other studies

Though a number of studies have investigated the status of occupations, only a very few studies which have concentrated on a particular range of occupations similar to those used in this investigation, can be compared with it.

In 1975 Seals and Clark (1) obtained the rankings of ninety-four occupations for college graduates made by 318 students in Oklahoma State University. Table 8.23 presents the rank orders of occupations in the American study and the English and American samples. The rank coefficient of correlation between the rankings of similar occupations by the English and American samples was .86. It appears from Table 8.23 that the American and the English sample are in close agreement about the ranking of the lawyer - both samples rank him second - than the Egyptian sample who assign him only ninth rank. The journalist was assigned

^{1.} Clark, A.J. and Seals, J.M. (1975), op. cit., pp. 293-298.

sixth rank by the Egyptian sample, but sixteenth by the American, and thirteenth by the English sample; the radio/TV announcer was assigned seventh rank by the Egyptian sample but twelfth by the American sample and fifteenth by the English sample. The university teacher was assigned the highest rank (2) by the Egyptian sample compared with fifth by the English sample and eighth by the American sample. The secondary school teacher was assigned similar ranks, eighth and ninth in England and Egypt, but thirteenth by The rank accorded to the primary school teacher was American sample.

more or less the same in all three countries, fourteenth by the American and Egyptian samples and twelfth by the English sample.

Comparison Between the Status Accorded to Similar Occupations by the American, English and Egyptian Samples

	Occupations	Ranking of American Sample	Ranking of English Sample	Ranking of Egyptian Sample
Geologist in the case of Egyptian ranking (11) Not compar- able with the Egypt.	Univ. Teacher Accountant Nurse	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	1 2 4 7 8 3 10 5 6 4 11 15 9 2 16 17	1 9 5 12 3 10 4 2 11 15 7 8 14 13 6 16

Correlation

English & American samples .86

Egyptian & American samples .63

Source of table of American ranks derived from data in Clark. A.J. Seals, J.M. (1975), op. cit., p. 295 English and Egyptian rankings: present investigation

In another study of a culture with a different social, historical, economic background, Cormack (1962)⁽¹⁾ obtained the ranking of occupations for university graduates made by university students in India. Only seven occupations ranked in the Indian study were comparable with the present investigation's list. The rank correlation between the relative rank order of the English and Indian samples was .61, whereas the correlation between the Egyptian and Indian samples was .93.

The similarity between the rankings of the English and American samples on the one hand, and the Egyptian and Indian samples, on the other, may lend support to the culturalist position rather than to the structuralist position in that the similarities may be the product of similarities of degree of industrialisation, modernisation, social and economic background in England and the USA in contrast to India and Egypt. But we think these figures are not very reliable as a basis of comparison. The wording, the methods and the list of occupations compared may have led to some differences in responses.

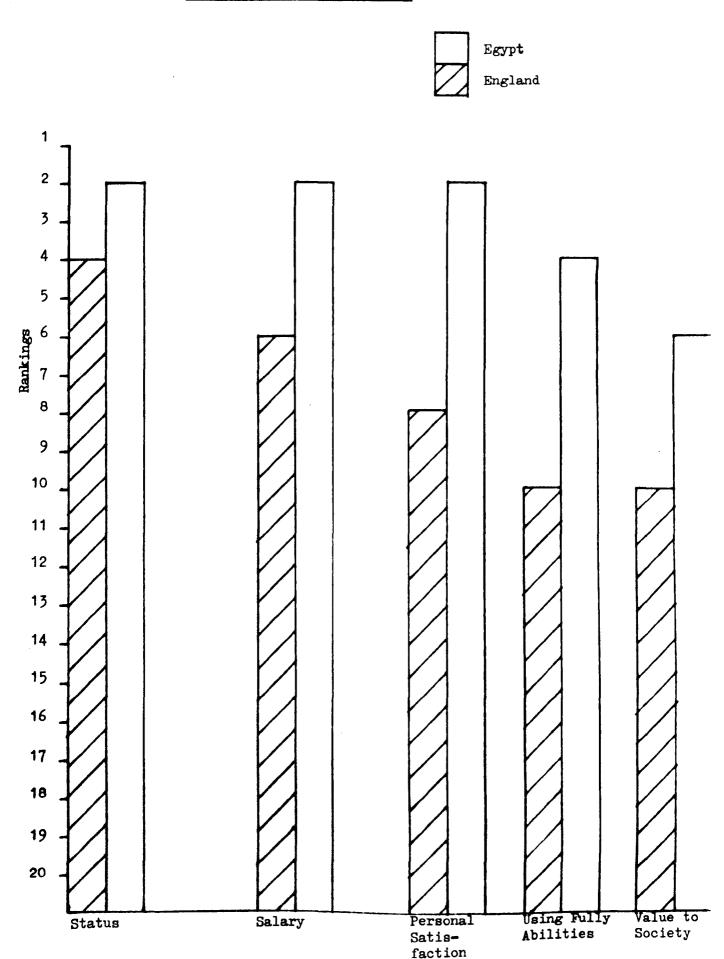
(ii) Comparison of the teaching occupations according to status, salary, using abilities fully and value to society in England and Egypt

(a) University Teacher

Diagram 8.3 presents the rank order assigned to the university teacher by the English and Egyptian samples on each of the following dimensions: status, salary, personal satisfaction, using abilities fully and value to society. The English and Egyptian samples are in closer agreement about the status of the university teacher than they are on the other dimensions. In England the university teacher was accorded 4th rank in status, and in Egypt he was accorded 2nd rank. For salary the English sample ranked the university teacher 6th, and the Egyptian sample ranked him 2nd. For using abilities fully and value to society the English sample gave a rank of 10, and the Egyptians gave

^{1.} Cormack, B. (1962), She Who Rides a Peacock, Asia Publishing House, Bombay, p. 75

Diagram 8.3: Ranking of University Teachers in Terms of Status, Salary Personal Satisfaction, Using Abilities Fully and Value to Society in England and Egypt



ranks of 4 and 6 respectively. A larger difference was noted in ranking for personal satisfaction; the English sample's ranking was eighth and the Egyptian sample's ranking was second.

(b) The Secondary School Teacher

Diagram 8.4 shows that the English and Egyptian samples assigned the secondary school teacher similar ranks on the basis of status, personal satisfaction, using abilities fully and value to society, but differed on the basis of salary. In Egypt, the secondary school teacher was assigned a relatively higher rank (7) than in England (13). The similarities in the ratings made by the English and Egyptian samples may possibly be due to the fact that teaching in secondary school is largely similar in the two countries in respect of the training course, the qualifications required and the prerequisites of teaching at this level.

(c) The Primary School Teacher

Diagram 8.5 shows the relative rank order assigned to the primary school teacher in terms of status, salary, personal satisfaction, using abilities fully and value to society in England and Egypt. The English sample accorded the primary school teacher a higher rank (10) than the Egyptian sample (14) as to status, whereas, the primary school teacher was accorded higher rank (12) by the Egyptian sample than the English sample (15) on salary.

It is interesting to note the higher ranking in terms of personal satisfaction and using abilities fully given by the English sample, the primary school teacher being accorded the second rank on both dimensions, whereas the Egyptian sample gave the primary school teacher ranks of 12 and 10 on personal satisfaction and using abilities fully respectively.

Diagram 8.4: Ranking of the Secondary School Teacher in Terms of Status Salary, Personal Satisfaction, Using Abilities Fully and Value to Society in England and Egypt

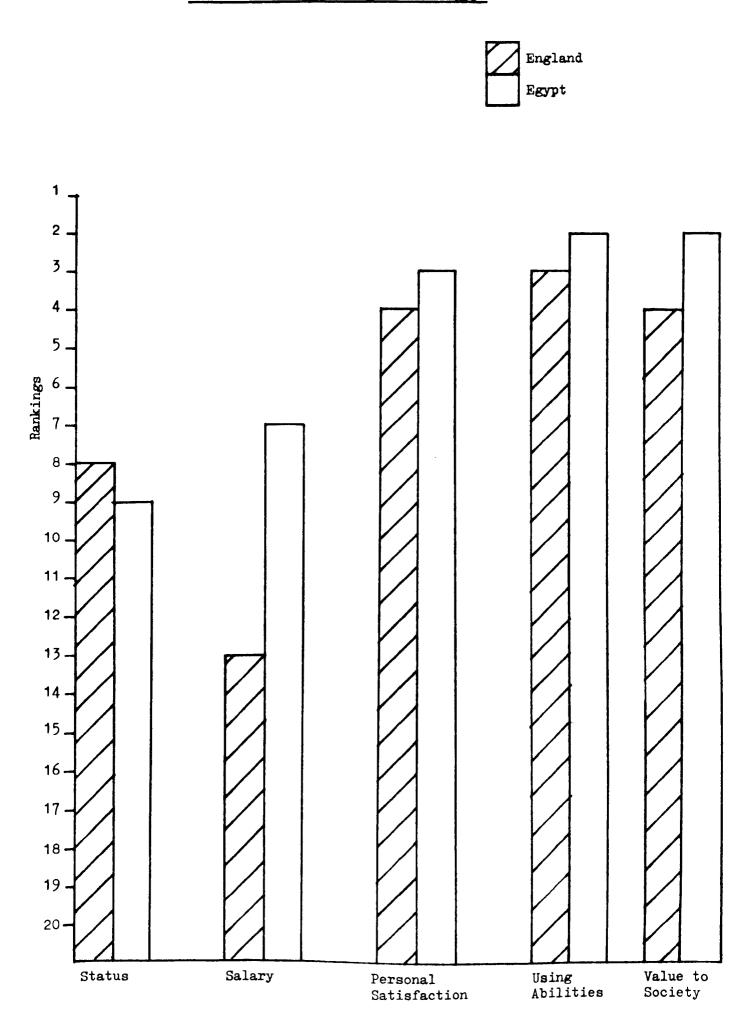
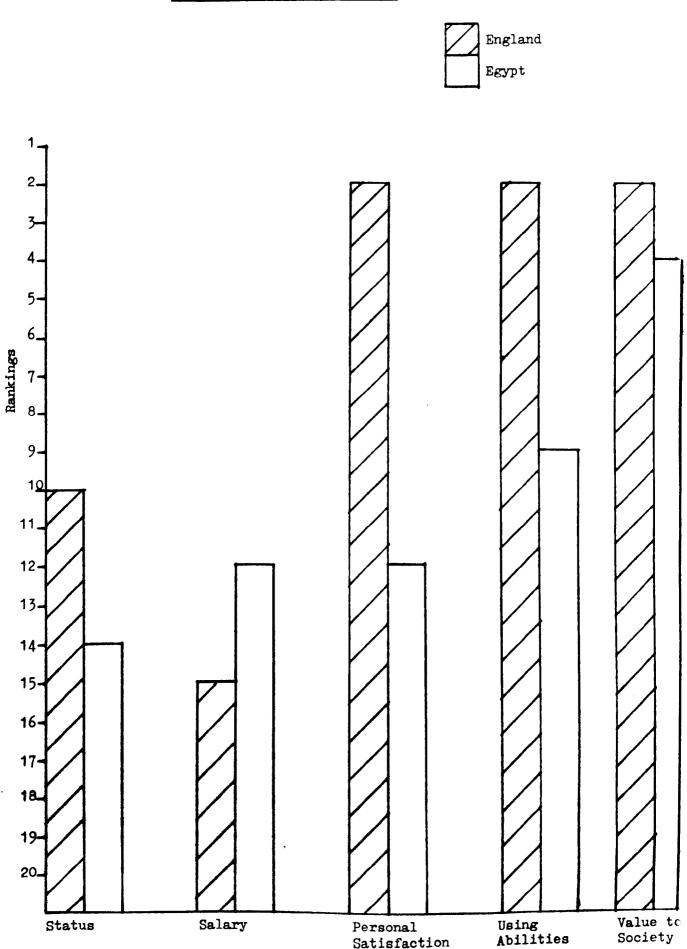


Diagram 8.5: Ranking of the Primary Teacher in Terms of Status, Salary Personal Satisfaction, Using Abilities Fully and Value to Society in England and Egypt



It is difficult to give a specific explanation for the differences, but it may be suggested that attitude toward primary school teachers may be affected by the large rate of respondents of B.Ed. students in the English sample who may themselves perceive teaching in primary schools as a good way of using abilities and fulfilling the need for personal satisfaction. On the other hand, the attitudes towards primary school teaching in Egypt are likely to be less favourable, reflecting social and educational and economic differences between teaching at secondary and primary levels, since the length of course of professional training for primary education and the prerequisites of educational levels of teachers are largely poor compared with those of secondary and university teachers. On value to society, they were in closer agreement; the English sample gave a rank of 2, and the Egyptian sample a rank of 4.

(iii) Comparison of rankings of the teaching profession at various levels as to public esteem in the two countries

The rank orders given to different levels of teaching in terms of public esteem by the English and Egyptian samples are shown in Table 8.24.

Table 8.24: Comparison in Ranking the Various Levels of Teaching According to Public Esteem in England and Egypt

Types of Teaching	English Sample	Egyptian Sample
No	300	500
Higher Education Further Education (Technical Ed.) Secondary Education Primary Education Adult Education Nursery Education	1 2 3 4 5	1 3 2 4 6

There is essential agreement in ranking the teaching levels in England and Egypt. The rank correlation between the ratings was .87. Only a slight difference was observed, teaching at secondary level was assigned

2nd rank by the Egyptian sample whereas in England, the ranking given was 3rd. Teaching in further education was accorded 3rd rank by the Egyptian sample and 2nd rank by the English sample. The results support the previous findings that the status attached to teaching occupations is very similar in the two countries.

(iv) Comparison in ranking the various levels of teaching by first preferences in England and Egypt

The rank order of preferences given to the various types of teaching in England and Egypt are shown in Table 8.25.

Table 8.25: Comparison in Ranking the Various Levels of Teaching by First Preferences in England and Egypt

Levels of Teaching	English Sample No 300	Egyptian Sample No 500
Secondary Education Primary Education Higher Education Further Education	1 2 3	1 3 2
(Technical Ed.) Nursery Education Adult Education	4 5 6	4 6 5

The comparison showed very close agreement between the English and Egyptian samples. Only slight differences in rating primary, higher, nursery and adult education were found.

Table 8.26 gives the percentages of the English and Egyptian samples who rated the teaching profession for public esteem and the status it should have in terms of five categories: excellent, good, average, below average and low. 44.7% of the English subjects and 41% of the Egyptian subjects gave the profession a rank of average in public esteem. A bigger difference was found between the percentages

Table 8.26: Comparison of Rankings of the Teaching Profession
According to Public Esteem and the Status it Should
Have in England and Egypt, in Percentages

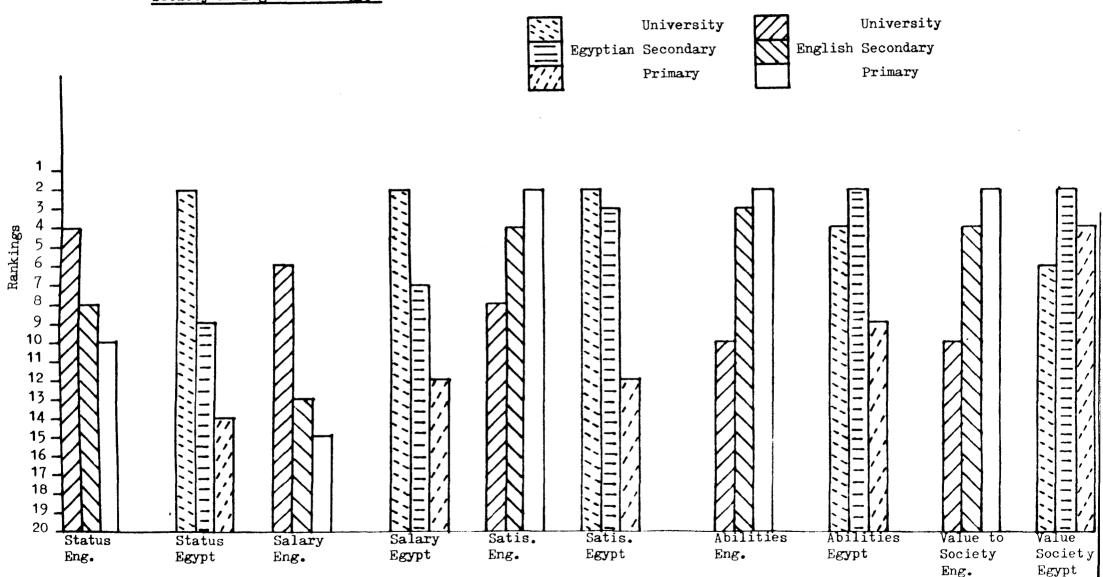
Categories Rank	Public	Esteem	Status it s	hould have
	England 300	Egypt 500	England 300	Egypt 500
Excellent	-	8.0	28.3	81.0
Good	48.7	6.0	60.3	13.0
Average	44•7	41.0	10.3	3. 6
Below Average	3•0	31.6	0.3	
Low	1.7	11.4		0.6
Do not know	2.0	2.0	0.7	1.8

of each sample who gave the profession a rank of good, (48.7% of the English subjects but 6% of the Egyptian subjects). Three per cent of the English sample rated the profession below average and 1.7 rated it as low. Of the Egyptian sample, 31.6% rated it below average and 11.4% rated it as low. Results suggest that the teaching profession was accorded a relatively higher rank in public esteem by the English sample than by the Egyptian sample.

When it came to assessing the status the teaching profession should have, 81% of the Egyptian sample gave it a status of excellent compared with 28.3% of the English sample. Sixty per cent of the English sample accorded it a rank of good, compared with 13% of the Egyptian sample.

On the whole cross-cultural comparison of the ratings at different levels in the two countries suggests that, although the status assigned to the profession is fairly similar, the characteristics of teaching at different levels are likely to be perceived in terms of the culture, functional roles, historical background and distinctive features of the educational system of each country, (see Diagram 8.6 overleaf).

Diagram 8.6: Comparison Between Relative Ranking of Teaching Occupation (University Teacher, Secondary Teacher, and Primary Teacher) in Terms of Status, Salary, Job Satisfaction, Using Abilities Fully, Value to Society in England and Egypt



CHAPTER IX

THE RELATIONSHIP BETWEEN THE ENGLISH SUBJECTS PERCEPTIONS OF THE STATUS OF THE TEACHING PROFESSION AND THEIR ATTITUDES TO EDUCATION

In Chapter VII I have discussed in detail every step in defining the factors for the English pilot sample, the English main sample, and the Egyptian sample. We arrived at the conclusion that the factors extracted are meaningful and coherent and justify the use of Oliver's Survey of Opinions about Education as a measure of teachers' attitudes to education.

In comparing the factors extracted from the English and Egyptian samples, we concluded that the factors are different in character. Consequently, the decision was made to treat the data from the English and Egyptian groups separately. This chapter deals with the English data. The following chapter deals with the Egyptian data.

In Chapters IX and X, factor scores were constructed for the English and Egyptian samples partly in order to clarify the interpretation of the factors and partly in order to examine the relationship between the perception of the status of the teaching profession by the English and the Egyptian samples.

The main divisions of this chapter are as follows:

- I. The scoring procedure
- II. The differences between the various sub-groups of the sample

III. The relationship between the subjects' perceptions of the status of the teaching profession and their attitudes to education.

I. The scoring procedure

A factor score was calculated for the two factors for each individual by means of computer programme (SPSS). (1)

Figures 1 and 2 in Appendix G show the distributions of the scores for the whole sample on the two factors which had been identified as follows:

- 1. Tenderminded-theoretical attitude to education
- 2. Progressive-radical attitude to education.

As may be seen from Figure 1, the distribution of the scores on the tendermindedness factor was approximately normal. The range of scores was broad enough to include extreme scores. The progressive radical factor was somewhat less satisfactory in this respect (see Figure 2, Appendix G).

A positive high score on Factor I indicates a strong emphasis on tendermindedness-theoretical opinions in education; low and negative scores indicate scant regard for tendermindedness, a tendency to toughmindedness and practical thoughts on education.

A positive high score on Factor II indicates a progressiveradical attitude to education; low and negative scores indicate less progressive attitudes and a tendency to traditional thoughts on education.

The correlation between the mean scores on the two factors was 0.101 for the whole sample. This suggests that the two factors are relatively independent.

II The differences between the various groups of the sample

In view of the findings of the relevant literature, a number of personal background variables were investigated in order to throw light on the differences between the means of the factor scores. These variables were: sex, age, teaching subject, subject of course and father's occupation. To examine the significance of the differences between the mean scores on each of the above five variables an analysis of variance and a T test using a computer programme.

The whole sample of 300 respondents was split into various subgroups according to the variables selected for study. Some sub-groups were combined to provide well balanced groups for purposes of comparison.

- 1. Sex groups: There were 86 men and 213 women.
- 2. Age groups: Subjects were grouped into three groups(i) 246
 respondents aged 20 to 24; (ii) 24 subjects aged 25 to 29;
 and (iii) 29 subjects aged 30 and over. But because of the small number of subjects in the last two groups, these two groups were combined. Thus, there were two groups in the sample, the younger group of 264 respondents, and the older group of 53 respondents.
- 3. Subject of teaching: Respondents were classified according to their teaching subjects into three groups: (i) 198 subjects who specialised in teaching language, social studies, (Arts group); (ii) 78 subjects who specialised in physics, mathematics (Science group); (iii) 28 subjects who specialised in teaching crafts, music and physical education (Non-academic group).
- 4. Course of study: Subjects were also classified by course of study into four groups: (i) 184 students who were following a course leading to the degree of Bachelor of Education (the B.Ed. group);

^{1.} SPSS

(ii) 78 graduate students who were following a course leading to the Post-Graduate Certificate in Education (P.G.C.E. group); (iii) 26 serving teachers who were following a part-time course leading to the degree of Master of Education (M.Ed. group); (iv) 12 serving teachers who were not registered for a course in education. The latter two groups were combined because their numbers were so small.

The Tender-minded-Theoretical Factor

In explaining the differences between the scores of the subgroups it may be useful to recall the content of the factor items.

Table 9.1 (overleaf) presents the items defining the tender-mindedtheoretical factor, Table 9.2 (overleaf), the mean scores and standard
deviations with F and T values on the tender-minded-theoretical
factor.

- 1. Table 9.2 shows that women scored significantly higher than men on the tender-minded-theoretical factor. This finding is largely as might have been expected. It may be explained by postulating that sex role differences do help to produce differences in attitude scores. Since women are responsible for rearing children, they are more likely to lay greater emphasis on children's needs and interests and to give less approval to an authoritarian approach to teaching. Another possible explanation is that women are more likely than men to be committed to teaching as a career and consequently to think positively about education.
- 2. The group of younger subjects scored significantly higher on the tender-minded-theoretical factor than the older age group. This was in the expected direction. This finding may be attributed to the recent contacts the younger teachers have had with new trends in

Table: 9.1: Factor I. The Tender-minded Theoretical Factor: Purified Form. The English Main Sample

The Content of the Items

One argument in favour of secondary technical education: A technical school training gives a boy or girl a good start in the competition for jobs

Argument in favour of secondary technical education: Technical education is a good investment for an industrial country

Reason for teaching science: The progress of industry demands workers equipped with scientific techniques

Reason for the training of teachers: A teacher must know how to control children

Reason for the teaching of English language in schools: Children must acquire proficiency in spelling, punctuation, and grammar

Another reason for religious instruction: It instils a sense of duty

Reason for teaching science: A scientific training offers good prospects for a career

Reason for excluding propaganda from schools: Instruction in one's duties to the state should come later

Education for international understanding: A study of international affairs should show which countries are our friends

One suggested way in approaching education for international understanding: Respect for one's own country is the best foundation for one's attitude to other countries

Reason for the training of teachers: A teacher must learn to understand children's needs

Reason for justifying the cost of special schools: The training provided may prevent the handicapped from becoming a charge upon society later

Another reason justifying the cost of special schools: It is only fair that a child unfortunate enough to suffer from a handicap should be compensated by special educational treatment

Reason for religious instruction: The knowledge of a living God meets a deep-felt need in children

Suggested way, of dealing with the problem of comics: The sale of harmful comics should be prohibited

Reason for excluding propaganda from schools: Propaganda might get into the wrong hands

One suggested way in dealing with the problem of comics: See that children can get the better comics

You cannot expect children to write good English unless they have a good foundation in grammar

Table 9.2: The Mean Attitude Scores on the Tenderminded-Theoretical Factor for the Sub-Groups According to Variables in Social Background

Variables	No in Sample	Mean Scores	S.D.	F and T Values
Sex groups Men Women	86 213	-•471 +•180	1.921 1.621	9.060, 3.010
Age groups Younger group Older group	246 53	+•057 -•550	1.655 1.96	3.822 *
Teaching subject Arts group Science group Non-academic group	198 70 28	+•026 -•312 +•669	1.711 1.749 1.647	3•311 *
Subject of course B.Ed. group P.G.C.E. group In-service group M.Ed. students	184 78 38	+•386 -•825 -•204	1.659 1.545 1.877	14.701 ***
Father's occupation Class I group Class II group Class III, IV and V group	126 45 101	156 +.147 +.234	1.426 1.782 1.793	1. 455
GP not stating father's occupation	28	 362	1.707	

^{*} denotes significant at the .05 level

education and the effect of their training course, the majority being student teachers who had spent three or four years on their college course. The older group, on the other hand, seem to have been less affected by new ideas in education. Most of them were teachers with some experience, but some were M.Ed. or P.G.C.E. students who were given the questionnaire at the beginning of their course.

^{**} denotes significant at the .025 level

^{***} denotes significant at the .001 level

3. The non-academic group scored significantly higher on tendermindedness than the Art and Science group at the .5 level. It had been
anticipated that subjects who teach non-academic subjects such as music
and crafts might be more in favour of tendermindedness than subjects who
teach academic subjects. Perhaps teachers of non-academic subjects are
more tender-minded because the nature of the subjects they teach is
less traditional than that of an arts or a science subject, or because
non-academic subjects are easier to teach and allow children more
opportunities for self-expression. Academic subjects, on the other
hand, demand stricter control by the teacher of the content and methods
of teaching and a stricter discipline than is normally required in an
art room or a craft room. These, however, are simply speculations.

When the Arts Group is compared with the Science Group it would seem that there is a slight tendency for them to score more highly on tender-mindedness than the Science Group. Perhaps teaching arts subjects is relatively easier and more enjoyable than teaching science subjects. The score of the Arts subjects was, however, not significantly higher than that of the Science subjects.

4. The College of Education Group (B.Ed. students) made significantly higher scores on the tender-mindedness-theoretical attitudes than the P.G.C.E. Group and the In-service Teacher Group. This finding may be explained if we assume that the B.Ed. Group might tend more towards a tender-minded attitude because they have had a longer period of introduction to, and experience of, new trends in education than the P.G.C.E. Group who scored lowest on this factor. This finding is in contrast with Butcher's finding (1962) that graduate teachers tend to score high on tender-mindedness. The difference between the two findings may perhaps be explained by the fact that the Leeds Group of P.G.C.E. students were given the questionnaire at the beginning of

their course before their attitudes had been affected by it.

The <u>very slight</u> tendency of in-service teachers to score higher than the P.G.C.E. students on the tender-mindedness-theoretical factor is so insignificant that speculation about it is totally unjustifiable. Some of the in-service teachers were following part-time courses leading to the degree of M.Ed.

5. No significant differences were found between the scores of subjects from different social classes on the tender-mindedness-theoretical factor, but there was a slight tendency for subjects in Class Groups II, III and V to score higher on this factor than subjects from Class Group I and those who could not be classified.

Table 9.3 gives the items of the progressive-radical factor that need to be kept in mind in order to understand the meaning of the progressive-radical factor defined in the present study. Table 9.4 gives the mean scores and the standard deviations with F and T values on the progressive-radical factor.

Table 9.3: The Progressive Radical Factor: Purified Form. The English Main Sample

Content of the Items

A higher proportion of national income to be spent on education Bigger allowances for play material in primary schools Smaller classes in primary schools

Less corporal punishment in schools

More nursery schools

More education for international understanding

Corporal punishment: Some children will not respond to any other form of discipline

Increased expenditure on adult education

Reason for teaching science: The child's sense of wonder is a good starting-point for the development of his interests

Corporal punishment: No other type of punishment is over so quickly or leaves so little resentment

Naturalness is more important than good manners in children

Table 9.3: (Continued)

Content of the Items

Reason for teaching English language in schools: It cultivates enjoyment in the use of language

One justification of the cost of special schools: Handicapped children can be very troublesome in ordinary schools

Reason for the training of teachers: The teacher should not stand in the way of a child's efforts to learn in his own fashion

Another reason for the training of teachers: A teacher must learn to understand children's needs

Education for international understanding: Contact between the people of different countries makes them realise they are alike at heart

Table 9.4: The Mean Attitude Scores on the Progressive-Radical Factor for the Sub-Groups According to Variables in Social Background

DOORDEOTE	•	····				
Social Background Variables	No. in Sample	The Progressive Radical Factor				
variables	оашрте	Mean Scores	S.D.	FT Values		
Sex groups male group female group	86 213	+•121 -•158	2.611 2.128	•920 • •959		
Age groups Younger group Older group	246 53	+•056 - •165	2.156 2.652	1.424		
Teaching subjects Arts group Science group Non-academic group	198 70 28	240 180 +1.070	2.296 2.210 1.936	4.242*		
Subject of course B.Ed. group P.G.C.E. group In-service group	184 78 38	+•156 -•545 -•227	1.995 2.563 2.788	2.421		
Fathers' occupations Class I group Class II group Lower Class groups	126 45	095 +.327	2.257 2.101	1.121		
Class III, IV, V Groups not stating fathers!	101	 059	2.256			
occupation	28	673	2.640			

1. Sex Differences: There were no significant differences between the scores of the men's group and the women's group, but the men's group

- tended to score higher in the direction of progressive-radical views than the women's group.
- 2. Age Groups: There were no significant differences between the scores of the younger and the older group, but there was a tendency for the younger group to score more in the direction of progressive-radical thought in education than the older group.
- Teaching Subject Groups: The Non-academic group scored significantly higher than the Arts and Science groups. This finding may be explained if we assume that the teaching of non-academic subjects such as music and crafts demands less academic ability, is less traditional and easier than teaching arts or science subjects and therefore predisposes teachers of non-academic subjects to have more progressive views than teachers of academic subjects.

Another possible explanation might be that the nature of the courses of training given to the non-academic group leads them to their being exposed to more progressive and radical viewpoints than the academic subjects' group. It must, however, be stressed that the data must be treated with great caution, since the number of the non-academic group was small. One hesitates to claim that being a teacher of music or following a course in physical education is the reason for a progressive and radical outlook. It is difficult to explain the differences in attitude held by different subjects.

4. Subjects of courses: When this variable was taken into consideration, no significant differences between the college students, P.G.C.E. students or serving teachers were found. Although there was a tendency for college students to score higher in the direction of a more progressive-radical attitude in education than the other groups. This may be explained on the assumption that the effect of the college course and the educational professional training may

have been to influence their attitudes towards more progressive radical views when compared with the P.G.C.E. group who had completed the Oliver questionnaire at the beginning of their course.

5. No significant differences were found between the scores of subjects grouped according to social class, though there was a tendency for Class Group II to score higher on the progressive-radical factor than the other groups.

III. The relationship between the subjects' perceptions of the status of the teaching profession and their attitudes to education

For investigating the relationship between the subjects' perceptions of the status of teaching and their attitudes to education, the following variables were chosen:

- 1. The subjects' evaluations of the status of the university teacher, secondary school teacher and primary school teacher in relation to other occupations included in the list provided.
- 2. The subjects' general evaluation of the teaching profession in terms of public opinion.
- 3. The subjects' general evaluation of the teaching profession according to the status they thought the profession ought to have.
- 4. The subjects' perception of the status of the various levels of teaching according to public esteem.
- 5. The subjects' personal preference for teaching at one of the levels of education, e.g. higher education, secondary education.

The method of analysis used was as follows. The whole group was arbitrarily divided on the basis of their rankings of different levels

Table 9.5: The Mean Attitude Scores on the Tender-minded-Theoretical Factor and the Progressive-Radical Factor of the Sub-Groups Ranking the Status of Three Levels of Teaching Occupations

The rankings of the levels of teaching occupations	No of Sample	The tender	-minded-t	theoretical	The progressive radical factor			
		Mean	S.D.	F Value	Mean	S.D.	F Value	
University Teacher The high ranking group (1:6) The middle ranking group (7:10) The low ranking group (11:20)	147 90 63	-0.074 +0.100 +0.034	1.929 1.1596 1.420	•295	-0.261 +0.339 -0.225	2.228 2.239 2.386	2.140	
Secondary School Teacher The high ranking group (1:8) The middle ranking group (9.13) The middle ranking group (14:20)	97 133 70	-0.098 +0.224 -0.286	1.939 1.531 1.762	2•39	-0.303 +0.167 -0.213	2.300 2.258 2.256	1.374	
Primary School Teacher The high ranking group (1:8) The middle ranking group (9:14) The low middle ranking group (15:20)	81 125 93	-0.089 +0.133 -0.261	1.8118 1.698 1.708	1.525	-0.440 +0.057 +0.096	2.157 2.207 2.441	1.522	

of teaching and according to the five variables already mentioned. It must, however, be admitted that some of the sub-groups were very small. This limited the generalisations that could be made from them. The comparison groups were tested for significance by analysis of variance using F and T tests.

1. The subjects' evaluations of the status of the university teacher, secondary school teacher and primary school teacher

(a) The ranking of the status of the university teacher

The subjects' mean scores on the tender-minded and the progressive radical factors were classified into three groups according to their perception of the status of the university teacher: (i) 147 subjects who assigned him a rank of 1 to 6 (the high rank group); (ii) 90 subjects who assigned him a rank of 7 to 10 (the middle rank group); (iii) 63 subjects who assigned him a rank of 7 to 20 (the low rank group).

(1) On the tenderminded-theoretical factor, there were no significant differences between the sub-groups in ranking the status of the university teacher. (2) On the progressive-radical factor, there were no significant differences between the sub-groups in ranking the status of the university teacher.

(b) The ranking of the status of the secondary school teacher

The subjects' mean scores on the educational attitude factors were classified into three groups according to their ranking of the status of the secondary school teacher: (i) 97 subjects who accorded him a rank of 1-8 (the high rank group); (ii) 133 subjects who assigned him a rank of 9-13 (the middle rank group); (iii) 70 subjects who assigned him a rank of 14-20 (the lower rank group).

(1) On the tender-minded-theoretical factor, there were no significant differences between the sub-groups in ranking the status of the secondary school teacher (Table 9.5). (2) On the progressive-radical factor, there were no significant differences between the sub-groups in ranking the status of the secondary teacher.

(c) The ranking of the status of the primary school teacher

The subjects' mean scores on the tender-mindedness factor and the progressive radical factor were classified into three groups on the basis of their rankings of the status of the primary school teacher:

(i) 81 subjects who assigned him a rank of 1 to 8 (the high ranking group); (ii) 125 subjects who accorded him a rank of 9 to 14 (the middle ranking group); (iii) 93 subjects who accorded him a rank of 15 to 20 (the lower ranking group).

- (1) On the tenderminded-theoretical factor, there were no significant differences between the sub-groups in ranking the primary teacher.
- (2) On the progressive-radical factor, there were no significant differences between the sub-groups in ranking the primary school teacher.

2. Subjects rankings of the teaching profession according to public opinions

The subjects' mean scores on the tender-mindedness factor and the progressive-radical factor were classified into three groups on the basis of their perception of the status of the teaching profession as the general public would rate it: (1) the group who accorded teaching an excellent rank; (2) the group who gave it an average rating; (3) the group who assigned it a rank of below average or low. Table 9.6 shows that the numbers in some of the sub-groups were relatively small.

Generalisations based on such data need to be treated with some caution.

Table 9.6: The Mean Attitude Scores on the Tenderminded-Theoretical Factor, and the Progressive Radical Factor for the Sub-Groups in Ranking of the Teaching Profession According to Public Opinion and the Status it Should Have

Ranking the status of teaching	Sample	The tendermi	The progressive-radical factor				
profession	No	Mean Scores	S.D.	F Value	Mean Scores	S.D.	F Value
Ranking the teaching profession by public esteem The high ranking groups (good) The middle ranking group (average) The lower ranking group (below average)	146 134 14	+•104 -•134 +•043	1.710 1.763 1.571	+ •605	+•007 -•122 -•140	2.331 2.324 2.410	+•082
Ranking the teaching profession by the status it should have The high ranking group (excellent) The middle ranking group (good) The lower ranking group (average & below average)	85 181 32	+•106 +•056 -•421	1.662 1.775 1.540	1.20	-•373 +•181 -•598	2.830 1.321 1.810	2•744

From Table 9.6, which gives the mean scores on the tender-mindedness-theoretical factor and the progressive-radical factor, along with F values, it may be seen that:

- (i) On the tenderminded-theoretical factor there were no significant differences between the scores of the sub-groups in rating the public esteem accorded to the teaching profession.
- (ii) On the progressive-radical factor there were no significant differences between the scores of the sub-groups in ranking the teaching profession as to public esteem.

3. Subjects' rankings of the teaching profession according to the status it should have

The subjects' mean scores on the tender-mindedness factor and the progressive radical factor were classified into three groups on the basis of their perception of the status they thought teaching should have: (1) the group who assigned the teaching profession a rank of excellent; (2) the group who accorded the teaching profession a rank of good; (3) the group who gave the teaching profession an average or below average rank. No subjects gave it a rank of low.

(i) On the tender-minded-theoretical factor, there were no significant differences between the sub-groups in ranking the teaching profession as to the status it should have. (ii) On the progressive-radical factor, there were no significant differences between the sub-groups in ranking the teaching profession as to the status it should have.

4. Subjects' rankings of the various levels of teaching occupations according to public esteem

Table 9.7 presents the mean scores on the tender-minded-theoretical and the progressive radical factors for the sub-groups in ranking the various levels of the teaching profession according to public esteem.

Table 9.7: The Mean Scores on the Tenderminded-Theoretical and the Progressive Radical Factors for the Sub-Groups in Ranking the Various Levels of Teaching According to Public Esteem

The levels of teaching occupations	Sample	The tende	rminded-th	neoretical factor	The progr	ressive r	adical factor
		Mean	S.D.	F. Value	Mean	S.D.	F. Value
a. <u>Higher education</u> The high ranking group The middle ranking group The low ranking group	118 125 55	046 +.40 +.004	1.697 1.747 1.805	•074	-•443 +•296 -•101	2.258 2.179 2.419	3 . 264*
b. <u>Further education</u> The high ranking group The middle ranking group The low ranking group	48 118 131	+•277 -•055 -•058	1.694 1.609 1.859	•744	171 +.061 123	2.090 2.185 2.140	•273
c. Secondary education The high ranking group The middle ranking group The low ranking group	150 119 29	+•208 -•147 -•480	1.748 1.734 1.536	2.666	+•034 -•202 -•065	2.197 2.390 2.212	0•365
d. Adult education The high ranking group The middle ranking group The low ranking group	98 145 54	+•389 +•036 -•817	1.634 1.741 1.651	8•935 ***	268 +.065 006	2.159 2.405 2.082	+•648
e. <u>Primary education</u> The high ranking group The middle ranking group The low ranking group	140 106 53	+•329 -•253 -•329	1.793 1.625 1.664	4•720 **	+•084 -•271 -•042	2.041 2.341 2.688	0.730
f. Nursery education The high ranking group The middle ranking group The low ranking group	66 130 99	+.167 +.064 189	1.709 1.756 1.743	•975	401 +.059 007	2.431 2.094 2.418	•939

(a) Higher education

Subjects were classified into three groups according to the rank they accorded to teaching in higher education in terms of public esteem:

(1) the high ranking group who rated higher education in the high esteem category; (2) the middle ranking group who assigned higher education a rank of good in public esteem; (3) the lower ranking group who gave it an average, below average or very low rank.

(i) On the tenderminded-theoretical factor, there were no significant differences between the sub-groups in ranking higher education.

(ii) Subjects who placed teaching in higher education in the top category made significantly lower scores on the progressive-radical factor than the groups who accorded it a middle or low rank. The difference was significant at the 0.5 level. Perhaps the explanation

for this difference lies in their holding more traditional views on

education than the other groups.

(b) Further education

The subjects' mean scores on the tenderminded-theoretical and progressive radical factors were divided into three groups according to their ranking of teaching in further education in terms of public esteem: (1) 48 subjects who assigned further education a high rank in public esteem (the high rank group); (2) 118 subjects who assigned a rank of 'good' (the middle rank group); (3) 131 subjects who rated it as average, below average and low in public esteem (the low ranking group).

- (i) The mean scores on the tenderminded-theoretical factor in Table 9.7 showed no significant differences between the sub-groups in ranking further education.
- (ii) The mean scores on the progressive-radical factor in Table 9.7 indicate no significant differences between the sub-groups in ranking further education.

(c) Secondary education

Subjects' mean scores on the tenderminded-theoretical and the progressive-radical factors were classified into three groups according to their ranking of teaching in secondary education as to public esteem:

(1) 150 subjects who assigned secondary education high or good esteem (the high ranking group); (2) 119 subjects who rated it average in esteem (the middle rank group); (3) 29 subjects who rated it below average or very low (the low rank group).

- (i) On the tenderminded-theoretical factor there were no significant differences between the scores of the sub-groups in ranking secondary education.
- (ii) On the progressive-radical factor, there were no significant differences between the sub-groups in ranking secondary education.

(d) Adult education

The subjects' mean scores on the tenderminded-theoretical and the progressive-radical factors were classified into three groups according to their ranking of teaching in adult education in terms of public esteem: (1) 98 subjects who accorded it high and good esteem (the high ranking group); (2) 145 subjects who accorded it average esteem (the middle ranking group); (3) 54 subjects who accorded it below average or low esteem (the low ranking group).

- (i) The results given in Table 9.7, show that the high rank group scored significantly higher on the tenderminded-theoretical factor than the middle and the lower ranking group. The explanation for this may be that those who believe that adult education is highly regarded by the general public may have thought more positively about education than those who rate it average or below average in public esteem.
- (ii) On the progressive-radical factor, there were no significant differences between the sub-groups in ranking adult education.

(e) Primary education

The subjects' mean scores on the tendermindedness-theoretical and the progressive radical factors were classified into sub-groups according to their ranking of teaching in primary education in terms of public esteem: (1) 140 subjects who assigned it a rank of high or good (the high rank group); (2) 106 subjects who assigned it a rank of average in public esteem (the middle rank group); (3) 53 subjects who assigned it a rank of below average or very low (the low rank group).

The results are given in Table 9.7.

- (i) On the tenderminded-theoretical factor, the high rank group who rated primary education as high or good in public esteem, scored significantly higher in favour of tenderminded-theoretical attitudes than those who assigned it to the middle or lower categories. It may be that those subjects who ascribe a higher status to primary education than the general public do, are likely to holdmore tenderminded views than those who rank it in the middle or lower categories.
- (ii) On the progressive radical factor, there were no significant differences between the sub-groups in ranking primary education.

(f) Nursery education

The subjects' mean scores on the tenderminded-theoretical factor and the progressive radical factor were classified into three groups according to their ranking of teaching in nursery education in terms of public esteem: (1) 66 subjects who assigned it a high or fairly high rank; (2) 130 subjects who assigned it average esteem; (3) 130 subjects who rated it below or low in public esteem.

- (i) On the tenderminded-theoretical factor, there were no significant differences between the sub-groups, but the high rank group showed a tendency to become more tender-minded than the other groups.
- (ii) On the progressive-radical factor, there were no significant differences between the sub-groups, but the high rank group showed a

tendency to become more progressive and radical than the other groups.

5. Subjects' rankings of teaching at different levels of education according to their personal preferences

Table 9.8 presents the mean scores on the tenderminded-theoretical and the progressive radical factors for the sub-groups according to their personal preferences for teaching at a particular level.

(1) Higher education

The subjects' mean scores on the tenderminded-theoretical and the progressive radical factors were classified into three groups according to their rankings of preference for teaching in higher education: (1) 67 subjects who assigned teaching in higher education first or second rank (the high ranking group); (2) 120 subjects who assigned it third or fourth rank (the middle ranking group); (3) 111 subjects who accorded if fifth or sixth rank (the low ranking group).

(i) Subjects who assigned teaching at higher education level a high rank in their preferences made significantly lower scores on the tenderminded-theoretical factor than groups who assigned it to the middle and lower categories. In other words, they tended to favour a tough-minded, practical approach to education. How do we explain these findings? Are subjects who make teaching in higher education their first choice thinking more about the prestige elements and salary of a teaching post at this level or about the opportunities for self-fulfilment it provides? Are they more likely to take a tough-minded and practical view of education, to pay more attention to achievement of the materialistic aims of education, to place more emphasis on subject-matter than upon the needs and interests of their students?

(ii) On the progressive radical factor, there were no significant differences between the mean scores of the sub-groups in ranking higher education.

Table 9.8: The Mean Attitude Scores of the Sub-Groups on the Tenderminded-Theoretical Factor and the Progressive Radical Factor According to their Personal Preferences at the Various Levels of Teaching

The levels of teaching	No of	The tendermin	ded-theo:	retical factor	The progress	ive radi	cal factor
	Sub- Groups	Mean Scores	S.D.	F Value	Mean Scores	S.D.	F. Value
a. <u>Higher education</u> The higher ranking groups The middle ranking group The lower ranking group	67 120 111	610 +.189 +.190	1.924 1.596 1.689	5•689 **	+.114 068 156	2.447 2.354 2.086	•293
b. <u>Further education</u> The higher ranking group The middle ranking group The lower ranking group	110 92 96	253 +.140 +.187	1.875 1.721 1.554	2.035	+•198 -•320 -•105	2.334 2.305 2.165	1.331
c. Secondary education The higher ranking group The middle ranking group The lower ranking group	106 -159 -33	376 +.203 +.316	2.797 3.188 2.253	4•206 *	044 +.040 589	2.538 2.139 1.987	1.048
d. Adult education The higher ranking group The lower ranking group	77 22 1 .	317 +.123	1.668 1.747	3•915 *	+•209 -•153	2•399 2•727	1.454
e. <u>Primary education</u> The higher ranking group The middle ranking group The lower ranking group	145 79 74	+•417 -•507 -•237	1.647 1.64 1.822	8.662**	076 326 +.257	2.028 2.492 2.472	1.262
f. Nursery education The higher ranking group The middle ranking group The lower ranking group	82 70 146	+•489 +•211 -•356	1.587 1.444 1.867	7•132 **	+•040 -•605 -•146	1.966 2.135 2.464	2.725

(b) Further education

Subjects' mean scores on the tenderminded-theoretical factor and the progressive radical factor were classified into three groups:

- (1) 110 subjects who assigned it first, second or third rank in preference for teaching in higher education (the high ranking group);
- (2) 92 subjects who assigned it fourth rank (the middle ranking group);
- (3) 96 subjects who assigned if fifth or sixth rank (the low ranking group). (1) Results given in Table 9.8, show that there were no significant differences between the sub-groups in ranking further education on the tenderminded-theoretical factor.
- (ii) On the progressive radical factor, there were no significant differences between the sub-groups in ranking further education.

(c) Secondary education

The subjects' mean scores on the tenderminded-theoretical factor were classified according to their ranking in preferences for teaching in secondary education: (1) 106 subjects who assigned teaching in secondary education first rank (the high ranking group); (2) 159 subjects who assigned it second, third or fourth rank (the middle ranking group); (3) 33 subjects who assigned if fifth or sixth rank (the low ranking group).

(i) Table 9.8 shows that subjects who ranked secondary school teaching at Number One in their order of preferences made significantly lower scores on tendermindedness and tended to favour a tough-minded, practical attitude to education. The results seem to be consistent with the earlier findings and to lend some support to the view that subjects who prefer to teach older students are more likely to hold tough-minded, practical opinions about education than those who give secondary school teaching a middle or a low rank.

(ii) On the progressive radical factor, there were no significant differences between the sub-groups in ranking secondary education, but the middle ranking group tended to score more in favour of progressive radical views than the high and middle ranking groups.

(d) Adult education

The subjects' mean scores on the tenderminded-theoretical and the progressive radical factors were classified into two groups according to their preferences in teaching in adult education: (1) 77 subjects who assigned it first, second or third rank in their order of preferences (the high ranking group); (2) 221 subjects who assigned it fourth, fifth or sixth rank in their order of preferences. The results are given in Table 9.8.

Subjects who placed teaching at adult education level in the top category made significantly lower scores on the tendermindedness—theoretical factor than those who placed it in the lowest category. This result seems to be consistent with previous findings that subjects who prefer to teach older students are likely to hold tough—minded attitudes to education; in other words, to be less tender—minded than those who give adult education an average or a low rank.

(e) Primary education

The subjects' mean scores on the tenderminded-theoretical and the progressive radical factors were classified into three groups according to their rankings of their preferences for teaching at primary school level: (1) 145 subjects who assigned primary education the first rank in their order of preferences (the high ranking group); (2) 70 subjects who assigned it second, third or fourth rank (the middle ranking group); (3) 74 subjects who assigned it fifth or sixth rank.

Results are given in Table 9.8.

(i) Subjects who assigned teaching at primary school level to the top category made significantly higher scores on the tender-mindedness-theoretical factor than the middle or low ranking groups. It may be that those whose first preference is for teaching at primary school levels have thought more about the level of teaching best suited to their capacities and temperaments, are people who enjoy working with children and who set themselves realistic standards of achievement.

(ii) On the progressive radical factor, there were no significant differences between the mean scores of the sub-groups in ranking their preferences for teaching in primary education.

(f) Nursery education

The subjects' mean scores on the tenderminded-theoretical and the progressive radical factors were classified into three groups according to their rankings of their preferences for teaching at the pre-school level: (1) 82 subjects who ranked teaching in nursery school either first or second (the high ranking group); (2) 70 subjects who gave it third or fourth rank (the middle ranking group); (3) 146 subjects who gave it fifth or sixth rank (the lower ranking group).

- (i) On the tenderminded-theoretical factor, the high ranking group made significantly higher scores in the direction of tendermindedness-theoretical views on education than those who gave it middle or lower ranks in their preferences. The results confirm the earlier findings that subjects who chose teaching younger children as their first preference tend to display greater concern for children's interests and needs, less emphasis on authoritarian views on education and subject-matter and the materialistic aims of education.
- (ii) On the progressive radical factor, there were no significant differences between the sub-groups in ranking nursery education. Though the subjects who gave teaching in nursery school as their first choice tended to score higher than those groups who assign it to middle or a lower category.

Summary and Conclusions

From the results reported in this Chapter we have found that the tender-minded-theoretical factor is useful in discriminating between the attitudes of sub-groups. Most of the differences noted were in the expected direction and confirmed earlier findings as follows:

- (1) Women scored significantly higher than men on the tender-mindedtheoretical factor. The sex differences found in the study appear
 to accord with those of Thompson (1955), Halliwell (1965),
 Glossop (1965), Morrison and McIntyre (1967), Ward and Rushton
 (1969) and Corties(1972).
- (2) The younger group made significantly higher scores on the tender-minded-theoretical factor than the Older group. This finding accords with the findings of Oliver and Butcher (1962), Pollock (1965) and Sutherland (1966).
- (3) The non-academic group, i.e. teachers of art, music and crafts, scored significantly higher on the tenderminded-theoretical factor than the arts and science groups. Corties reported a similar finding in 1972.
- (4) The B.Ed. Group (college of education students) scored significantly higher on the tenderminded-theoretical factor than the P.G.C.E. Group (university student teachers). This finding runs counter to that of Butcher (1962). Perhaps the difference resulted from the fact that the P.G.C.E. group in this study completed the Oliver questionnaire at the beginning of their year of professional training.
- (5) There were no significant differences between the scores on the tender-minded-theoretical factor when students were grouped according to social class, as assessed by father's occupation, but there was a tendency for students from Class I and Class II to score higher on the tender-minded theoretical factor than those from Classes III, IV and V. This is contrary to the findings of McIntyre (1966) which

suggest a significant relationship between social class and T scale score. He found that teachers from skilled working class backgrounds were less tender-minded than teachers from unskilled working class backgrounds. It is not possible to compare his finding with one from this study, because the unskilled and skilled groups were combined.

We may conclude that the tender-minded-theoretical factor is sufficiently satisfactory in its sensitivity to make possible different-iation between the attitudes of different sub-groups in the expected directions and in a way which accords with previous findings.

As for the progressive-radical factor, the results reported in this Chapter suggest its inability to help in differentiating between the attitudes of sub-groups. Nevertheless there was some regularity in the pattern of the scores of the sub-groups which was in the expected direction and which is indicated in the following trends:

- (i) The scores of men and women were very similar.
- (ii) The younger groups tended to score higher than the older groups on the progressive-radical factor, but not at a significant level.
- (iii) The non-academic group scored significantly higher at the .05 level than the arts and science groups.
- (iv) The B.Ed. group tended to score higher on the progressive-radical factor than the P.G.C.E. group, though not at a significant level.

It would seem that the discriminative value of some of the items of the progressive-radical factor can no longer be assumed; many educational opinions which proved useful in earlier days in discriminating between traditional and progressive-radical attitudes to education no longer serve this diagnostic purpose. For a number of reasons, the items formulated to test this factor represent the least stable area of educational opinions, viz. the one which is primarily concerned with broad issues of public educational policy. Some of the items included

appear to be out of date. Perhaps some that used to elicit a negative answer from conservative and traditional people are no longer answered in that way. For example, the statement, "A higher proportion of the national income should be spent on education" might today elicit an affirmative answer from many conservatives. "Handicapped children may be very troublesome in ordinary schools" may not today be accepted because radical opinion generally is now favouring the integration of handicapped children into ordinary schools. Furthermore, some items have become neutral insofar as traditionally-minded and progressively-minded people have come to argue about them, e.g. the need for more nursery schools.

Oliver and Butcher (1962) suggested that the Radical Scale was less satisfactory than the Tender-minded-Tough-minded Scale in measuring teachers' attitudes. Morrison and McIntyre (1967) found that the R Scale was less useful in discriminating between the various groups after college experience. Corties (1972) found that the T scale was the most satisfactory, and the R scale the least satisfactory, in terms of reliability and validity. Wilson (1975) factor analysed the responses of a sample of 424 post-primary school teachers on Oliver's Survey of Opinions about Education. This analysis confirms the presence of a strong Tendermindedness dimension, a less strong Radical dimension and a weak Naturalism factor.

Hence, the insignificant results reported for this factor in this study may be a function of circumstances also present in earlier studies.

Item analysis of new items needs to be carried out in order to get a more satisfactory measure of progressive-radical attitudes in education.

The relationship between the subjects' perceptions of the status of teaching and their educational attitudes

Whereas no information was available from previous studies about the relationship between an individual's perception of the status of the teaching profession and his/her attitudes to education, the principal finding of the section of this Chapter devoted to this point clearly indicates that a subject's perception of the status of teaching at different levels is not associated with his/her attitudes to education as measured by scores on the tenderminded-theoretical factor and the progressive-radical factor, with a very few exceptions.

Nevertheless the results of this study may be regarded as important in showing the insignificant effects of student teachers' and serving teachers' perceptions of status on their educational attitudes. It is possible to argue that students who enter teaching have thought about their standing in the eyes of the public as well as their status in relation to other occupations. They may be aware of the possible realistic factors which influence public opinion of the status of the occupation of teacher, but their evaluations of the teaching occupations, whether high, middle or low, act independently from their educational attitudes. There may well be other factors which are more important in deciding teachers' educational attitudes than the status of the occupation: there may be moral and social values which student teachers think more important.

The relationship between the subjects preferences for teaching at different levels of education and their attitudes to education

Results suggest that subjects' preferences for teaching at a particular level of education are associated with their attitudes as measured on the tenderminded-theoretical scale. Subjects who rank

teaching in primary or nursery school as their first preference are found to be more tenderminded and theoretical than those who rank it last. Subjects who rank teaching in higher education, secondary education or adult education as their first preference are found to be more tough-minded and practical than those who rank teaching at those levels at the bottom of their list of preferences. These results lend support to the effectiveness of the tenderminded-theoretical factor in discriminating between the attitudes of sub-groups.

CHAPTER X

THE RELATIONSHIP BETWEEN EGYPTIAN STUDENT TEACHERS PERCEPTIONS OF THE STATUS OF THE TEACHING PROFESSION AND THEIR ATTITUDES TO EDUCATION

This chapter has three sections:

- (I) The scoring procedure and the relationships between factor scores
- (II) The differences between the various sub-groups of the sample
- (III) The relationship between the subjects' perceptions of the status of the teaching profession and their attitudes to education

(I) The scoring procedure

The scoring procedure was the same as that followed with the English data: a factor score was calculated for the four factors for each individual by means of computer programme (SPSS). (1)

Figures 1, 2, 3 and 4 in Appendix H show the distributions of scores for the sample on the four factors which had been defined as follows:

- (i) Commitment to education
- (ii) Unsentimental efficiency
- (iii) Conventionality
 - (iv) Allocation of resources to education

A high positive score on Factor I indicates a strong degree of commitment to education; low and negative scores indicate a lesser degree, or lack, of commitment to education. A high positive score on Factor II indicates a strong emphasis on practical, unsentimental

^{1.} SPSS

efficiency in education; low or negative scores indicate less emphasis on the practical and a tendency to unrealistic views on education.

A positive high score on Factor III indicates a conventional attitude to education; low and negative scores indicate a less conventional attitude and a tendency to progressive attitudes to education.

A positive high score on Factor IV indicates a strong emphasis on allocation of resources to education; negative and low scores indicate low emphasis on this.

The intercorrelations between the factor scores for the sample are shown in Table 10.1. The correlations are not high, except for the correlation (0.44) between the scores on Factor I (commitment to education) and Factor III (conventionality). This relatively high correlation may have been due to the fact that a few items were common to the tests of both factors.

Table 10.1: The Correlation Between the Scores on Four Factors

	Factor I	Factor II	Factor III	Factor IV
Factor I, Commitment to education	-	•170	•414	•234
Factor II, Unsentimental efficiency		-	•1 46	•253
Factor III, Conventionality			-	•075
Factor IV, Allocation of resources to education				-

II The differences between the various sub-groups of the sample

The same variables were used with the Egyptian sample as had been used with the English sample in the examination of possible differences between the means of factor scores except for one variable, father's occupation. It was felt that classification of the subjects by

father's occupation did not accurately discriminate between the various sub-groups. This was explained earlier in Chapter V. Thus the variables studied were: sex, age, teaching subject and subject of course. The significance of the differences between the mean scores of the various sub-groups of the sample according to each of four social background variables on each of the four factors was tested by one-way analysis of variance and a 't' test.

The analysis of the results in this section was based on 347 subjects. The number of the sample was decreased because of loss of some of the Oliver Questionnaires while in transit. This sample of 347 respondents was then split into sub-groups according to the variables selected. Some groups were combined to form well-balanced groups suitable for comparison. The sub-groups of the sample were divided as follows:

- (1) Sex groups: There were 145 men and 202 women
- (2) Age groups: Subjects were divided into three groups: (1) 279 subjects aged 20-24 years (the younger group); (2) 24 subjects aged 25-29 (the middle group); (3) 43 subjects aged 29 and over (the older age group). It must be admitted the numbers in the last two groups were relatively small. But it did seem useful to combine them, as their mean scores on the factors were largely different.
- (3) Teaching Subject: Subjects were classified according to their teaching subjects: (1) 34 who specialised in Mathematics; (2) 40 who specialised in teaching physics and biological subjects; (3) 232 who specialised in teaching social studies and the Arabic language; (4) 40 who specialised in teaching English and French language.
- (4) Course of Study: Subjects were classified according to their course of study into two groups: (1) 268 non-graduates (college students' group); (2) 79 graduates (serving teachers' group).

It should be noted that in some of the comparisons and analyses data was not available for all the sample. Therefore, in these cases the precise number is indicated in the tables.

(1) The commitment to education factor

In explaining the differences between the sub-groups of the sample it may be helpful to repeat Table 10.2 which gives the items formulated to test the commitment to education factor.

Table 10.2: The Items Defining the Commitment to Education Factor

Content of the Items

Education for international understanding may be approached in the following way: A study of international affairs should show which countries are our friends

One reason for religious instruction: It instils a sense of duty One reason for the teaching of Arabic language in schools: It cultivates enjoyment of the use of language

One reason for religious instruction: The knowledge of a living God meets a deep-felt need in children

Education for international understanding may be approached in the following way: Contact between the people of different countries makes them feel they are alike at heart

Reason for teaching science: A scientific training offers good prospects for a career

Reason for teaching of Arabic language: Children must acquire proficiency in spelling, punctuation and grammar

More education for international understanding

Reason for the training of teachers: A teacher must know how to control children

Reason for teaching science: The study of science helps to satisfy one's intellectual curiosity

One of the strongest arguments in favour of secondary technical education has been as follows: With some children the best approach to general education is through their technical interests

Reason for excluding propaganda from schools: Pupils should be free to form their own opinions

One reason for favouring secondary technical education: His future work is naturally one of the main interests of the adolescent

Reason for training teachers: A teacher must learn to understand children's needs

Reason for excluding propaganda from schools: Propaganda might get into the wrong hands

J: .

Table 10.2: (Continued)

Content of Items Defining Factor 2

A higher proportion of the national income to be spent on education One justification for expenditure on special schools: Handicapped children can be very troublesome in ordinary schools

You cannot expect children to write good Arabic unless they have a good foundation in grammar

Table 10.3 presents the scores of the sub-groups, the standard deviations as well as F and T values on the commitment to education factor.

Table 10.3: The Attitude Scores on the Commitment to Education Factor for the Sub-Groups According to Social Background Variables

Sub-groups of the sample	No. of Sample	The commitment to education factor Mean Scores	S.D.	F.Value	T. Value
Sex groups Male Female	14 5 202	+•517 -•371	1.804 1.297	28•457 ***	5•334 **
Age groups Younger group Middle Group Older group	279 24 43	255 625 +1.968	1.403 1.461 1.391	49.09 ***	
Teaching subject Mathematics group Science group Social studies & Arabic group Foreign language group	34 40 232 40	+2.486 +0.223 -0.308 -0.591	0.574 1.902 1.279 1.581	45•417 ***	
Subject of course Non-graduate group Serving teacher group	268 79	-0.220 +0.737	1.399 1.953	23•297 ***	4.826 **

Men scored significantly higher on commitment to education than women at the .001 level, as was to be expected in Egyptian culture. First, however, we must indicate that commitment to education in the Egyptian context is likely to be correlated with commitment to teaching: teachers who are dedicated to the ideals and the values of education are likely to be more committed to a teaching career and more willing to devote their

time and their social activities to teaching. However, owing to the lack of empirical studies in this field, our interpretation will have to be based on observations of every-day life in Egypt. The findings may be explained in terms of the different life situations particularly the different occupations of men and women. Men and women are likely to have different values and to seek fulfilment of their needs in different ways. In Egypt almost all men work for a living; the role of the breadwinner is a prominent part of being a man; he is the main supporter of the family. In spite of the large increases in the number of women in the Egyptian labour force and equality of opportunity with men in education, most women perceive their occupation, whether it be teaching or something else, as of secondary importance to their commitment to family life and marriage. They are not likely to be so involved in their occupation as men, or as dedicated to the ideals and values of education as men. The biological fact of maternity, the responsibility for child-rearing and, over and above that, the perception of women's role in Egyptian culture in the tightly woven framework of kinship structure combine to make women's roles as workers subordinate to their family roles. Furthermore, Islam accords women a lower status than men.

(2) Age Groups

The older group scored significantly higher on commitment to education than the younger and middle groups at the .001 level. This finding may be explained if we postulate that older teachers are less likely to change their careers from teaching to another occupation as their chances of starting in a new job are very small. Thus they are likely to be more dedicated to their job.

(3) Grouping by Teaching Subject

The mathematics and the science groups scored significantly higher on commitment to education than the social studies and Arabic group and the foreign language group. This difference was significant at the .001 level. Perhaps (and this is pure speculation) this result may be explained if we take into account the Egyptian government's policy on higher education, which aims at recruiting as many scientists and technicians as possible, and the prestige accorded in Egypt to scientific subjects in contrast to Arts subjects. To teach mathematics or science in Egypt requires higher examination marks than are required for specialisation in social studies or a language. Though salary scales are the same for all teachers and science teachers can supplement their incomes by giving private lessons outside school hours. The nature of these subjects is such that the public regards them as more important than Arts subjects and consider getting a high mark in them the key to higher education. Moreover, because of the shortage of teachers of mathematics and the sciences these subjects are accorded a higher prestige by the Ministry of Education, the general public and teachers in the schools.

(4) Grouping by subject of course (Table 10.3) shows that the group of serving teachers scored significantly higher on commitment to education than the non-graduate group at the .001 level. These results are consistent with the earlier findings that the older group are in general more committed to education than the younger group.

(ii) The unsentimental efficiency factor

Table 10.4 gives the items on the test of the unsentimental efficiency factor. In Table 10.5 are shown the mean scores of the sub-groups on the factor and standard deviations with F and T values.

Table 10.4: Items Defining the Unsentimental Efficiency Factor

Items Defining Unsentimental Efficiency

One reason for the training of teachers: A teacher must understand how to develop children's interest in their studies

Reason for the training of teachers: A teacher must acquire efficient techniques of teaching his subject

One argument in favour of secondary technical education has been as follows: Technical school training gives a boy or girl a good start in the competition for jobs

One justification for expenditure on special schools: The training may prevent the handicapped from becoming a charge upon society later

Fewer free school meals

Another justification for expenditure on special schools: Handicapped children can be very troublesome in ordinary schools

Table 10.5: The Attitude Scores on the Unsentimental Efficiency Factor for the Sub-Groups According to Social Background Data

Sub-groups of the Sample	No. of Sample	Unsentimental Efficiency Factor Mean Scores	S.D.	F Value	T Value
Sex groups male female	145 202	065 +.046	1.055 .930	1.083	1. 040
Age groups younger group middle group older group	279 24 43	+•051 -•082 -•342	•932 1•032 1•011	3 . 163*	
Teaching subject mathematics group science group social studies & Arabic group	34 40 232	631 066 +.122	•592 1•134 •931	6•403 ₩	
foreign language group	40	102	1.151		
Subject of course non-graduate group in-service group	268 79	+•092 -•346	•902 •932	12.679***	3•560 **

(1) <u>Sex groups</u>: There were no significant differences between men and women on the unsentimental efficiency factor, but women scored very slightly higher than men.

(2) The age of sub-groups: The younger group scored significantly higher on the test of the unsentimental efficiency factor than the middle and the older age groups at the .05 level. The results may be explained by suggesting that the impact of the educational environment of the college of education and the students' recent contact with progressive trends in education may have influenced the attitudes of the younger group, (see list of items in Table 10.4). They emphasise developing children's interests in their studies, using efficient practical methods in teaching, and suggest that technical education may give a boy or girl a good start in the competition for jobs.

Perhaps the differences between the scores of the younger and the older groups on the unsentimental efficiency factor can be explained on the basis of differences of outlook between the generations.

- (3) Grouping by teaching subjects: The mathematics group made significantly Lower scores on the unsentimental efficiency factor than the social studies and language, and science groups. The teachers may see things in black and white, be logical in their views of educational matters, more confident in their ability to teach with less consideration of children's interests, less worried about problems of order caused by handicapped children and problems of discipline, since the pupils' sense of the importance of mathematics is likely to contribute towards control and the maintenance of order in a class. It must, however, be admitted that this interpretation of the differences is not confirmed by previous findings in this field either in Egypt or in other countries. Thus the explanation is not very reliable; it is based on everyday observation in Egyptian schools within the experience of the researcher.
- (4) Grouping by subject of course: The scores of the non-graduate group on the unsentimental efficiency factor were significantly higher at the .001 level than those of serving teachers. This result confirms

previous findings that the younger group are more in favour of unsentimental efficiency (see Table 10.5).

(iii) The conventionality factor

In Table 10.6 items used for testing the conventionality factor are presented, to give the reader some idea of the concept of conventionality used in this study. Table 10.7 shows the mean scores of the subgroups of the sample on the conventionality factor and the standard deviations with F and T values.

Table 10.6: The Items defining the Conventionality Factor

The Content of the Items

The problem of comics: Parents should not allow their children to read such comics

One argument in favour of the retention of corporal punishment: No other type of punishment is over so quickly or leaves so little resentment

One argument in favour of the retention of corporal punishment: Some children will not respond to any other form of discipline

The problem of comics: Way of dealing with the problem of comics have been suggested: Try to cultivate interest in other kinds of reading matter

One reason for teaching of the Arabic language in schools: A person who uses Arabic incorrectly is handicapped in his career

One reason for excluding propaganda from schools: It is better to aim at sound knowledge and a fair minded attitude

One justification of the cost of special schools: Handicapped children can be very troublesome in ordinary schools

Table 10.7: The Attitude Scores on the Conventionality Factor for the Sub-Groups According to Social Background Data

Sub-groups of the sample	No. of sample	Conventionality factor Mean Scores	S.D.	F Values	T Values
Sex groups male female	145 202	+•126 -•090	•955 1•015	4•005*	2.001*
Age groups younger group middle group older group	279 24 43	085 227 +.659	.988 1.049 .741	11.742 ***	
Subject of teaching mathematics group science group social studies & Arabic group foreign language group	34 40 232 40	+.841 +.568 186 196	.434 1.047 0.956	17•945 ***	
Subject of course non-graduate group in-service group	268 79	075 +.248	1.007 .917	6 . 446**	2 _• 539*

(1) Men scored significantly higher on the conventionality factor than women. Men in Egyptian society tend to be more authoritarian, to show more approval of restrictions on children's freedom and of corporal punishment, and to be more in favour of traditional formal methods of teaching than women. Women tend to be less authoritarian and to value progressive trends in education than men. It is an open question whether this difference between men and women is due to differing perceptions of the man's role and the woman's role and to the lower legal status accorded to women in Egyptian culture. Egyptian society and Islam give men more power, authority and rights as well as more responsibility for keeping order and discipline in the home. It is the psychological and physical characteristic of women to be more understanding of children and more tolerant in disciplining them and to be more in favour of progressive ideas in teaching.

- (2) The older group scored significantly higher on conventionality than the younger and middle groups. This is consistent with most studies of teachers in other countries. The older teachers are found to be more traditional and more authoritarian, favouring firm control and formal traditional methods in teaching, than the younger groups. This may be the outcome of differences in outlook between the generations or one effect of the recent contact of the younger group with new trends in education or it may be the outcome of both those influences.
- (3) The mathematics and science groups scored significantly higher on the conventionality factor than the social studies, Arabic and foreign language groups. This seems in accord with our expectations. Teachers of mathematics and science are likely to be more authoritarian, more in favour of restrictive order at school and more traditional in their teaching methods than those who teach social studies, Arabic and foreign languages. The differences may be attributed to the difficult nature of teaching science and mathematics. Compared with teachers of other subjects, teachers of science and mathematics are likely to spend most of their time acquiring the knowledge and the intellectual skills of their subjects rather than thinking about the philosophy of education and new trends in education. It may also be that teachers of science and mathematics are likely to perceive their professional training and/ or educational studies as less of importance than their main specialist subject, in contrast to teachers of social studies and languages who are more likely to perceive their training as of equal importance with their main subject of teaching. Again, these interpretations are highly speculative, since no previous studies have dealt with this point.
- (4) The non-graduate group scored significantly higher on the conventionality factor than the group of serving teachers. These findings are consistent with the previous findings that the older group are more

conventional than the younger group (Table 10.7). The reasons suggested earlier could probably be used to explain the differences between the student teacher (non-graduate group) and the serving teachers who have had some experience of teaching.

(iv) The allocation of resources to education factor

Table 10.8 gives the items of the allocation of resources to education factor. Table 10.9 presents the mean scores of the sub-groups of the sample on this factor.

Table 10.8: The Items Defining the Allocation of Resources to Education Factor

Content of Items

Bigger allowances for play material in primary schools The raising of the school leaving age to 16 More nursery schools

Smaller classes in primary schools

Agreement with these items indicates concern for a larger allocation of resources to education: disagreement reveals a lack of concern.

Table 10.9: The Attitudes Scores on the Allocation of Resources to Education Factor for the Sub-Groups According to Social Background

Sub-Groups of the Sample	No• of Sample	The allocation of resources to education Mean Scores	S.D.	F Value	T Value
Sex groups male female	145 202	+•112 -•80	•958 1. 024	3 .1 23	1.76
Age groups younger group middle group older group	279 24 43	007 178 +.117	1.037 •937 •752	•675	
Subject of teaching mathematics group science group social studies &	34 40	+•136 +•071	•713 •919	. 628	
Arabic groups foreign lang. group	232 40	002 163	1.027 1.136		
Subject of course non-graduate group (B.Ed. students)	268	+•012	1.039	. 286	
in-service group	79	057	. 852		

No significant relationship was found between the allocation of resources factor and sex, age, teaching subject and course followed.

(III) The Relationship Between the Subjects' Perceptions of the Status of the Teaching Profession and Their Attitudes to Education

The same variables as were used in analysing the rankings of teaching of the English sample were used with the Egyptian sample. The Egyptian subjects' perceptions of the status of teaching and their attitudes to education were analysed in terms of the four factors: commitment to education, unsentimental efficiency, conventionality and allocation of resources to education.

The variables used were the same as those used with the English sample.

- (1) The subjects' evaluations of the status of the university teacher, secondary teacher, and primary teacher in relation to other occupations included in the list given to the Egyptian sample.
- (2) The subjects' general evaluations of the teaching profession according to public esteem.
- (3) The subjects' general evaluations of the teaching profession in terms of the status it should have.
- (4) The subjects perceptions of the status of the various levels of teaching according to public esteem.
- (5) The subjects' personal preferences for teaching at various levels of teaching, e.g. higher education, secondary education.

The subjects' attitude mean scores on each factor were divided into divisions for each variable on ranking occupation data. These were based on subjective arbitrary decisions in order to provide well balanced groups suitable for comparison, and using non-parametric tests.

For each factor, the comparison groups were tested for significance by analysis of variance using F and T values.

(1) The subjects' evaluations of the status of the university teacher, secondary teacher and primary teacher

The information in these variables was gathered, when the subjects ranked the 20 occupations on the list given to them. The relative ranks of the university teacher, secondary school teacher and primary school teacher were derived from analysis of these rankings. Table 10.10 presents the mean scores on commitment to education, unsentimental efficiency, conventionality, and the allocation of resources to education for comparison groups in ranking the status of the three levels of teaching occupations.

(a) University teacher

The mean scores of the subjects on the four factors were divided into four groups according to their rankings of university teacher.

(1) 101 who assigned the university teacher first rank; (2) 98 who assigned him a rank of 2 to 4; (3) 73 who assigned him a rank of 5 to 8; (4) 70 who assigned him a rank of 9 to 20.

On the commitment to education factor, those subjects who assigned the university teacher a rank of 2 to 4 and 5 to 8 scored significantly higher than the other groups who assigned him the highest and the lowest ranks at the .05 level.

There were no significant differences between the mean scores of the sub-groups in ranking university teacher on the unsentimental efficiency factor, the conventionality factor, the allocation of resources to education factor.

Table 10.10: The Attitude Scores on Commitment to Education, Unsentimental Efficiency, Conventionality and Allocation of Resources to Education for the Sub-Groups in Ranking the Status of the Three Levels of Teaching Occupations

Sub-groups according to	No. of	Factor I Commitment to education				Factor II			Factor III Conventionality			Factor IV Allocation of resources		
ranking occupation data		Mean	S.D.		Mean	S.D.	F.	Mean	S.D.	F.	Mean	S.D.	resources F.	
University teacher High ranking group (1) Upper middle (2-4) Lower middle (5-8) Low ranking (9-20) Secondary teacher Higher ranking (1-5) Upper middle (6-10) Lower middle (13-14)	101 98 73 70 89 88 92	-0.023 +0.170 +0.225 -0.455 -0.185 +0.672 -0.204	1.700 1.633 1.524 1.378 1.562 1.793 1.427	2.806* 7.659**	-0.184 +0.081 -0.002 +0.087 0.101 -0.107 -0.012	0.882 1.020 0.990 0.992 1.005 1.014 0.938	1.099	0.000 -0.29 -0.099 -0.034 -0.233 -0.238 -0.015	1.073 0.919 0.941 1.054 1.009 1.003 0.898	•292 3•386*	-0.024 -0.001 0.015 -0.008 0.012 0.125 -0.013	0.920 .982 1.089 1.050 1.042 0.964 1.021	•0215 1•074	
Primary school teacher High ranking group (1-10) Upper middle (11-17) Lower middle (18-19) Low ranking group (20)	75 64 86 106 86	-0.336 -0.329 +0.023 -0.131 +0.351	1.369 1.464 1.753	2.765*	-0.010 -0.036 +0.172 -0.058 -0.156	0.943 0.993 1.038	1.77	-0.228 -0.070 -0.042	1.030 1.053 0.907 0.995 1.029	2.100	-0.156 -0.093 -0.056 +0.122 -0.056	1.035 0.949 1.097 0.879	0.888	

(b) Secondary school teacher

Analysis of the mean scores on the four factors, when subjects were asked to rank the secondary school teacher, produced the following groups: (1) 89 subjects who assigned the secondary school teacher a rank of 1 to 5; (2) 88 who ranked him from 6 to 10; (3) 92 who gave him a rank of 11 to 14; (4) 75 who gave him a rank of 15 to 20.

On the commitment to education factor those subjects who gave the secondary school teacher a rank of 6 to 10 made significantly higher scores on the commitment to education factor than those other groups who gave him higher or lower ranks.

On the unsentimental efficiency factor, there were no significant differences between the mean scores of the sub-groups in ranking the secondary school teacher.

On the conventionality factor, subjects who accorded the secondary school teacher higher ranks (1 to 5) scored significantly less on the conventionality scale than other groups who gave him middle or lower ranks. It seems that subjects who tend to overestimate the status of the secondary school teacher are likely to hold more radical views on education.

On the allocation of resources to education factor, there were no significant differences between the means of the sub-groups in their rankings of the secondary school teacher.

(c) Primary school teacher

Subjects' mean scores on the four factors were divided into four groups on the basis of their rankings of the primary school teacher:

(1) 64 subjects who assigned the primary school teacher a rank of 1 to 10 (the high ranking group); (2) 86 subjects who assigned the primary school teacher a rank of 11 to 17 (the upper middle ranking group);

(3) 106 who assigned the primary school teacher a rank of 18 or 19 (the lower middle ranking group); (4) 86 subjects who assigned the primary school teacher a rank of 20 (the lower ranking group).

On the commitment to education factor, subjects who ranked the primary school teacher in the upper middle rank and the lower categories made significantly higher scores than those who assigned him to the higher and the lower middle categories (Table 10.10). It is difficult to explain these differences. A number of explanations are possible: Perhaps their commitment to education makes them so sensitive to the lowly position of the primary school teacher that they exaggerate its lowliness: or perhaps commitment makes them more critical.

There were no significant differences between the mean scores of the sub-groups in ranking the primary school teacher on (a) the unsentimental efficiency factor; (b) the conventionality factor, and (c) the allocation of resources to education factor.

(2) Subjects' ranking of the teaching profession according to public esteem

Data on this question were obtained by examining the subjects' ratings of the teaching profession as the general public would rate it. Their scores on the four factors were classified into five groups on the basis of their ranking of the teaching profession: (1) 40 subjects who assigned the teaching profession a rank of 'excellent'; (2) 25 subjects who assigned the profession a rank of 'good'; (3) 155 subjects who assigned the profession an average rank; (4) 94 subjects who assigned the profession a rank 'below average'; and (5) 28 subjects who gave the teaching profession a very low rank.

Table 10.11 gives the mean scores for the sub-groups in their rankings of the teaching profession according to (1) public esteem, (2) the status it should have.

Table 10.11: The Mean Scores on the Commitment to Education, Unsentimental Efficiency, Conventionality and Allocation of Resources to Education Factors for the Sub-Groups in Ranking the Teaching Profession According to Public Opinion and the Status it Should Have

Division of respondents	No. of Sample	Factor I Commitment to Education I Mean S.D. F. N			<u></u>			Factor III Conventionality Mean S.D. F.			Factor IV Allocation of Resources Mean S.D. F.		
Ranking of the teaching profession by public esteem Excellent Good Average Below average Low	40 25 15 5 94 28	-0.524 -0.167 +0.188 +0.120 -0.325	1.578 1.723 1.591 1.593	2.139	+0.220 +0.007 -0.056	1.058 1.037 0.942 0.977	1.215		1.074 1.015 0.922 1.013	3•84 7*	+0.065 -0.313 -0.091 +0.005 +0.566	1.225 0.733 0.912 0.976	3 . 204*
Ranking of the teaching profession by the status it should have Excellent Good Average	288 37 13	+0.501	1.634 1.367 1.074	1.093	-0.061 +0.302 +0.017	0.926	2.626	-0.013 +0.094 +0.227	0.993		-0.016 +0.013 -0.036	0.909	•476

On the commitment to education and the unsentimental efficiency factor there were no significant differences between the various subgroups in ranking the teaching profession.

Scores on the conventionality factor indicate that subjects who ranked the teaching profession as merely average or below average in public esteem scored significantly more in the direction of conventionality than those who accorded it a status of 'excellent' or 'good'. It is probable that those who give such high ratings hold radical views on education in contrast to those groups who rate the profession as average or below average.

On the allocation of resources to education factor subjects who rated teaching in the lowest category made scores which were significantly higher at the 0.5 level in the direction of allocation of resources to education than the other groups who assigned it a rank of excellent, good, average and below average.

(3) Subjects' ranking of the teaching profession according to the status it ought to have

The subjects mean scores on the four factors were classified according to their rankings of teaching in terms of the status it should have: (1) 288 subjects who assigned the teaching profession a rank of excellent; (2) 37 subjects who assigned it a rank of good; (3) 13 subjects who assigned it a rank of average or below average. No subjects assigned it in the low category.

On the commitment to education factor, the unsentimental efficiency factor, the conventionality factor and the allocation of resources factor there were no significant differences between the mean scores of the sub-group in ranking the teaching profession according to the status it ought to have.

Table 10.12: The Attitude Scores on the Four Factors for the Sub-Groups in Ranking the Various Levels of Teaching
According to Public Esteem

The levels of teaching			Factor			actor]			Factor III			Factor IV		
occupations	Sample			education			fficiency		rentior			ion of re		
		Mean	S.D.	F.	Mean	S.D.	F.	Mean	S.D.	F.	Mean	S.D.	F.	
a. <u>Higher education</u> High & good Average, below average & low	224 110	168 +.588	1.409 1.707	9•227 **	+•065 -•183	1.002 .907	4•784*	+•170 -•087	•978 •995	5 . 01 4 *	017 +.055	1.017 .958	•38	
b. Secondary education High & good Average, below average & low	225 75	+•029 -•033	1.570 1.690	•08	+•002 -•102		•653	061 +.167		3.076	+•023 •021	1.057 .903	. 11	
c.Technical education High & good Average Below average & low	93 170 63	236 +.014 +.438	1.40 1.60 1.723	3•39 *	•109 -•053 -•163	•509	1.57	+•006 -•077 +•141	1.04	1.116	•132 ••049 ••008	1.222 .949 .909	•995	
d. Adult education High Good Average Below average Low	19 32 72 58 141	627 472 265 +.819 050	1.565 1.342 1.432 1.655 1.60	5•044 ***	+•101 +•193 -•127 -•128 +•011	•988 •978	1.712	411 374 +.343 +.421 +.125	•975 1•036 •914		•275 ••093 ••165 +•289 ••022	1.202 1.004 .912 1.035 1.009	1.869	
e.Primary education High Good Average Below average Low	28 57 142 64 28	+.240 146 +.220 173 231	1.40 1.55 1.75 1.513 1.354		+.320 172 077 097 +.288	•995 •878	2.150	012 +.045 132			.063 .106 .044 215 +.014	1.317 .970 1.049 .043 .718	1.021	
f. Nursery education High Good Average Below average Low	26 37 73 71 112	480 599 +.231 +.556 134	1.325 1.439 1.700 1.666 1.520		+.031 241 176 +.72 +.82	•918 •981 1•007 1•053 •930	1.73	.088 .188	1.016 1.088		374 121 +.192 1.206 +.108	•971 •956 1•011 1•113 •898	2•418	

(4) The subjects' perception of the status of the various levels of teaching according to public esteem

Table 10.12 gives the mean scores on the commitment to education, the unsentimental efficiency, the conventionality and the allocation of resources to education factors for the sub-groups in ranking the various levels of the teaching profession according to public esteem.

(a) Higher education

The subjects' mean scores on the four factors were classified according to the rank they accorded to teaching in higher education in terms of public esteem: (1) 224 subjects who rated higher education in the 'high' and 'good' esteem categories; (2) 110 subjects who assigned higher education a rank of average, below average or low.

Subjects who rated public esteem of teaching as 'high' or 'good' made significantly lower scores on the commitment to education factor than the group who assigned it average, below average or low rank (Table 10.12).

On the unsentimental efficiency factor, the group who gave higher education a rank of high or good scored significantly higher than the group who ranked it as average and below average or low in public esteem at the .05 level.

The group who rated public esteem of teaching in higher education as high or good scored higher on the conventionality factor than the group who gave it a rank of average, below average or low.

On the allocation of resources factor, there were no significant differences between the mean scores of the sub-groups in ranking higher education.

(b) Secondary education

The subjects' mean scores on the four factors were classified into two groups: (1) 225 subjects who accorded it high or good esteem; (2) 75 subjects who gave it average and below average or low rank. The results are given in Table 10.12.

Results set out in Table 10.12 show that no significant differences were found between the mean scores of the sub-groups in ranking the secondary school teacher on (a) commitment to education, (b) unsentimental efficiency, (c) conventionality.

(c) Technical education

The subjects' mean scores on the commitment to education, the unsentimental efficiency, the conventionality and the allocation of resources to education factors were classified into three groups according to their ranking of teaching in technical education: (1) 93 subjects who assigned it a rank of high or good; (2) 170 subjects who assigned it average esteem; (3) 63 subjects who rated it below average or low in public esteem.

Subjects who assigned teaching at technical education level a high or good rank in public esteem made significantly lower scores, at the .05 level, on the commitment to education factor than groups who assigned it to the middle or lower categories.

On (a) the unsentimental efficiency factor, (b) the conventionality factor, (c) allocation of resources to education factor, there were no significant differences between the sub-groups in ranking technical education.

(d) Adult education

The subjects' mean scores on the four factors were classified into sub-groups according to their ranking of teaching at adult education level in terms of public esteem: (1) 19 subjects who accorded it a rank of high; (2) 32 subjects who assigned it a rank of good; (3) 72 subjects who gave it a rank of average; (4) 58 subjects who gave it a rank of below average; (5) 141 subjects who accorded it a rank of low. The results are given in Table 10.12.

On the commitment to education factor, subjects who assigned teaching at adult education level a rank of below average made significantly higher scores than groups who assigned it to higher categories (high, good, average) and the lowest category.

On the unsentimental efficiency factor, there were no significant differences between the mean scores of the sub-groups in ranking adult education. Subjects who assigned teaching at adult education level to the lower categories (average, below average and low in terms of esteem) scored significantly higher on the conventionality factor than groups who assigned it to the higher categories (ranks of high or good).

On the allocation of resources to education factor, there were no significant differences between the mean scores of the sub-group in ranking adult education.

(e) Primary education

The subjects' mean scores on the four factors were classified into sub-groups according to their ranking of teaching in primary education in terms of public esteem: (1) 28 subjects who gave it a rank of high; (2) 57 subjects who gave it a rank of good; (3) 142 subjects who accorded it a rank of average; (4) 64 subjects who gave it a rank of below average; (5) 28 subjects who gave it a rank of low.

On the commitment to education factor, the unsentimental efficiency factor, the conventionality factor and the allocation of resources to education factor, there were no significant differences between the mean scores of the sub-groups in ranking primary education.

(f) Nursery education

Subjects' mean scores on the four factors were classified into three groups according to their ranking of nursery education in terms of public esteem: (1) 26 subjects who accorded it a rank of high; (2) 37 subjects who assigned it a rank of good; (3) 78 subjects who accorded it a rank of average; (4) 71 subjects who gave it a rank of below average; (5) 112 subjects who assigned it a rank of low (Table 10.12).

Subjects who assigned teaching in nursery education to the average and below average categories scored significantly higher on the commitment to education factor than the groups who gave it a rank of high or good or low.

On (a) the unsentimental efficiency factor, (b) the conventionality factor and (c) the allocation of resources to education factor there were no significant differences between the mean scores of the subgroups in ranking nursery education.

(5) Subjects' ranking of teaching at different levels of education according to their personal preferences

The mean attitudes scores on the commitment to education, unsentimental efficiency, conventionality and allocation of resources to education factors are given in Table 10.13.

Table 10.13: The Attitude Scores on the Commitment to Education, Unsentimental Efficiency, Conventionality and Allocation of of Resources to Education Factors for the Sub-Groups, According to their Preferences for Teaching at Different Levels

Division of respondents in	No. of		ctor I		ctor II		ctor III	Factor IV		
terms of their rankings	Sample	Commitment	to education	Unsentimen	tal efficiency	Conver	ntionality	Allocatio	on of resources	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	
a. Higher education rank 1 rank 2 rank 3 rank 4 rank 5 F. Value	155 77 33 34 46	+.032 +.402 262 402 217 2.572*	1.651 1.644 1.569 1.189 1.458	140 +.226 190 +.149 +.146 2.620*	.912 .185 .709 .850 1.021	029 +.043 050 +.053 +.053 0.143	1.005 1.049 .978 1.353 .863	•045 +•143 -•247 +•102 +•260 1•851	•969 1•103 •865 •047 •944	
b. Secondary education rank 1 rank 2 rank 3 rank 4, 5, 6 F. Value	94 157 63 31	+•271 +•038 -•315 -•389 2•407	1.633 1.620 1.361 1.634	+•066 -•131 +•143 +•121 1•713	1.014 .880 1.071 1.013	+.026 +.011 +.021 166 .325	•961 •991 1•093 •939	+•063 +•033 -•146 -•094 •775	1.018 .962 1.018 1.116	
c. Adult education rank 2 rank 3 rank 4 rank 5 rank 6 F. Value	36 42 90 82 89	612 +.189 239 +.525 094 4.490***	1.541 1.491 1.491 1.718 1.522	004 021 +.094 116 +.039 .533	.057 .975 1.006 .938 1.013	157 145 107 +.147 +.130 1.573	•964 •901 1•026 •967 1•037	235 +.016 +.006 +.123 017 .813	1.015 1.011 1.004 .989 1.002	
d. Primary education rank 1 rank 2 rank 3 rank 4 rank 5, 6 F. Value	32 48 52 99 113	220 337 525 +.776 221 9.532***	1.363 1.235 1.531 1.642 1.547	+.114 +.014 254 062 +.083 1.477	1.009 •949 •939 •908 •970	+.001 +.005 +.135 +.181 091 1.296	1.165 •934 •880 •956 1.050	001 160 +.012 +.075 006	1.031 .996 .021 .972 1.018	
e. Nursery education rank 1 rank 2 rank 3 rank 4 rank 5 rank 6 F. Value	45 12 20 31 63 172	251 180 111 909 +.104 +.216 3.056**	1.300 .953 1.565 1.190 1.645 1.699	+•238 +•397 +•172 -•258 -•141 -•016 1•770	1.085 1.008 1.008 1.009 .948 .941	+•172 +•198 +•147 -•204 -•018 -•027 •731	•924 1•006 •986 •989 1•23 •922	113 216 368 281 +.081 +.122	1.094 1.037 .836 .986 .960	

(a) Higher education

The subjects' mean scores on the four factors were classified according to their ranking of preferences for teaching in higher education: (1) 155 subjects who assigned teaching in higher level first rank; (2) 77 subjects who assigned it second rank; (3) 33 subjects who assigned it third rank; (4) 34 subjects who assigned it fourth rank; (5) 46 subjects who accorded it fifth rank. No subjects placed higher education in the sixth rank.

Subjects who assigned teaching at higher education level a high rank (first and second) in their preferences made significantly higher scores on the commitment to education factor than the group who assigned it to the lower and middle categories at the .5 level.

On the unsentimental efficiency factor, subjects who assigned teaching at higher education level second, fourth, and fifth ranks scored significantly higher than the other groups who assigned it first and third ranks at the .5 level.

On the conventionality factor, there were no significant differences between the sub-groups in ranking higher education.

On the allocation of resources to education factor, there were no significant differences between the sub-groups in ranking higher education.

(b) Secondary education

The subjects' mean scores on the four factors were classified on the basis of their ranking of preferences for teaching in secondary education: (1) 94 subjects who assigned it first rank; (2) 157 subjects who assigned it second rank; (3) 63 subjects who accorded it third rank; (4) 31 subjects who accorded it fourth, fifth and sixth rank.

On the commitment to education factor, there were no significant differences between the sub-groups in ranking secondary level.

On the unsentimental efficiency factor, there were no significant differences between the sub-groups in ranking secondary level.

On the allocation of resources to education factor, there were no significant differences between the sub-groups in ranking secondary level. On the conventionality factor, there were no significant differences between the sub-groups in ranking secondary level.

(c) Adult education

The subjects' attitude mean scores on the four factors were classified on the basis of their ranking of preferences for teaching in adult education: (1) 36 subjects who assigned it second rank; (2) 42 subjects who assigned it third rank; (3) 90 subjects who accorded it fourth rank; (4) 82 subjects who assigned it fifth rank; (5) 89 subjects who assigned it sixth rank. No subjects placed adult education in the first rank.

Subjects who assigned teaching at adult education level a rank of 5 and 3 made significantly higher scores on the commitment to education factor than the groups who assigned it second, fourth and sixth ranks at the .01 level.

On the unsentimental efficiency factor, there were no significant differences between the sub-groups in ranking adult education.

On the conventionality factor, there were no significant differences between the sub-groups in ranking adult education.

On the allocation of resources to education factor, there were no significant differences between the sub-groups in ranking adult education.

(d) Primary education

The subjects' mean scores on the four factors were classified according to their ranking of preferences for teaching in primary level: (1) 32 subjects who accorded it first rank; (2) 48 subjects who assigned it second rank; (3) 52 subjects who assigned it third rank; (4) 99 subjects who accorded it fourth rank; (5) 113 subjects who assigned it fifth and sixth ranks.

Subjects who assigned teaching at primary level a rank of 4 scored significantly higher on the commitment to education factor than the groups who assigned it in the higher category or the lowest at the .01 level.

On the unsentimental efficiency factor, there were no significant differences between the sub-groups in ranking primary level.

On the conventionality factor, there were no significant differences between the sub-groups in ranking primary level.

On the allocation of resources to education factor, there were no significant differences between the sub-groups in ranking primary level.

(e) Nursery education

The subjects' mean scores on the four factors were classified into six groups: (1) 45 subjects who assigned teaching at the nursery level a rank of 1; (2) 12 subjects who assigned it a rank of 2; (3) 20 subjects who assigned it a rank of 3; (4) 31 subjects who assigned it a rank of 4; (5) 63 subjects who accorded it a rank of 5; (6) 172 subjects who assigned it a rank 6 (Table 10.13).

On the commitment to education factor, subjects who assigned teaching at the nursery level in terms of preferences, in the lower categories (5, 6 ranks) scored significantly higher on the commitment to education factor than the groups who assigned it in the higher categories (1, 2, 3, 4 ranks).

On the unsentimental efficiency factor, the conventionality factor and the allocation of resources to education factor there were no significant differences between the sub-groups in ranking the nursery school teacher.

Summary and Conclusion

(1) The Discriminative Value of the Factors Extracted

Oliver's "Survey of Opinions on Education" proved sufficiently sensitive to reveal differences between the four factors extracted from it. The results reported in this chapter suggest that the commitment to education, the unsentimental efficiency and the conventionality factors were more sensitive in discriminating between the attitudes of the sub-groups of the sample, classified according to variables of social background, than the allocation of resources to education factor. These findings should, however, be regarded as tentative, since there are no other studies to support our findings.

(2) The Relationship between Perceptions of the Status of the Teacher and Attitudes to Education

In view of the almost complete absence of findings of a significant relationship between student teachers' perceptions of the status of teaching and their attitudes to education and also the inexplicable nature of what significant differences were found, it seems plausible to argue that attitudes to education are related to a student's value system and his personal reasons for choosing teaching as his career

rather than to the status of teaching. Perhaps students who choose teaching as a career see the function of the school as supportive of the values they hold and are more likely to think less about status; in other words, their evaluation of the status of teaching is not a major influence on the formation of their attitudes to education, or their value system does not accord status an important role.

Again it needs to be emphasised that this conclusion is a tentative one.

CHAPTER XI

SUMMARY AND CONCLUSION

The principal aim of this study was to compare student teachers perceptions of the teaching profession and their attitudes to education in England and Egypt.

Its subsidiary aims were:

- (1) To investigate how teachers perceive the teaching profession at different levels of education in terms of status, salary, using abilities fully as well as in terms of public esteem.
- (2) To investigate the ranking of selected occupations in terms of status, salary, personal satisfaction and value to society as perceived by the English and Egyptian samples.
- (3) To assess the value of R.A.C. Oliver's questionnaire, "Survey of Opinions about Education", as a measure of teachers' attitudes to education in terms of three dimensions: Naturalism, Radicalism and Tendermindedness.
- (4) To assess the effectiveness of the Oliver Questionnaire as a measure of teacher attitudes to education in Egypt.
- (5) To compare student teacher attitudes to education in the light of certain demographic information, viz. sex, age, teaching subject and subject of course.

One major reason for starting the study was that nothing was known about the relationship between student teachers' perceptions of the status of the teaching profession and their attitudes towards education.

There is very little evidence about the effect of the status of teaching on teacher attitudes to education. This study is the first empirical attempt at a cross-cultural study of teacher education in England and Egypt. It is thought that some interesting data has been obtained but it is not claimed that conclusions can be more than tentative.

I. The Relationship between English Student Teachers' Perceptions of the Status of Teaching and Their Attitudes to Education

English student teachers' perceptions of the status of the teaching profession are not significantly related to their attitudes to education as measured by the tenderminded, theoretical and progressive radical attitude scales devised by Oliver.

The conclusion that emerges from a study of student perceptions of the status of the three levels of teaching (university, secondary school and primary school teaching) in relation to other professions on the given list, as well as their evaluations of the degree of public esteem accorded to each of these different levels of teaching and of the degree of public esteem the profession ought to have, is the insignificance of the association between students' perceptions of the status of the teaching profession and their attitudes to education as measured on the two factors listed above. The results are consistent and support each other. They suggest that students and teachers who have chosen teaching as their occupation do not consider the status of teaching as of great importance in making their choice. They may have taken up teaching because of the opportunities it offers for public and social service or because of its intellectual nature or because of their liking for children. The data, however, do not provide reasons for an individual's choice of teaching as a career or a list of motives for entering the teaching profession.

The English subjects' evaluations of teaching in terms of personal satisfaction, using abilities fully and value to society support the conclusion set down in the last paragraph, namely, that student teachers valued other attributes of teaching more highly than status or salary. This result suggests that student teachers attach different weights to different aspects of the job of teaching. They may well have thought more about the personal satisfaction which teaching can give the teacher than of status and salary. In other words, teaching enables them to achieve goals that are related to their value systems.

Although they rank teaching at different levels in a clear hierarchy, they express preferences for teaching at levels which do not correspond with this hierarchy. It seems that their choice of a level at which they want to teach does not depend on status but on some other values.

Preferences and Attitudes to Education

- (a) Results showed that subjects who gave teaching at nursery or primary level as their first preference scored significantly higher on the tender-minded-theoretical factor than subjects who placed it low down on their preference scale.
- (b) Another finding was that subjects who gave a high rating to teaching at higher education, secondary school or adult education level made significantly lower scores on the tender-mindedness-theoretical attitude scale than those who ranked teaching at these three levels low down on their scale of preference.

II. The Relationship between Egyptian Student Teachers' Perceptions of the Status of Teaching and Their Attitudes to Education

Egyptian student teachers' perceptions of the status of the teaching profession are not significantly related to their attitudes to education as measured by their scores on tests of the following factors: commitment

to education, unsentimental efficiency, conventionality and allocation of resources to education.

These results for the Egyptian sample are based on analysis of the same selected variables as used with the English sample. The results as a whole are consistent and lend support to the conclusion one arrives at from the English data: that student teachers tend to disavow the social status of the teaching profession as a main factor in moulding their attitudes to education. A few significant results in the contrary direction were observed, but these were not at a high level of significance and do not hold for all the sub-groups. As already indicated, there may be factors other than status which influence the development of their attitudes to education. The Egyptian results showed that the ratings of value to society, personal satisfaction and using abilities fully were higher, in the case of the secondary school teacher, than those for status and salary.

III Some Comparisons between England and Egypt on (I) and (II)

Despite the differences between England and Egypt in social and cultural backgrounds, this study found that English and Egyptian student teachers were alike in providing no evidence of a relationship between their perceptions of the status of teaching and their attitudes to education.

Student teachers in both countries were aware of the ranking given to teaching by the public: but motivation to enter teaching seems more likely to correlate with students attitudes to education. It is encouraging to discover that the attitudes of students to education are apparently not affected by their perception of the status of teaching, whether it is high or low.

(1) Perceptions of the Teaching Profession in England and Egypt

(a) The Status Dimension

Comparison between the ratings given to teaching in terms of status, salary, personal satisfaction, using abilities fully and value to society in the two countries showed that the status assigned to the university teacher, the secondary school teacher and the primary school teacher are very similar in the two countries. The university teacher was assigned high status by both the English and the Egyptian samples. The secondary school teacher was given a middle rank; a rank of 8 by the English sample, a rank of 9 by the Egyptian sample. The primary school teacher was ranked tenth by the English sample and fourteenth by the Egyptian sample. The cross-cultural comparison showed that the primary school teacher is likely to be ranked higher in status in England than in Egypt. These differences may reflect differences between the kind of education and training given to primary school teachers in each of the two countries.

(b) The Salary Dimension

The salaries given to university, secondary school and primary school teachers were perceived as relatively higher by the Egyptian sample than by the English sample. The university teacher was rated second by the Egyptian sample and sixth by the English sample; the secondary school teacher was given a rank of 7 by the Egyptian sample and a rank of 13 by the English sample; the primary school teacher was rated twelfth by the Egyptian sample and fifteenth by the English sample. These differences may reflect the salaries paid in each country. It is, however, interesting to note the continuing similarities between the relative positions of university teacher, secondary school and primary school teachers in the two countries.

(c) The Personal Satisfaction Dimension

The results showed interesting differences between the two countries.

The English and Egyptian samples are in close agreement about the personal satisfaction attached to secondary school teaching. The secondary school teacher is ranked fourth on this dimension by the English sample and third by the Egyptian sample. Variations in the ratings given to the university teacher and the primary school teacher were very interesting; the university teacher was given a rank of 8 by the English sample and a rank of 2 by the Egyptian sample; whereas the primary school teacher was given a rank of 2 by the English sample but a rank of 12 by the Egyptian sample. These results reflect differences between the determinants of personal satisfaction in the two countries. Perhaps the Egyptian students associate personal satisfaction with the amount of money the occupation gets, whereas their English counterparts do not.

(d) The Using Abilities Fully Dimension

Again the English and Egyptian samples were in close agreement about the ranks they assigned to the secondary school teacher in respect of using abilities fully; the secondary teacher was assigned a rank of 3 by the English sample and a rank of 2 by the Egyptian sample. The university teacher was assigned a rank of only 10 by the English subjects compared with a rank of 4 from the Egyptian subjects. On the other hand, the primary school teacher was ranked second by the English sample and ninth by the Egyptian sample.

The relative positions of ranks in each country are interesting.

The primary school teacher stands at the top of the hierarchy and the university teacher stands at the bottom in England, whereas in Egypt the secondary school teacher stands at the top of the hierarchy and the primary school teacher at the bottom.

However, the differences between the two countries as expressed in terms of using abilities fully probably reflect differences in interpretation of the meaning of the phrase. With the Egyptian sample the phrase seems likely to be related to the level of education primary school teachers receive whereas in England it seems to be related to occupational role rather than qualification. In any case the data do not permit us to offer an accurate explanation.

(e) The Value to Society Dimension

Again the English and Egyptian samples were in close agreement on the ranks they assigned to the secondary school teacher, who was ranked second on the value to society dimension by the Egyptian sample and fourth by the English sample. The English and Egyptian samples assigned a similar rank to the primary school teacher. The university teacher was assigned a slightly higher rank by the Egyptian sample (6) compared with a rank of 10 by the English sample. Comparison of the relative positions of the three levels of teaching on value to society shows the following variations: in England the primary school teacher was given the highest rating, followed by the secondary school teacher and lastly by the university teacher. In Egypt the secondary school teacher was rated highest and was followed by the primary school teacher. Lowest in rank was the university teacher.

(f) Public Esteem and Preferences for Teaching at a Particular Level

Results showed that the ratings assigned to teaching at different levels in terms of public esteem were very similar in the two countries. So too were the preferences for teaching at different levels of education.

As a whole, cross-cultural comparison of the ratings given to teaching in the two countries suggests that, though the status assigned to the teaching profession is similar, the characteristics of teaching occupations are likely to be perceived in terms of the culture and functional roles and the educational and historical backgrounds of each country.

(2) <u>Cross-Cultural Comparisons of the Rankings of Similar Occupations</u> in England and Egypt

The above observation gets support from the ratings of similar occupations in the two countries on each of the dimensions mentioned above. When the ratings given to the status of similar occupations in the two countries are compared, the rank coefficient of correlation between the English and Egyptian ratings works out at .62. This provides evidence in support of the culturalist view of a society rather than the structuralist view.

Cross-cultural comparison on the personal satisfaction dimension revealed greater differences than were found on ratings of status, salary, using abilities fully and value to society. The coefficient of correlation between the English and Egyptian evaluations of personal satisfaction : was only .34. The correlation between estimated salary in the two countries worked out at .59. The rank correlations between the ratings of the English and Egyptian samples for (a) using abilities fully, and (b) value to society, worked out at .50. The differences between the rankings of occupations in the two countries by the English and Egyptian samples reflects differences in salaries, the value to society of each occupation and the demand for, and supply of trained people.

Cross-cultural differences may be explained in terms of the interrelationships between the various dimensions in each country. Here are some of the significant differences.

- (1) The rank coefficient of correlation between perceived status of the teaching occupations and income was .59 in England and .88 in Egypt.
- (2) The rank coefficient of correlation between perceived, status of occupations and personal satisfaction was .40 in England and .68 in Egypt.
- (3) The rank coefficient of correlation between perceived status and using abilities fully was .36 in England and .65 in Egypt.
- (4) The rank coefficient of correlation between perceived status and value to society was .48 in England and .58 in Egypt.

One cannot draw any sweeping conclusions from comparisons between these coefficients of correlation. Clearly the dimensions used in this study are not seen in the same way by student teachers in the two countries. In Egypt the status of a given occupation is more closely linked with salary than it is in England, possibly because in a developing country like Egypt, economic factors play an important part in moving from one class to another and in achieving a comfortable existence. The importance of income from an occupation in Egypt is clearly to be seen if one compares the degrees of relationship between perceived salary and personal satisfaction of the English and Egyptian samples. The rank coefficient of correlation between these two variables was .76 in Egypt and .12 in England.

Another interesting finding was that the rank coefficient of correlation between perceived salary and using abilities fully was -.05 in England and .74 in Egypt. This difference probably reflects differences between perceptions of the full use of abilities in relation to salary in Egypt and England. In Egypt salary scales are very often closely related to the amount of ability shown in a particular occupation. The common attitude in Egypt is that money is the most likely reward for using one's abilities fully. In this connection it

is worth noting that the rank coefficient of correlation between estimated salary and value to society was -.06 in England and .62 in Egypt.

The occupations of the English and Egyptian samples were similar on the following dimensions: (i) perceived satisfaction and using abilities fully, which produced a rank coefficient of correlation of .89 in England and .84 in Egypt; (ii) value to society and personal satisfaction, which produced a rank coefficient of correlation of .84 in England and .75 in Egypt; (iii) using abilities fully and value to society, which produced a rank coefficient of correlation of .81 in England and .73 in Egypt.

This study shows that there is a very high measure of agreement within the sub-groups of the sample as to the status hierarchy of the occupations listed. With certain minor variations this agreement holds regardless of the variable used to differentiate between groups - sex, religion, age, subject of course, main teaching subject, father's occupation, in both Egypt and England. The similarities between the two countries accord with the findings of most of the studies carried out in different parts of the world in different cultures, in non-industrial as well as industrial countries.

(3) Student Teacher Attitudes to Education

The factor structure of student teacher attitudes to education is only partially explicable in terms of the three dimensions postulated by the Oliver hypothesis: the factors of Naturalism, Radicalism and Tendermindedness. The results of this study provide good evidence for a tendermindedness factor and a limited amount of support for a radicalism factor, but no evidence of a Naturalism factor.

This conclusion, based on factor analysis of the responses of the English pilot sample to the thirty-two scored items defined by Oliver and Butcher (1962), accords with the findings of Wilson and Bill (1976). Since the factors extracted from the pilot study seemed to be meaningful and coherent and to suggest the usefulness of the questionnaire in two of the three dimensions, it was decided to continue to use the questionnaire, but to make an analysis of all 59 items on the questionnaire.

The analysis of English student teacher attitudes based on their responses to the 59 items revealed two meaningful interpretable factors. These were defined as the tendermindedness-theoretical factor and the progressive-radical factor. In the analysis of each sample the first two factors proved more meaningful and accounted for most of the variance. These factors are to some extent comparable with Oliver and Butcher's Tendermindedness-Toughmindedness and Radicalism-Conservatism factors; but the factors derived from the English sample used in this study are. in some respects different in context and loading from those obtained by Oliver and Butcher.

The factor structure of Egyptian attitudes to education is very different from the factor structure of the attitudes of the English sample. The analysis produced four interpretable factors: commitment to education, unsentimental efficiency, conventionality and allocation of resources to education. This was based on the responses of the Egyptian sample to the 59 items of the Oliver Questionnaire. results suggest that teachers' attitudes to education are not organised and formulated in the same way in the two countries. The difference reflects differences between education in England and education in

Oliver and Butcher, (1962), op. cit. Wilson and Bill, (1976), op. cit. 1.

^{2.}

Egypt, e.g. the marked differences between the students admitted to teacher training in England and Egypt; the differences between the primary and secondary education provided in the two countries. In Egypt all student teachers come from general secondary schools in which academic achievement is strongly stressed, whereas in England students come from grammar and comprehensive schools, some of which may be less orientated towards academic success. Teacher education as provided in England is more child-centred than teacher education in Egypt, which tends to be an amalgam of methods old and new and of religious and non-religious subject-matter, and altogether to be subject-centred rather than child-centred.

In addition, the educational policies of the two countries are, on the whole, very different. Egyptian education is under highly centralised control by the state which is striving to extend free education to all three levels of education - primary, secondary and higher; to increase enrolment at each stage; and to increase the number of teacher training colleges to meet the great demand for teachers at every level. All these factors affect the environment of the school and the quality of the education given. There are problems of over-crowded classes and lack of adequate material resources for education, e.g. school buildings and equipment. Teaching methods leave much to be desired. Educational, economic, social and political factors have interacted to produce the distinctive atmosphere of Egyptian education which makes it very different from that of English education.

Moreover, different connotations of certain items on the Oliver Questionnaire and unfamiliarity of students with some of the items are among the reasons which help to account for the difference between the factor structure of attitudes to education of English and Egyptian student teachers.

Nevertheless, the comparison between the two countries revealed some interesting findings about the dimensions of teachers' attitudes to education. Furthermore, it highlights the importance of trying out and adapting questionnaires and tests for cross-cultural use. This entails a thorough examination of the concepts and conceptual structures in all the items of the test and the extent to which these concepts are comprehensible when translated into the language of another culture.

This study has shown that the Oliver Questionnaire can be useful in measuring the attitudes of student teachers to education, but if it is to be used in a foreign country, certain items need to be modified and certain items need to be replaced by items about educational issues in that country. The study has shown the importance of investigating the dimensions behind teachers attitudes to education in Egypt. It is no more than a first attempt to examine the factor structure of teacher attitudes in Egypt. Its findings should be regarded as merely tentative and suggestive.

In Chapter IX some interesting data were given about the relationship between the factors extracted and certain biographical variables sex, age, subject of course, teaching subject and father's occupation. Father's occupation was taken into account only with the English sample.

The English Sample

On the tender-minded-theoretical factor significant differences were found between mean scores for the following variables: sex, age, teaching subject and course of study. This finding was in accord with the findings of previous studies. Examination of the mean factor scores for each variable on the tender-minded factor led to the following conclusions:

- (a) Women made significantly higher scores in the direction of tender-mindedness than men.
- (b) The younger group made significantly higher scores in the direction of tender-mindedness than the older group.
- (c) The scores of those who were teaching non-academic subjects were significantly higher in the direction of tender-mindedness than the scores of those who were teaching arts and science subjects.
- (d) The social class of respondents derived from father's occupation did not correlate with their scores on the tender-minded-theoretical factor.

These findings confirm the results of the factor analysis and suggest that the tender-mindedness-theoretical factor is more satisfactory than the progressive-radical factor in discriminating between the sub-groups of samples on the variables listed above. The progressive-radical factor is a less satisfactory discrimination. Perhaps social, political, economic and educational changes since the questionnaire was formulated have altered the educational connotations of some of the items.

Before the present study was undertaken, Oliver and Butcher (1962), Morrison and McIntyre (1967), Corties (1972) had found that the radical-conservative factor was a less satisfactory means of differentiating between the attitudes of different groups than the tender-mindedness-tough-mindedness factor. An examination of the factor content of the Oliver Questionnaire and a reconsideration of its validity and reliability are now urgently needed.

The Egyptian Sample

- (1) On the commitment to education factor significant differences were found between mean scores of sub-groups for the following variables: sex, age, teaching subject and subject of course. Examination of the mean factor scores of the sub-groups of the sample on these variables led to the following conclusions:
 - (a) The men scored significantly higher on commitment to education then the women.
 - (b) The older group scored significantly higher on commitment to education than the younger group.
 - (c) The science and mathematics group scored significantly higher on commitment to education than the social studies and foreign language groups.
 - (d) The group of serving teachers scored significantly higher on commitment to education than the B.Ed. student group.
- (2) The unsentimental efficiency factor was found to be significantly related to age, main teaching subject, subject of course:
 - (a) The younger group made significantly higher scores on this factor than the older group.
 - (b) The mathematics group had significantly lower scores on unsentimental efficiency than the science, social studies and foreign language groups.
 - (c) The B.Ed. group had significantly higher scores on unsentimental efficiency than the groups of serving teachers.
- (3) The conventionality factor was found to be significantly associated with sex, age, teaching subject and course of study.
 - (a) Women were found to be significantly less in favour of conventionality than men.

- (b) The younger group made significantly lower scores on conventionality than the older groups.
- (c) The group of serving teachers made significantly higher scores on conventionality than the B.Ed. student group.
- (d) The science and mathematics groups made significantly higher scores on conventionality than the social studies and foreign language groups.

The findings on this factor accord with those of most studies of teachers' attitudes in other countries, particularly England and the USA. They fit in, too, with what a person familiar with Egyptian culture expects.

(4) The allocation of resources to education factor proved to be the least satisfactory of the four factors used in the analysis of the Egyptian sample. No significant differences were found when mean factor scores on each of the four variables of social background were examined.

So far the findings from the Egyptian sample suggest the importance of future efforts to adapt measures of teachers' attitudes to education for cross-cultural purposes. The Oliver questionnaire has been shown to be useful in measuring student teachers' attitudes to education on a limited number of dimensions.

Further Studies

Further studies should expand the scope of inquiry by using larger samples. These larger samples should include college or university students who have chosen occupations other than teaching so as to make possible the comparison of the status rating of teaching given by those

who have chosen teaching and those entering other occupational groups, and its relationship with their attitudes to education.

It is also important to investigate the relationship between student teachers' perceptions of other aspects of the teaching profession, e.g. personal satisfaction, using abilities fully and value to society.

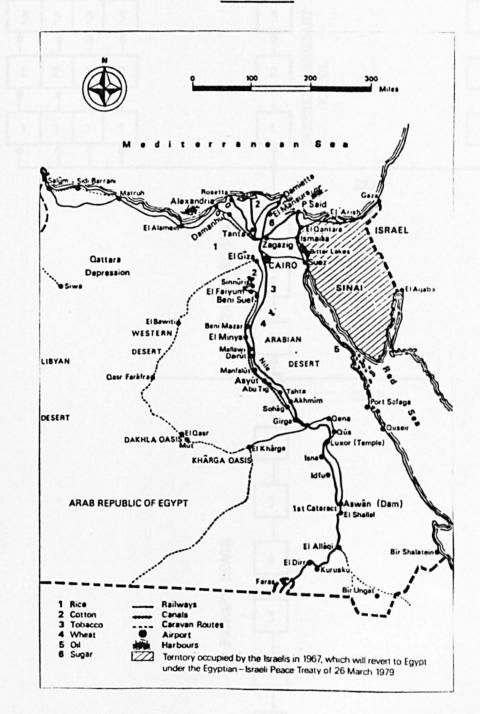
Further work is also necessary if the Oliver questionnaire is to be used in cross-cultural comparisons. The present study has shown its usefulness in measuring teacher attitudes in a different culture, but it has also highlighted several of its short-comings. We have seen how, even in England, certain items have expanded or changed their meanings or have become out of date with the development of education or changes in educational thought. How far items designed for one particular culture are translatable into the language of a different culture and are relevant to a different culture must also be looked at.

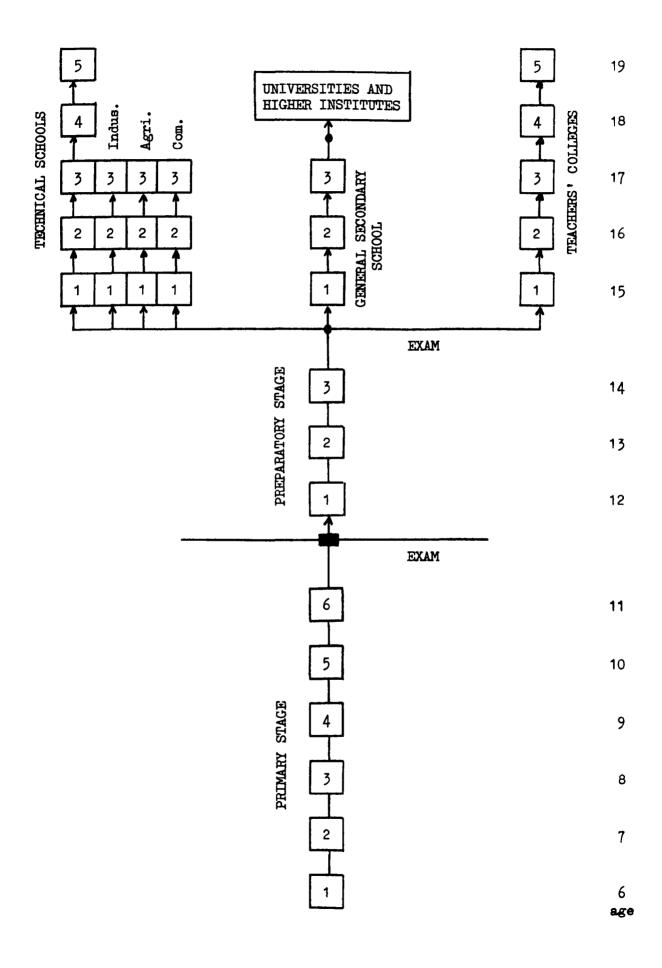
APPENDIX A

Chapter I

Teacher Education in England and Egypt

EGYPT





APPENDIX B

Chapter IV

The Tests Used in the Investigation

Amira Shahin, Research Student, University of Leeds, Education Department.

This research project will, it is hoped, lead to improvement in the education of touchers and to better understanding between the two countries where the research is being carried out.

I shall be grateful for your assistance in this research.

All the information you provide will be regarded as confidential: no report of individual answers will be made.

Please provide the following information about yourself. Put a circle round the appropriate answer or complete the statement.

1. Name in full.

2.	Sex:	Male	Female	
3.	Age:	20–24	25–29	30 and over
4.	Religion	Catholic	Protestant	Jewish
		Moslem	No religion	Other religion (please
		state which oth	er)	

- 5. Place of birth:
- 6. College or University:
- 7. Subjects of study:
- 8. Length of your present course:
- 9. Certificate or Degree already obtained:
- 10. Certificate or Degree for which you are studying:
- 11. Length of experience, if any, as full-time teacher: 1 year: 2-4 years: 5 or more years.
- 12. Type of secondary school at which you were educated:

 - (b) Co-educational: Boys' School: Girls' School.
- 13. Parents' occupation:
 - (a) father at present or before retirement:
 - (b) mother at present: before marriage:

The objectives of this study

This study aims basically at defining and discovering people's attitudes towards certain occupations in different countries.

The following list includes twenty occupations which University and College graduates frequently enter.

Please arrange these occupations as they would come, in your opinion. in order of status. In other words, say which, in your own opinion, has the highest status.

Put "1" opposite the occupation you think has the highes status, then put "2" opposite the next highest and so down to 20, the occupation you think has the least status.

You will probably find it easy if you choose the occupation you think should come first and mark it, then choose the occupation you think should come last, then think of the 2nd and 3rd choices, then the 19th and 18th and so on.

The list of occupations

		rank			rank
1.	Accountant	••••	11.	Journalist	
2.	Agricultural Engineer	••••	12.	Librarian	• • • • •
3.	Architect		13.	Management trainee	• • • • •
4.	Army Officer		14.	Primary school teacher	
5.	Banker		15.	Pharmacist	
6.	Dentist	••••	16.	Radio or T.V.	
7.	Doctor			producer.	••••
8.	Engineer (professional		17.	Secondary school teach	er
9.	Civil Servant (graduate		40	01-7	••••
	entry)		18.	Social worker	••••
10	Lataron		19.	Nurse-Sister (S.R.N.)	• • • • •
10.	Lawyer		20.	University teacher	

State which five occupations in the preceding list would, you think, have the highest salary during the first year of work. Put first the occupation you think would be most highly paid and second the occupation next highly paid, and so on -

1.

2.

3.

4. 5.

How is the teaching profession looked upon in your country generally? Does it rank high in public opinion? Please specify your answer by marking

/one

one of the following classifications:

Teaching is of

excellent ctatus -

good status -

average status -

below average status -

low status

I don't know how teaching is looked upon -

Consider the following stages of teaching in the educational system of your country, indicate your order of preference for the stage at which you would like to teach by putting 1 opposite your first preference, 2 opposite your second preference and so on to 6 opposite the stage you would like least.

Preference

- 1. Nursery Education -
- 2. Primary Education -
- 3. Secondary Education -
- 4. Further Education -
- 5. Higher Education -
- 6. Adult Education -

Which of the stages of teaching is, as far as you know, held in high or low esteem by people in your country?

Indicate your answer by marking one of the following classifications:

Classifications

	High esteem	Good	Average	below average	low esteem
Nursery Education				•••••	
Primary Education	•••••	• • • • •		•••••	
Secondary Education			•••••		
Higher Education			•••••		
Adult Education			•••••		
Further Education					

Would you please state how you think people in your country ought to look upon the teaching profession.

Indicate your answer by marking one of the following:-

1.	Teaching	should	have	excellent status	• • • • •
2.	11	**	17	good status	• • • • •
3.	, 1	**	11	average status	• • • • •
4.	11	11	91	below average status	• • • • •
5.	11	11	11	low status	

If you are already a teacher, are you satisfied with your career as a teacher? Please indicate, by marking one of the following expressions, your satisfaction with your work:

- 1, very well satisfied
- 2. fairly well satisfied
- 3. well satisfied
- 4. not very well satisfied
- 5. not at all satisfied
- 6. if you are not satisfied, please say why not:

Thank you for your assistance! If you would like to write any comments on the questions or on the teaching profession, please do so here:

Amira Shahin, Research Student, University of Leeds, School of Education.

This research project will, it is hoped, lead to improvement in the education of teachers and to better understanding between the two countries in which the research is being carried out.

I shall be grateful for your assistance in this research.

You are not required to give your name; the forms have been numbered only so that replies to the two questionnaires can be compared.

please provide the following information about yourself. Put a circle round the appropriate answer or complete the statement.

1.	Sex:	Male	Female

- 2. Age: 20 24 25 29 30 and over
- 3. Religion: Catholic Protestant Jewish

No religion Other religion: (please state which other)

- 4. Place where you were educated:
 - (a) Primary School: City Town Village
 - (b) Secondary School: City Town Village
- 5. Present place of study: College University
- 6. Subject of study: indicate your main area of study, apart from professional studies in Education:

Arts Science Crafts others state,

- 7. Length of your present course: 3 years 4 years 1 year
- 8. Qualification already obtained:

No qualification B.A. B.Sc.

Certificate of Education Other (state which)

9. Certificate or Degree for which you are studying:

B.Ed. Diploma Postgraduate Certificate of Education in

10. Length of experience, if any, as a full-time teacher:

None One-year 2 - 4 years 5 or more years

- 11. Type of secondary school at which you were educated (answer both (a) and (b)!):
 - (a) Independent Comprehensive Secondary Modern

 Grammar Grant-Aided Other (please state which)
 - (b) Co-educational: Boys' School Girls' School
- 12. Parents' Occupation:
 - (a) Father's at present (or before retirement)
 - (b) Mother's at present (or before marriage)

Education

2.

The objectives of this study

1. This study aims basically at defining and discovering people's attitudes towards certain occupations in different countries.

The following list includes twenty occupations which University and College graduates frequently enter.

Please arrange these occupations as they would come, in your opinion, in order of status. In other words, say which in your own opinion, has the highest status.

Put "1" opposite the occupation you think has the highest status, then put "2" opposite the next highest and so down to 20, the occupation you think has the lowest status.

You will probably find it easy if you choose first the occupation you think should come first, then the occupation you think should come last; then think of the 2nd and 3rd choices, then the 18th and 19th and so on.

The list of occupations

	:	Rank			Rank
1.	Accountant		11.	Librarian	
2.	Architect	-	12.	Management Trainee	-
3.	Army Officer		13.	Primary School Teacher	
4.	Banker		14.	Pharmacist	
5.	Dentist		15.	Radic or TV Announcer	*
6.	Doctor		16.	Secondary School Teacher	
7.	Engineer (Professional)	w.ebildp.e	17.	Social Worker	
8.	Civil Servant		18.	Nurse - Sister, SRN	
9.	Lawyer	-	19.	University Teacher	
10.	Journalist		20.	Vet	

- 2. State which five occupations in the preceding list would, you think, have the highest salary during the first year of work. Put first the occupation you think would be most highly paid, and second the occupation next most highly paid, and so on.
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.

3.

3.	(1)	which yo	hoose from the list given in question 1 the five occupations u think would give the greatest amount of personal tion: arrange them in <u>descending</u> order (i.e., the best irst).
			1.
			2.
			3.
			4.
			5.
	(2)	which yo	noose from the list given in question 1 the 5 occupations in think would give an individual the best opportunity to y all his/her abilities: arrange them in descending
			l .
			2.
			3.
			4.
			5.
	(3)	which yo	noose from the list given in question 1 the five occupations think are most valuable to society: again, arrange descending order
			L .
			2.
			3.
		•	1.
			5.
	(4)	Does it :	ne teaching profession looked upon in your country generally? rank high in public opinion? Please give your answering one of the following classifications.
		Teaching	is regarded as having
		(1)	excellent status
		(2)	good status
		(3)	verage status
		(4)	pelow average status
		(5)	ow status
			don't know how teaching s looked upon

5.	Would you please state look upon the teaching one of the following.	how you t	chink pecp on, Indi	ole in you cate your	er country answer by	ought to marking
	Teaching should h	ave ex cel l	ent statu	ıs		
	Teaching should h	ave good s	tatus		******	
	Teaching should h	ave averag	e status		·	_
	Teaching should h	ave below	average s	tatus	···	••
	Teaching should ha	ave low st	atus			_
6.	Which of these stages high or low esteem by by marking one of the	people in	your coun	try? In	ou know, he dicate you	
		Classifi	cations			
		held in high esteem	held in good esteem	held in average esteem	held in below esteem	held in low esteem
	Adult Education					
	Further Education					
	Higher Education					
	Nursery Education					
	Primary Education					
	Secondary Education					
7.	Considering the follows of your country, indicated which you would like to preference: 2 opposite the stage you would like Adult Education	ate your c o teach by e your sec	rder of p putting ond prefe	reference 1. opposi	for the s te your fi so on to	stage at .rst
	Further Education			ry Educat	•	
	Higher Education -			dary Educ	_	

It is understood that the short answers do not fully express your views. It is not necessary to add to the
answers you have given, but if you wish to do so, please use the space below.

PART I

PART II

PART III

365.

SURVEY OF OPINIONS ABOUT EDUCATION — ANSWER SHEET

NAME (236)	SEX	AGE	DATE	5
PART I	PART II		PART III	
1	1	1a	52	**************************************
4	6	3a	7a	F L
5	7			Т
6	9	4a	8a	R
8 🗆 🗆 🗆 🗆	.11 🗌 🔲 🔲 🖂	d 🗌 🖂 🖂	d 🔲 🗎 🔲	

PART II

You are asked to give your opinion about a number of changes in education which have been suggested. You will probably feel that some of the changes would be desirable and that others would be undesirable. Some you may not feel able to express an opinion about one way or the other. Five alternative answers are offered: VERY DESIRABLE, RATHER DESIRABLE, NO OPINION, RATHER UNDESIRABLE and VERY UNDESIRABLE, and for each question five corresponding boxes are provided on the answer-sheet. Please consider each of the changes mentioned, and indicate your opinion of it by placing an X in the appropriate box on the answer-sheet. Please be sure to indicate in one of these five ways your opinion about each of the changes mentioned. Should you wish to qualify the answer-sheet.

- 1. Fewer free school meals.
- 2. The raising of the school leaving age to 16.
- 3. More education for international understanding.
- 4. Increased expenditure on adult education.
- 5. School courses in parenthood.
- 6. Bigger allowances for play material in primary schools.
- 7. Comprehensive schools to be the normal form of secondary education.
- 8. More nursery schools.
- 9. A higher proportion of the national income to be spent on education.
- 10. Smaller classes in the primary school.
- 11. Less corporal punishment in schools.

PART III

Below are four reasons which might be given for the teaching of English Language in schools. You may feel that better reasons than any of these might be given but please consider only the four reasons given here. Some of these you may feel are better than others. Some you may feel are not good at all. Five alternative opinions about each of the reasons are given—very good, good, fairly good, no opinion and not good. Corresponding boxes are provided on the answer-sheet. Note that the five possible ways of expressing your opinion are not exactly the same as in Parts I and II.

- 1. Reasons for the teaching of English Language in schools:
 - (a) It helps children to express themselves with freedom and fluency.
 - (b) It cultivates enjoyment in the use of language.
 - (c) A person who uses English incorrectly is handicapped in his career.
 - (d) Children must acquire proficiency in spelling, punctuation and grammar.

When you have indicated your opinion about the reasons for teaching English Language in schools, you will find various reasons which might be given for teaching other subjects stated below. Please indicate in a similar way what you feel about each of the reasons given.

- 2. Reasons for teaching science:
 - (a) The child's sense of wonder is a good starting-point for the development of his interests.
 - (b) The progress of industry demands workers equipped with scientific techniques.
 - (c) The study of science is satisfying to one's intellectual curiosity.
 - (d) A scientific training offers good prospects for a career.
- 3. Education for international understanding may be approached in the following four ways. Please indicate as before how good you feel each to be.
 - (a) Respect for one's own country is the best foundation for one's attitude to other countries.
 - (b) A study of international affairs should show which countries are our friends.
 - (c) Contact between the people of different countries makes them feel they are alike at heart.
 - (d) Knowledge of the achievements of other countries engenders respect for them.
- 4. Reasons for Religious Instruction:
 - (a) It develops a sense of spiritual values.
 - (b) The knowledge of a living God meets a deep-felt need in children.
 - (c) It instils a sense of duty.
 - (d) It helps to keep children from wrong-doing.
- 5. Reasons for excluding propaganda from schools:
 - (a) It is better to aim at sound knowledge and a fair-minded attitude.
 - (b) Pupils should be free to form their own opinions.
 - (c) Propaganda might get into the wrong hands.
 - (d) Instruction in one's duties to the state should come later.
- 6. The problem of comics. It is often said that some comics are harmful to children, and a number of ways of dealing with the problem have been suggested. Assume that some comics may be harmful, and indicate as before how good you feel each of these suggestions to be.
 - (a) Parents should not allow their children to read such comics.
 - (b) Try to cultivate interest in other kinds of reading matter.
 - (c) The sale of harmful comics should be prohibited.
 - (d) See that children can get the better comics.

- 7. Reasons for the training of teachers:
 - (a) A teacher must acquire efficient techniques of teaching his subject.
 - (b) A teacher must know how to control children.
 - (c) A teacher must learn to understand children's needs.
 - (d) A teacher must understand how to develop children's interest in their studies.
- 8. Corporal punishment. The majority of teachers are not in favour of the prohibition of corporal punishment in schools. Here are some of the arguments in favour of its retention. Indicate as before how good you feel each of these particular arguments to be.
 - (a) Some children will not respond to any other form of discipline.
 - (b) No other type of punishment is over so quickly or leaves so little resentment.
 - (c) Corporal punishment is an emergency measure to be followed by more constructive treatment.
 - (d) The attitude of society to corporal punishment can only be altered gradually.
- 9. Reasons justifying the cost of special schools. It costs much more to educate handicapped children, such as the educationally sub-normal, in special schools than it does to educate normal children in ordinary schools. Here are some of the reasons why the cost of special schools is thought to be justified. Indicate as before how good you feel each of these reasons to be.
 - (a) It is only fair that a child unfortunate enough to suffer from a handicap should be compensated by special educational treatment.
 - (b) Handicapped children, like other children, should have the education their individual needs require.
 - (c) Handicapped children can be very troublesome in ordinary schools.
 - (d) The training provided may prevent the handicapped from becoming a charge upon society later.
- 10. Some arguments in favour of secondary technical education have been as follows. Please indicate as before how good you feel each of these arguments to be.
 - (a) A technical school training gives a boy or girl a good start in the competition for jobs.
 - (b) With some children the best approach to general education is through their technical interests.
 - (c) Technical education is a good investment for an industrial country.
 - (d) His future work is naturally one of the main interests of an adolescent.

If you wish to add to the answers you have given, please use the space provided on the back of the answer-sheet.

SURVEY OF OPINIONS ABOUT EDUCATION

Constructed by R. A. C. Oliver, University of Manchester

You are invited to give your opinions about a number of educational questions which are set out in the following pages. As the questions are matters of opinion, there are no "right" or "wrong" answers: you will be asked to choose the answer you prefer from a number of alternatives. Please answer every question. There is no time limit, but you are advised not to spend a long time considering each question. Space is available on the back of the answer-sheet for you to use if you want to add anything to the answers you have given.

Please give your own frank opinion. Answer on the answer-sheet only after writing your name etc. on it.

PART I

A number of debatable opinions about education are expressed in the following statements. You are asked to indicate whether on the whole you agree or disagree with each of these opinions. Five alternative answers are suggested—STRONGLY AGREE, AGREE, NO OPINION, DISAGREE, STRONGLY DISAGREE, and on the answer-sheet there are five boxes corresponding to these answers for each question. Please indicate your own attitude by placing an X in the appropriate box on the answer-sheet. Be sure to indicate in one of these five ways your opinion about each of these statements. Should you wish to qualify the answers you have given, you will find a space in which you may write on the back of the answer-sheet.

- 1. The time to begin reading lessons is when the children feel the need for them.
- 2. Direct moral instruction does little to improve children's characters.
- 3. History should make children familiar with the great figures of the past.
- 4. Schools should teach Social Studies rather than History or Geography.
- 5. Naturalness is more important than good manners in children.
- 6. Character training is impossible if there is no final standard of right or wrong.
- 7. You cannot expect children to write good English unless they have a good foundation in grammar.
- 8. The teacher should not stand in the way of a child's efforts to learn in his own fashion.

TABLE 1. SCORING OF N ITEMS

Item	F	acto	rial	Sco	ring	Li	kert	Sco	ring		
Part I 2 3 4 5 6 7 8 .	9379337	7 5 6 8 5 5 6	6 7 5 7 5 6 5	6 8 5 7 6 4	3 9 4 4 8 8 3	5 1 5 5 1 1 5	4 2 4 4 2 2 4	3	2 4 2 2 4 4 2	1	
Part II 11	9	7	7	5	3	5	4	3	2	1	
Part III 4c 4d	2	4.4	5 5	6	8 8	1	2 2	3	4 4	5	

Maximum N score: Factorial scoring: 82 Likert scoring: 50

TABLE 2. SCORING OF R ITEMS

Item	F	acto	rial	Sco	ring			Like	rt S	cori	ng	
Part I 1 Part II 2 3 4 5 6 7 8 9 11 Part III 8a	7 4778898979 3	7 5556677557 5	6 5535556547 6	5 6424445535 7	4 7 3 1		5 1555555555 1	4 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3 3 3 3 3 3 3 3 3 3 3 3	2 4 2 2 2 2 2 2 2 2 2 4	1 5 1 1 1 1 1 1 1 5	

Maximum R score: Factorial scoring, 93. Likert scoring, 60.

TABLE 3. SCORING OF T ITEMS

Item	Factorial Scoring	Likert Scoring		
Part III 1c 2b 2d 3b 4c 4d 5c 6a 6c 7a 8a 9c 10a 10c	9909777889907890789677966856685668566779678990789907890	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 3 3 4 5 1 2 3 5 1 2 3 5 1 2 3 5 1 2 3 5 1 2 3 5 1 2 3 5 1 3 5		

المسترا	التربيسية	الم الماعات
بانجل]	بام

يهدف هذا البحث الى رفع كاية المدرس والنهوس يستوى التدريس سأكون شاك لساهتك برأيك في هذه الدراسة -

) 19 1K 41 المطلوب منك أن تزودنا بالبيانات التاليه برضع علامة (الناسبة أو تكلة المهارة الناقصة .

ملحوظة هذه النيانات ستحاط بالسرية الكاملة وتستخدم فقط لاغراض البحت .

(۲۰ نمانوق) (11_10) (15-1.) ٠. ج 7 L

.. ç. ٦ ١

أمام أحدى التصنيفات التي تتبع لها البدرسة حانظ انظ کنا ک **Y**24 ₹. ξ, المرحلة الابتدائيه في مدرسة الجهة التي درست بها : مع علا مة ب - الموطلة الثانويه في مدرسة

مانط جـ الرحلة الجامسه في جامعة

دراسات اجتماعية رياضيات لغات غيرها مع ذكرها ţ F Po de بعدراسه الحالية : مضوع الدراسة : الدراسة العالبة 1

الشهادة الجامعي التي سبق العمول طيها : لم احمل بعد _ بكالوريسون لشهادة الجامع _ دبلسوم ا مدون منتظم يدة الدراسة الحالية: ٤ ستوات - سنتان - سنة ولاحدة 1 I

هدة الخبرة كندرس منتظم : لم يسبق لي التدريس - سنة واحدة - سنتين الي اربع سنوات الخبرة كندرس منتظم : لم سنوات فأكر . الشهادة التي تسمى العصول عليها / بكالوريون-ليسانس - دبلوم ماجستور 1.

نوع البدرسة الثانويه التي تخرجت شها : مدارس حكومية عامة - مدارس خامة نقط غداون لفات

١١ ـ مكل المدرسة الثانوي التي تغرجت شها ٤ مداون مغتلطة - ينون نقط - ينات نقط في القت الحالي ٥٠٠٠ قبل النماش ٥٠٠٠ ال مينة الاي ال 117

في القت الحالي ٠٠٠٠ قبل السنواج ٠٠٠٠٠

ب-مطنة الام

1_ أهداف هذه الدراسـة:

تهدف هذه الدراسة أساسا الو التعرف واكتشاف اتجاهات النابر نحو المهن الفائسة التاليه تحتوى على عشرين مهنة يشغلها خريجى الجامعات والمعاهد العاليا رجا ترتيب هذه المهن ترتيبا تنازليا مبتدئا بالوظيفة التى تحتل المركز الاعلى من وجهة نظرك الخاص وضع رقم (١) امام الوظيفة التى تعتقد انها تحتل المركز الاعلى ثم رقسم (٢) امام الوظيفة التى تعتقد انها تليها في المركز وهكذا تنازليا حتى تصل الى رقم (٢٠) المهنة التى تعتقد انها تحتل المركز الادنى في الترتيب و

فائسة المهسن

رقم		رقم		
• •	۱۱_ صیدلی	• •	محاسب	_1
• •	۱۲ــ محامی	• •	مهند س زرای	_٢
• •	١٣ ـ رئيسة معرضات (معهد التمريض	• •	ضابسط	_٣
	العالـــــ)			
• •	۱۱ـ مترجـم	●, ●	طبيب أسنان	_{1
• •	۱۵ ـ طبیب بشری	. • •	صحفسي	_0
• •	١٦ ـ مذيـــع	• •	موظف اد اری	_7
• •	۱۷ ـ مذرس ابتدائی	• •	جيولوجسي	Y
• •	۱۸ ـ مدرس جامعة	• •	مهنسد س	_
• •	۱۹ _ امین مکستبسه	• •	اخصائي اجتماعي	_1
• •	۲۰ طبیب بیطری	• •	مدرس ثانوی	_1.

٢ من القائمة السابقة اذكر خمس مهن تعتقد انها تأخذ المرتب الاعلى في السنه الاولى من العمل - ضع أولا المهنة التي تعتقد انها تأخذ اعلى مرتب ثم ثانيا المهنية التي تليها في المرتب وهكذا الى أن تصل الى المهنة الخامسة في المرتب .

الاولىسى : ••• الثانيسسه : •••

الثالثـــه: •••

الرابعـــه: ٠٠٠

الخاســه: ٠٠٠

سن نفس القائمة اختر حسر مهن تعتقد أنها تعطى اكبر قدر من الاشباع الشخسى
 الشعور بالرنا والارتياح) ورتب هذه الوظائف ترتيبا تنازليا •

الأولىسى : ٠٠٠

الثانيـــه: ٠٠٠

الثالث... : • • •

الرابعـــه: ٠٠٠

الخامسة : •••

١٤ اختر ايضا من القائمة خمسة مهن تعتقد انها تعطى الفرد الفرصة لاستخدام كــل
 ما لديم من قدرات ومهارات ورتبها تنازليا •

الاولىسى ٠٠٠٠

الثانيسه ٠٠٠٠

الثالث ...

الرابعية ٠٠٠٠

الخامسه ٠٠٠٠

ه_ من القائمة اختر خمس وظائف تعتقد انها تعود على المجتمع باكثر فائدة ورتبها تنازليا •

الاولى ٠٠٠٠

الثانيم ٠٠٠٠

الثالث

الرابعه

الخامسه ٠٠٠٠

1_ كيف ينظر الى مهنة التدريس عامة في مجتمعنا وهل تحتل مكانة عاليه في الرأى المام رجاء ترضيح اجابتك برضع علامة (×) على احدى التصنيفات التالية :

التدريس ينظر اليه على انسه

مرکز مشاز

مرکز جیسد

مركز متوسط

مركز افل من المتوسط

مركز منخفسض

لا أعرف كيف ينظر الى مهنة التدريس •

٧_ بالنظر الى المراحل التاليه للتدريس فى نظامنا التعليمى رضح ما تفضله بالترتيب للمرحلة التى تحب أن تقوم بالتدريس فيها بوضع رقم (١) امام التفضيل الأوليب للتدريس ورقم (٢) امام التفضيل الثانى وهكذا الى رقم (٦) امام المرحلة الاخيسرة فى اختيارك٠

التفضيل بالترتيب	المراحل التعليبية
••	١- تعليم الكبار
• •	۲۔ تعلیثم فسنی
• •	٣- تعاليم عاليتي
• •	٤- تعاليم في المرحلة الثانويه و
• •	٥- تعاليم في المرحلة الابتدائيه
• •	الت تعليم في دور العضائيية

٨ـ اى مرحلة من مراحل التعليم التاليه ترى انها تحوز على عدير مرتفع او منخفــــن من الناس في مجتمعنا

وضع اجابتك بوضع علامة واحدة امام كل مرحلة من المراحل التي تبين هذا التقديسر المراحل التعليمية تحوز على تقدير متأز _ جيد _ متوسط _ اقل من المتوسط _ منخفض

١_ تعليم الكبار

٢_ تعليم في المرحلة الابتدائيه
 ٣_ تعليم عالى

تعلیم فنی

هـ تعليم في المرحلة الثانويه
 ٦ـ تعليم في د ور الحضائة

 1 وضع لنا برأ يك الشخص ماينبغى ان تكون عليه نظرة الناس الى مهنة الدريس بوضيع علامة واحدة على احدى التصنيفات التاليه •

مرکز متاز	يجب أن ينظر ألى مهنة التدريس على أنها			_[
مرکز جید	44	66	44	44	_ - -
مركز متوسط	44	66	66	66	>
اقل من المتوسط	"	44	44	44	_ 3
منخفض	44	44	66	66	&

دراسات للآراء التربويسة

على الصفحات التالية بعض الاسئلة التربوية ، المطلوب منك أن تعطى رأيك فيها ، بما أن هذه الاسئلة مجرد آراء، ومن ثم لا يوجد خطأ أو صواب، المطلوب منك اختيار الاجابة التي تغضلها من عدد من الاجابات الاختيارية.

طويلا في التغكير في كل اجابة ، اذا أردت اضافة شيئا للاجابة التي أعطيتها يكنك رجاه الاجابة على كل سوال ، لا يوجد وفت معين ولكن من الافضل الا تفضى وقتسا استخدام الساحة الخاليسة في ظهر ورفسة الاجابسة

اعط رأيك بصراحة ، استخدم ورقة الاجابة نقط بعد كتابة اسمك والبيانات المطلوبة

الجسز الاول

اجابات اختيارية مقترحة أوافق بشدة ، أوافق ، ليس لي رأى ممين ، أعارض ، أعارض بشده . منك أن تبين بصفة عامة اذا كنت توافق أو تعارض لكل رأى من هذه الاراء ه أمامك خمس لكل سواال سنجد في ورقة الاجابة خمس مهمات مقابلة للاجابات الغمس المفترحة عليك في العبارات التالية عدد من الارآاء التربوية التي يختلف الناس بشأنها ، المطلس الرجا توضيح رأيك الشخصى بوضع علامة (×) في السريح المناسب في ورقة الاجابة.

تأكد أنك رضحت رأيك الخاص باختيار اجابة واحدة من الاجابات الخمسة المغترحة ، في حالة فيتك شرح الاجابة التي أعطيتها في هذا الجز ويمكنك استخدام الساحــة الخاليم في ظهر ورضة الاجابسة .

- يبدأ الاطفال في فواح الدروور عندما يشعرون بحاجتهم اليها
- التعليمات الاخلافية الساشرة تعمل قليلا في تحسين شخصيات الاطفال.
- يجب على المدارد أن تدرد الدراسات الاجتماعية الثر من التاريخ والجفرافيا . يجب على التاريخ أن يجمل الاطفال ملمين بالشخصيات العظيمة في الماضي .
- ترك الطفل على فطرته اكثر أهمية من تلقينه المادات الحسسنه
- ٧ _ لا يكنك أن تتوفع من الاطفال كتابة المربية الصحيحة أذا لم يكن لديهم أسام، جيسه تكون التربية الخلفية مستحيلة اذا لم يكن هناك معيار نهائي للصواب أو الخطاء

يجب على المدرورالا يقف في طريق مجهودات الطفل في التعليم بطريقته الخاصة ه في القواعد

الجسز والكان

فيه ، والبعض الآخر غير مؤوب فيه ، وقد تشعر أيضا انك عاجز عن التعبيس برأيسك أمامك في هذا الجزوبعض التغييرات التربوية المقترحة والمطلوب منك اعطهاه رأيك الخاص بالنسبة لهذه التغييرات ، فقد تشعر أن بعض هذه التغيرات مؤسوب في احد الاتجاهين السابقيسن •

مندم اليك خدر، اجابات اختيارية مقترحة ، موفوب جدا ، موفوب الى حد سا ليس لى رأى معين ، غير مرغوب ، غير مرغوب بالمرة ،

لكل سوال سنجد في ورقمة الأجابة خمد مربمات غابلة للأجابات الخمسية

الرجا التفكير في كل تديير من التغيرات المشار اليها ، وضع رأيك فيه

في حالة فيتك شرح الاجابة التي اعطيتها في هذا الجزء يكتك استخدام الساحه بضع علامسة (×) في المربع المناسب في ورقة الاجابسة. تأكسه أنك وضحت رأيك الخاص باختيار <u>اجابة واحدة</u> من الاجابات الخمس الخالية في ظهر ورقة الاجابسة

اعطا التلاميذ فليل من الوجبات الغذائيه المدرسية مجانسا •

رفع سن التعليسم الاجسباري حتى ١٦ سنة

زيادة الاهتمام بالتربيسة نحو التفاهم المالسي . 1

زيادة الانفاق على تعليسم الكبسار ļ

تخصيص برامج مدرسية في تنشئسة الاطُّفال • 1

زيادة ميزانية أدوات اللعب في المدارس الابتدائيه 1

جمل نظام المدارس الشاملسة نظاما عاديا للمدارس الثانوية

I >

نيادة عدد مدارس العضائسة .

تخصيص نسبة اعلى من الدخل القوس للصرف على التربية والتمليم • ١٠ - خفض عدد الثلامية في فصل المدارس الابتدائية، Ļ

١١ _ التغليسل من المغاب البدنسي في المدارس

الجرز الثاليث

فيما يلى اربع اسباب يمكن ان يكون احداها او بعضها هو السبب في تدريسس، اللغة العربيه في المدارس، فقد تشعر بوجود أسباب اخرى أفضل من الاسباب الاربعة الفترحسة المفترحه عليك ولكن المطلوب منك ان تضع في الاعتبار هذه الاسباب الاربعة الفترحساء عليك فقط ، قد تشعر ان بعض هذه الاسباب أفضل من الآخرين ، وقد تشعر ايضلسلاق ،

مقدم اليك خمس اجابات اختيارية لكل سبب من الاسباب الاربعة .

صحيح للغاية صحيحا صحيح الى حد ما ليس لى رأى معين خطأ امامك في ورقة الاجابة مربعات مقابلة للاجابات الخمسة المقترحة والاجابات الخمسة المكنة للتعبير عن رأيك ليست تماما مثل الاجابات في الجزو الاول والثانسي و

- 1_ أسباب تدريس اللغة العربية في المدارس -
- أ_ انها تساعد الاطفال التعبير عن أنفسهم بحرية تلقائيه •
- ب. انها تنبي الشعور بالاستمتاع في استخدام اللغية •
- جـ الشخص الذي يخطى عنى اللغة العربية بعد غيرك عنى مهنته و
- د _ يجب على الاطفال اكتساب المهارة في الهجا والقواعد واستخدام علاميات الترفيسم والفواصيل
 - ٢_ أسباب تدريس العلسوم
 - أ ميل الطغل للاكتشاف يعد نقطة بداية طيبه لتطوير ميولمه
 - ب_ يتطلب التقدم المناعي عمال مجهزين بالطرق العلميه .
 - جـ دراسة العلوم تشبع للفرد ميوله للاكتشاف العقلس ٠
 - د ... يقدم التدريب العلى امكانيات جديدة للنجاح في المهنسة .
- التربية من اجل التفاهم العالمي يمكن ان تتحقق بالطرق الاربعة الاتية وضع كسا سبق مدى احساسك بصحة كل من هذه الطرق.
 - أ_ احترام الفرد لبلده يعتبر أحسن أساس لاتجاهاته نحو البلاد الاخرى
 - ب دراسة الأمور الدولية يجب أن يوضع أى الدول صديقة لنسا •
- جـ الاتصال بين الناس من الدول المختلفه يجعلهم يشعرون انهم متساوون في
 - د _ معرفتناً بانجازات الدول الأخرى يولد الاحترام لمسم
 - ٤_ أسباب دراسة التوجيهات الدينيسه
 - أ- انها تنمي الاحساس بالقيم الروحية •
 - ب المعرفة بوجود آله توافق حاجة الطفل للاحساس العميق بالايمان
 - ج ـ انها تلقن الاحساس بالواجب
 - د ... انها تساعد على رفاية الاطفال من الاعمال الخاطئة ·

أسباب استبعاد الدهلية من العدارس

لانه من الافضل أن تهدف ألى أتجأه المعرفة الحقة والاتجاه المتزن ف

يجب أن يكون التلاميذ احرارا في تكوين آرائهسم الشخصيه ١.

تمليم الفرد واجباته نحو الدولة سفى يكون متأخسرا الدعايسة من المحتمل أن تقع في أيدى غير سليمه ه 1

مشكلة الهزليات (المجلات والشراقط المصورة) :-

يقال أن بعض المزليات ضارة بالاطفال وومن ثم افترحت بعض الطرق لملاج هذه المشكلة أفترض أن بعضها ضار وضع كما سبق مدى احساسك بصحة كل اقتسراح من الافتراحات التاليسيم:

يجب على الاباء الا يسمحوا لاولاد هم بقواء أى نوع من الهزليات، محاولة توجيه الاعتمام إلى موضوعات أخرى في القسراح 4. L

ج - يجب منع بيع الهزليات الفسارة،

العمل على المكانية تزويد الاطفال باحسن الهزليات،

٧- أسباب تدريب المدرسسسين

يجبعلى المدرس اكتساب الطرق الغمالة في يدريس مادنه

يجب على العدرس أن يعرف كيف يضبط الاطفسال. **.**{

يجب على المدرس أن يفهم كيف ينهي اهتمامات الاطفال لدراساتههم يجب على المدرس أن يتعلم حتى يفهم حاجات الاطفال . ! .\

العقب البدنسي :-**!**

العجع المويدة لاستبغائه رضح كما سبق مدى احساسك بصحة كل حجة من الحجع غالبية المدرسين غير مشجمين تحريم المغاب البدني في المدارس وامامك بمه الفدية اليسك

لير. هناك نوع آخر من العقاب ينتهى اثره بسرعة ءاو يترك اثرا قليلا مسن بعض الاطفال لن يستجيبوا لأى نوع آخر من التأديب، K ·ľ

انجاه المجتمع نحو العفاب الههدئي يكن أن يتغير نفط تدريجي العقاب البدني وسيلة موافته يمكن أن يتبعمها علاج بنائسي

اسباب مبررات الانفاق على المدارس النخاصة (نوى الماهات) :-

لهذه المدارس ، وضع كما سبق مدى احساسك بصحة كل سبب من الاسباب الاسوياء في المدارس المادية ، الملك بعض الاسباب التي تبرر الانفاق على يتكلف تمليم الاطفال المعرفين في المدارس الخاصة اكثر من تعليم الاطف

انه من العدل أن يعوض الطفل العموق عن عجزه الذي يماني من وف لك بممالجة تربوية خاصه

يجب أن يحصل الاطفال المعوفين على التربية التي تتطلبها حاجاتهم الغوديسة مثلهم في ذلك الاطفال الآخريسن. 1.

من المكن أن يسبب الاطفال المعرفين ازعاجا في المدارم العاديم. من الجائز أن تساعد التدريبات المعدة للمعرفين على الا يصبحوا عبد على المجتسع.

١٠ - فيما يلى بعض الحجسج المويدة للتعليم المهنى ، رجاء توضيح مدى احساسك بمحة كل حجة من الحجج الاتيسم :-

يمنع التدريب المهني المدرسي الولد أو البنت فرصة حسنة في التناف من أجل الوظائسة .

لسدى بعض الاطفال تعد أفضل الطبق للتعليم نابعة من ميولهم المهنيه

من الطبيعي أن يكون المستقبسل المهني للمراهق أحد اهتمامات. يعد التعليسم الفني وسيلسة مثمرة للدول الصناعيسسة

الحوظات : -

تخص الجز والأول ، والجز والثاني على الأضافات التي تختص الجز والثاني " في الخالية في ظهر ووقة الاجابة ، مع ملاحظة كتابة الجزء الابل على الاضافات التي اذا أردت أن تضف شيئا للاجابة التي أعطيتها ، يكنك استخدام الساحة والجز • الثالث على الاضافات التي تختص الجز • الثالث.

	الجنس SEX	مــا، ـــــ AGE	التا ريخ DATE	
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APPENDIX C

Chapter V

The Preliminary Inquiry

Table 1: Classification of the Subjects by Sex

Sex	No of Subjects 74
men	5 0
women	44

Table 2: Classification of the Subjects by Age

Age Categories	No of Subjects
20–24	12
25 - 29	43
30 and over	19

Table 3: Classification of the Subjects by Place of Birth

Birth Categories	No of Subjects 74
Large City	28
Small City	23
Towns	12
Not Stated	11

Table 4: Classification of the Subjects by Religious Categories

Religious Categories	No of Subjects 74
Catholic	18
Protestant	34
No Religion	18 ·
Not Stated	4

Table 5: Classification of the Subjects by Their Main Subject of Study

Subject of Study Categories	No of Subjects 74
Arts	55
Science	12
Crafts	7

Table 6: Classification of the Subjects by Their Length of Course

Length of Course	Groups of the Present Study	No of Subjects 74
Four Year	College of Ed.	12
One Year	P.G.C.E. group	36
One Year	Diploma group	26

Table 7: Classification of the Subjects by Length of Experience

Experience Categories	No of Subjects 74
No Experience	45
One Year	2
Two to Four Years	1
Five Years and More	23
Not Stated	3

Table 8: Classification of the Subjects by Father's Occupation

Occupational Categories (Registrar General's Classification)	No of Subjects 74
Class I	31
Class II	23
Class III	15
Class IV	2
Class V	1
Not Stated	2

Table 9: Classification of the Subjects by Mother's Occupation

Occupational Categories	No of Sample 74
Class I	12
Class II	24
Class III	9
Class IV	9
Class V	15
Not Stated	5 *

Table 10: The Distribution of Rankings of Occupations According to Status by the English Pilot Sample

Occupations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.Doctor	6	33	18	10	1	4	1	-	1	-	-	_	_	-	-	-	-	_	-	-
2.Lawyer	24	23	7	4	3	1	1	1	1	3	2	-	1	1	-	1	_	1	-	-
3.University Teacher	6	5	7	8	14	3	5	6	6	2	4	2	-	2	3	2	-	-	-	_
4.Architect	3	5	11	12	6	8	5	3	1	6	3	1	1	2	2	3	²	-	-	-
5.Dentist	-	3	13	7	6	11	10	2	5	7	2	2	-	1	-	1	1	-	_	1
6.Prof. Eng.	-	2	3	7	6	3	6	8	8	7	3	5	2	4	5	3	1	-	-	-
7.Accountant	1	3	1	6	7	7	6	9	6	2	2	3	1	1	2	1	5	4	2	3
8.Radio/TV Announcer	3	3	2	2	6	5	5	4	6	3	3	4	7	2	3	3	3	1	4	1
9.Banker	-	3	5	3	4	4	10	5	4	3	7	3	2	1	4	6	3	1	1	3
10.Civil Servant	1	1	2	2	7	4	1	6	9	4	1	5	9	4	3	4	6	7	-	1
11.Pharmacist	_	2	3	2	2	3	4	8	6	2	8	7	4	3	2	6	5	3	1	1
12.Sec. School Teacher	1	-	-	3	1	2	5	7	3	9	-	2	6	10	8	6	1	2	2	-
13.Agricultural Engineer	2	2	-	2	2	3	3	5	6	4	6	2	7	5	6	4	6	1	4	3
14.Army Officer	-	2	1	1	1	5	5	4	2	6	8	2	3	3	3	5	4	6	1	11
15. Journalist	_	-	3	2	5	1	5	2	2	2	6	9	10	5	5	4	2	6	4	6
16.Primary School Teacher	-	-	-	3	2	1	1	6	2	3	3	3	3	7	11	2	6	4	10	6
17.Nurse	-	1	3	2	2	-	2	1	1	3	2	5	1	5	4	3	6	12	9	10
18.Social Worker	-	-	-	<u>-</u>	2	1	-	-	2	3	5	7	4	8	4	4	6	10	10	7
19.Management Trainee	-	-	-	_	_	-	-	1	2	2	6	5	4	2	6	9	4	11	13	7
20.Librarian] -	_	_	_	<u> </u>	-	-	2	-	2	1	2	3	9	5	4	14	8	10	12

Table 11: The Distribution of Rankings of Occupations in Five Categories According to Salary

	Occupations	1	2	3	4	5	Weighted Scores	R
1	Accountant	2	4	5	4	4	53	10
2	Agricultural Engineer	-	1	3	5	1	24	13
3	Architect	5	5	4	5	2	69	9
4	Army Officer	8	5	4	4	6	86	6
5	Banker	1	-	-	8	5	26	12
6	Dentist	5	7	7	5	6	90	5
7	Doctor	8	14	5	7	8	133	2
8	Engineer	9	8	6	7	7	116	3
9	Civil Servant	3	6	7	7	3	77	8
10	Lawyer	8	11	12	4	6	134	1
11	Journalist	-	-	1	-	-	3	18
12	Librarian	-	_ '	-	-	-	-	19
13	Management Trainee	1	2	-	3	3	22	14
14	Primary School Teacher	-	-	-	-	-	-	19
15	Pharmacist	5	3	3	1	4	52	11
16	Radio/TV Producer	14	1	7	3	7	108	4
17	Secondary Sch. Teacher	-	-	3	3	1	16	15
18	Social Worker	-	-	-	3	-	6	17
19	Nurse-Sister	-	2	1	-	-	11	16
20	University Teacher	4	5	5	7	9	78	7

Table 12: The Distribution of Rankings According to Preferences for a Particular Level of Teaching

Stages of Education	First	Second	Third	Fourth	Fifth	Sixth	Non Responded
Nursery Education	-	6	9	5	8	44	2
Primary Education	17	10	4	9	30	2	2
Secondary Education	40	10	11	4	1	6	2
Further Education	4	27	16	11	9	5	2
Higher Education	6	11	17	22	10	6	2
Adult Education	5	8	15	21	13	10	2

Table 13: The Distribution of the Rankings of Different Levels of
Teaching According to Public Esteem

	Excellent	Good	Average	Below Average	Low	Weighted Scores	Total of Samples
1 Nursery Education	2	7	32	25	. 7	191	73
2 Primary Education	3	1 5	46	9	0	231	73
3 Secondary Education	1	31	34	6	1	274	73
4 Higher Education	32	31	8	2	0	312	73
5 Adult Education	6	27	28	9	2	228	72
6 Further Education	14	29	21	7	2	265	73

Figure 1: Distribution of Scores of English Pilot Sample on the N Scale, using Likert Scoring

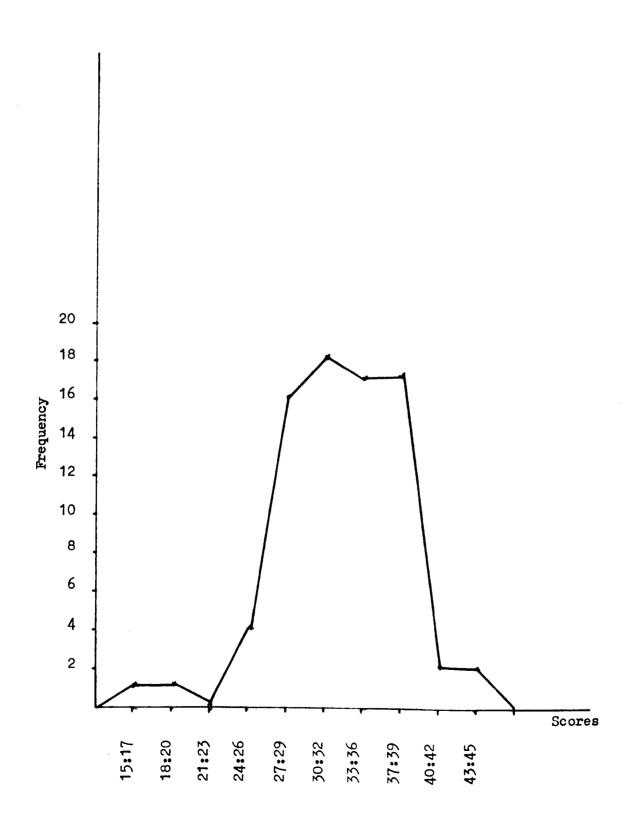


Figure 2: The Distribution of Scores of English Pilot Sample on the R Scale, using Likert Scoring

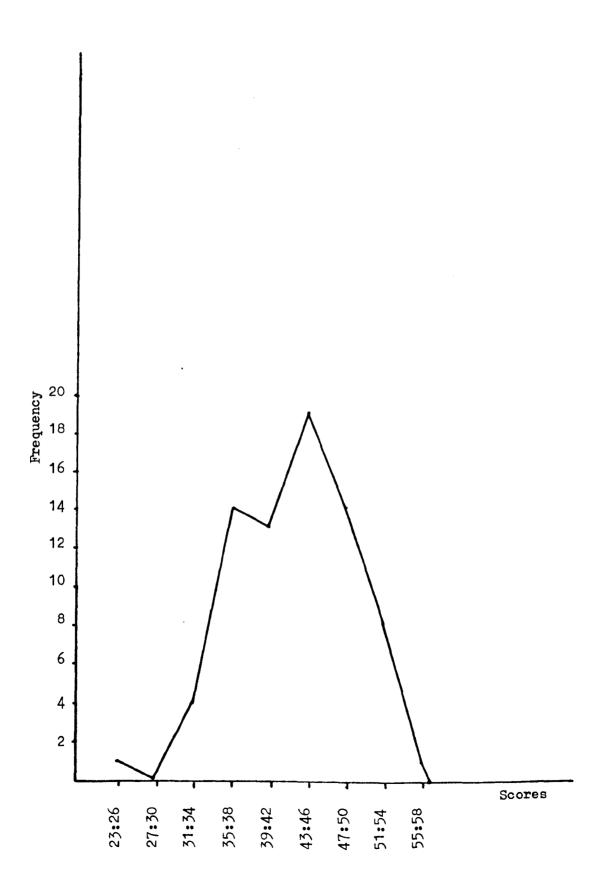
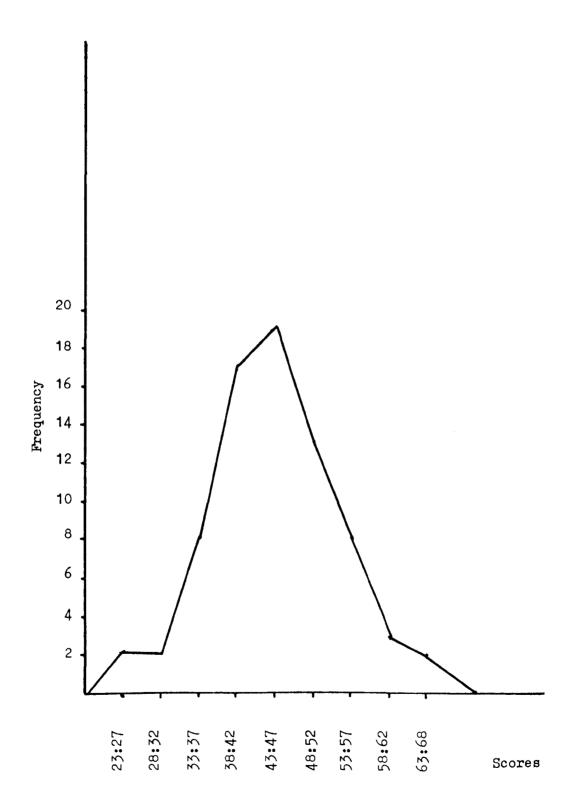


Figure 3: The Distribution of Scores of the English Pilot Sample on the T Scale, using Likert Scoring



APPENDIX D

Chapter VI

Description of Testing

Table 1: Classification of English Subjects by Religion

Religious Groups	Number Total 300	Per cent
Catholic	36	12.0
Protestant	197	65•7
No Religion	47	15.7
Jewish	6	2.0
Yoga	2	0.7
Orthodox	8	2.6
Not Stated	4	1.3
Total	300	100

<u>Table 2: Classification of English Subjects by Place of Primary Education</u>

Place of Primary Education	Number	Per cent
City Town Village	71 155 74	23•7 51•7 24•6
Total	300	100

Table 3: Classification of English Subjects by Place of Secondary
Education

Place of Secondary Education	Number	Per cent
City	74	24.7
Town	210	70.0
Village	14	4•7
Not Stated	2	0. 6
Total	300	100

<u>Table 4: Classification of English Subjects by the Qualifications Obtained</u>

Qualification already Obtained	Number	Per cent
Non graduate	126	42.0
Certificate of Education	66	22.0
B.A.	55	18.3
B.Sc.	26	8.7
Diploma	22	7•3
Master's degree	2	0.7
Not stated	3	1.0
Total	300	100

Table 5: Classification of English Subjects by Length of Experience

Length of Experience	Number	Per cent
No experience	261	87.0
One year	5	1.7
Two to four years	13	4•3
Five years and over	21	7.0
Total	300	100

<u>Table 6: Classification of English Respondents by Type of Secondary School</u>

Type of Secondary Education	Number	Per cent
Independent	20	6.7
Comprehensive	81	27.0
Secondary Modern	30	10.0
Grammar	145	48•3
Grant aided	16	5•3
Technical	6	2.0
Not stated	2	0.7
Total	300	100

Table 7: Classification of English Subjects by Type of School (single-sex or mixed)

Type of School	Number	Per cent
Co-educational	171	57.0
Boys' school	38	12.7
Girls' school	90	30.0
Not stated	1	0.3
Total	300	100

Table 8: Classification of English Respondents by Mother's Occupation

Mother's Occupation	Number	Per Cent
Class I	49	16.3
Class II	54	18.0
Class III	81	27.0
Class IV	38	12.7
Class V	10	3.3
Not stated	68	22.7
Total	300	100

Table 9: Classification of Egyptian Subjects by Religion

Religion	Number	Per cent
Islamic Christian	420 80	84 1 6
Total	500	100

<u>Table 10:</u> <u>Classification of Egyptian Subjects by Place of Primary Education</u>

Place of Primary Education	Number	Per cent
Small town	106	21.2
Big town	74	14.8
City	320	64.0
Total	500	100

<u>Table 11:</u> <u>Classification of Egyptian Subjects by Place of Secondary</u> Education

Place of Secondary Education	Number	Per cent
Small towns' group	42	8.4
Big towns' group	120	24.0
Cities' group	338	67.6
Total	500	100

<u>Table 12:</u> <u>Classification of Egyptian Subjects by Type of Secondary School</u>

Type of Secondary Education	Number	Per cent
Public school	439	87.8
Independent	30	6.0
Language school	27	5•4
Not stated	4	0.8
Total	500	10 0

Table 13: Classification of Egyptian Subjects by Type of School (mixed or single-sex)

Type of School	Number	Per cent
Co-educational	74	14.8
Boys' school	122	24•4
Girls' school	302	60.4
Not stated	2	0.4
Total	500	100

Table 14: Classification of Egyptian Subjects by Qualifications already
Obtained

Qualification Obtained	Number	Per cent
Non-qualification group	419	83.8
B.Sc. group	48	9.6
B.A. group	33	6.6
Total	500	100

Table 15: Classification of Egyptian Subjects by Length of Experience

Length of Experience	Number	Per cent
No experience	419	83.8
One Year	15	3.0
2-4 years	15	3.0
5 and over	51	10.2
Total	500	100

APPENDIX E

Chapter VII

Factor Analysis of the English
and Egyptian Responses to the
Oliver Questionnaire

Table 1: The English Pilot Sample Responses on the Oliver Questionnaire, the Unrecoded and Recoded Data

Table 1: (continued)

Unrecoded Data

v	1	2 like	3 rt type	4 score	5	0	1	2 like	3 ct type	4 score	5
125 126 127 128 129 130 131 132	28 49 5 9 7 22 7	23 17 11 14 22 29 27 19	13 4 18 20 26 15 26 20	3 1 7 7 4 3 4 8	7 33 24 15 5 10	1	28 89 22 10	23 25 23 29 29 29 34 19	23 27 26 23 26 20	41 24 19 14 25	33

Table 2: The English Main Sample Responses on the Oliver Questionnaire,
The Unrecoded and Recoded Data

Unrecoded Data

											·
V	1	2 likert	3 type	4 score	5	0	1	2 like	3 rt type	4 score	5
74 77 76 77 78 81 81 81 81 81 81 81 81 81 81 81 81 81	15 15 122 130 92 27 20 150 52 108 164 130 228 227 61 34 60 32	76 137 62 1136 56 8 11 90 2 11 11 90 11 11 90 11 11 90 11 11 11 11 11 11 11 11 11 11 11 11 11	18125722956447827644615615678876755455481634543 10584876752759956435546163461567584876755475643555261634543	149 149 149 149 149 149 149 149 149 149	36 20 21 31 31 40 53 7 32 28 11 11 32 22 11 11 29 11 11 29 11 11 11 11 11 11 11 11 11 11 11 11 11		21 18 8 36 41 22 35 53 47 66 68 95 15 69 15 16 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	94 127 137 136 136 136 136 136 136 136 136 136 136	149 137 134 75 129 106 107 107 105 107 105 107 107 107 107 107 107 107 107 107 107	36 20 21 120 160 22 11 137 24 32 33 40 53 89 54 22 43 48 57 41 33 56 77 47 127	31 62 71 15 28 41 26 28 47 81

Table 2: (Continued)

Unrecoded Data

Recoded Data

٧	1	2 liker	3 t type	4 score	5	0	1	2 liker	3 t type	4 score	5
125 126 127 128 129 130 131 132	131 206 30 49 52 96 50 57	95 83 62 75 98 120 123 98	43 5 75 64 103 54 86 84	7 2 28 36 18 19 17 28	24 4 107 76 29 11 24 32		131 206 92 49 52 96 50	95 94 101 175 98 120 123 98	74 107 76 103 84 86 84	47 41 29	32

Table 3: The Egyptian Sample Responses on the Oliver Questionnaire, the Unrecoded and Recoded Data

Unrecoded Data

v	1	2 liker	3 t type	4 score	5	0	1	2 liker	3 t type	4 score	5
 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88	68 73 124 64 9 107 154 152 270 168 160 169 250	146 178 155 125 31 149 117 115 63 110 116 134 87 122 111	17 15 37 56 15 39 26 14 11 12 61 23 7 16 74	90 55 29 78 125 38 43 48 1 30 9 16 1	20 26 2 24 167 14 7 18 2 27 1 5 2 21		68 73 124 64 107 154 152 270 168 160 169 250 196 98	146 178 155 125 149 117 115 77 110 116 178 97 151 111	107 76 68 134 191 75 80 69 71	26 26 24 180	167
89 90 91 92 93 94 95 96 97 98 99 100 101 102 103	269 265 202 172 134 95 61 111 187 210 118 129 238 120 67 96	62 68 32 136 125 121 44 87 116 136 126 73 118 100 151	8 7 3 13 66 102 89 77 31 73 18 82 73 13	4 5 10 17 9 15 37 42 7 3 12 13 8 11 46 16 4	4 2 10 9 13 14 116 3 6 3 8 6 10 9 2 11 0		269 265 292 172 134 95 111 187 210 118 129 238 120 67 96 280	78 82 55 175 125 121 105 87 160 137 136 109 118 100 151 67	88 131 128 77 93 92 109 128 100	115 72 52	
105 106 107 108 109 110 111 112 113 114 115 116 117 120 121 122 123 124 125	280 159 139 153 135 158 132 30 75 121 282 148 197 251 73 48 278	50 112 128 92 131 98 126 70 49 132 55 91 49 144 105 73 68 45 98 132 52	75 68 79 42 77 56 82 69 71 27 41 39 71 73 101 114	11 6 19 21 11 50 6 3 9 7 2 4 3 2 14 35 1 36 1	14 4 17 13 22 115 148 20 23 86 1 63 2 121 170 64 17 2		159 139 153 135 158 132 121 233 112 282 48 197 251 73 63 48 278	188 128 92 131 98 126 100 132 114 132 65 199 150 95 139 998 132 69	80 102 81 91 89 132 75 94 103	115 124 170 64 36	148

Table 3 (continued)

Unrecoded Data

V	1	2 liker	3 t type	4 score	5	0	1	2 liker	3 type	4 score	5
126 127 128 129 130 131 132	200 77 160 83 125 232 93	110 124 99 113 136 88 107	23 81 43 94 65 21 109	4 15 16 29 17 2	10 50 29 28 4 4 18		200 77 160 83 125 232 93	147 124 99 113 136 115	81 88 94 86	65 57 38	

Table 4: The Factor Pattern of the English Pilot Sample, Unrecoded Data, Principal Component, 59 items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	0.40201	0.41671	0.24548	0.22427
VAR	75	0.47850	0.06038	-0.11266	0.36686
VAR	76	-0.34378	0.05700	0.03555	0.08444
VAR	77	0.07513	0.09796	0.41885	0.14749
VAR	78	0.24939	0.06234	-0.14253	0.00093
VAR	79	- 0.38326	-0.13772	0.15484	-0.11274
VAR	80	-0.13419	-0.32192	0.09953	0.20044
VAR	81	-0.04839	0.34516	0.01341	0.03744
VAR	82	-0.00852	-0.34967	0.11336	0.44101
VAR	83	-0.00613	-0.08300	-0.31834	-0.42248
VAR	84	-0.08498	0.42348	-0.31835	-0.06871
VAR	85	-0.06053	0.31618	-0.36473	-0.12921
VAR	86	0.05580	0.58727	-0.18676	0.08178
VAR	87	-0.08087	0.58313	-0.10195	0.25118
VAR	88	0.17670	0.43925	0.03048	-0.08034
VAR	89	-0.21355	0.58436	-0.08670	0.23406
VAR	90	-0.30678	0.41872	- 0.37168	0.16083
VAR	91	-0.21366	0.49573	0.02872	-0.1450 6
VAR	92	0.22124	0.47973	0.14236	-0.05067
VAR	93	-0.33069	-0.08167	-0.08181	-0.13350
VAR	94	-0.47127	0.37137	0.03577	-0.01254
VAR	95	-0.52658	-0.06738	0.31239	0.04622
VAR	96	-0.42283	-0.19351	0.38192	0.04744
VAR	97	-0.21174	0.45302	0.17071	0.11864
VAR	98	-0.45435	-0.17581	0.44460	0.13697
VAR	99	-0.21243	0.46856	0.36946	0.16546
VAR	100	-0.40758	-0.27928	0.28103	0.01861
VAR	101	-0.39286	-0.18518	0.32736	0.16761
VAR	102	-0.14823	0.12643	0.18141	0 . 52 34 8
VAR	103	-0.38374	0.17682	0.04746	-0.24512
VAR	104	-0.46481	0.17926	-0.15298	0.05821
VAR	105	-0.48955	0.08223	0.08165	-0.57428
VAR	106	-0.52526	-0.12902	-0.06589	-0.52731
VAR	107	-0.30739	-0.06855	0.24641	-0.41606
VAR	108	-0.35146	-0.15834	-0.09212	-0.24018
VAR	109	-0.43549	0.02019	-0.26087	-0.03879
VAR	110	-0.18610	-0.03936	0.01364	-0.15457
VAR	111	-0.29038	-0.26449	-0.13818	0.32125
VAR	112	-0.25550	-0.05858	-0.11739	0.16081
VAR	113	-0.17729	-0.04805	0.02270	0.14797
VAR	114	-0.52875	0.17243	0.14057	-0.11402
VAR	115	-0.38551	0.12270	0.23755	0.14723
VAR	116	-0.40601	0.14253	0.01740	0.06307
VAR	117	-0.53557	0.00274	-0.07586	0.29333
VAR	118	-0.45812	-0.15284	-0.18933	0.23774
VAR	119	-0.60621	0.23504	-0.247 69	0.12237
VAR	120	-0.52893	0.17200	-0.32085	0.14158
VAR	121	-0.23497	-0.50708	-0.36748	0.13934
VAR	122	-0.20321	-0.23073	-0.51243	-0.08540
VAR	123	-0.33943	-0.05084	-0.38443	0.13215
VAR	124	-0.04115	0.06397	-0.44116	0.05204

Table 4: (Continued)

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	125	-0.46166	0.13198	0.08424	-0.15927
VAR	126	-0.18982	0.28575	0.41711	-0.29280
VAR	127	-0.39700	-0.22857	-0.17557	0.23285
VAR	128	-0.32322	-0.18314	-0.19911	0.15748
VAR	129	-0.58696	-0.04877	-0.03162	0.18262
VAR	130	-0.47950	0.06937	-0.00483	-0.18126
VAR	131	- 0.45892	-0.12922	0.19494	0.21299
VAR	132	-0.54563	0.03635	0.01100	-0.02148

Table 5: The Factor Pattern of the English Pilot Sample, Recoded Data Principal Component, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	0.25251	-0.51157	-0.10474	0.37707
VAR	75	0.51628	-0.09777	0.39950	0.28389
VAR	76	-0.35616	0.05542	0.07809	0.17773
VAR	77	0.02307	-0.07783	-0.23290	0.31484
VAR	78	0.05997	-0.12785	-0.03925	-0.08988
VAR	79	-0.39891	0.10921	-0.00744	-0.07397
VAR	80	-0.16913	0.17464	-0.13481	0.23390
VAR	81	-0.07717	-0.25829	0.06432	0.06125
VAR	82	0.16334	0.39434	0.09890	0.35164
VAR	83	0.03391	0.13376	0.14198	-0.48962
VAR	84	0.00740	-0.41370	0.27690	-0.16173
VAR	85	-0.12134	-0.33187	0.36088	-0.29194
VAR	86	0.02073	-0.55163	0.30595	0.02423
VAR	87	-0.15825	-0.45692	0.18797	0.16105
VAR	88	0.02418	-0.47851	-0.05612	0.04939
VAR	89	-0.33723	-0.34011	0.11800	0.29950
VAR	90	-0.29241	-0.23390	0.35410	0.06733
VAR	91	-0.34062	- 0.35263	-0.01287	-0.08997
VAR	92	0.18434	-0.4 6558	-0.09390	0.13531
VAR	93	-0.36632	-0.00530	0.14886	-0.18585
VAR	94	-0.48539	-0.36634	0.13193	0.00452
VAR	95	-0.62929	0.09464	-0.38989	0.08211
VAR	96	-0.43861	0.30300	-0.41064	0.20034
VAR	97	-0.33452	-0.35447	0.06086	0.03401
VAR	98	-0.46610	0.22971	-0.31468	0.28837
VAR	99	-0.33869	-0.40042	-0.08666	0.34368
VAR	100	-0.42636	0.36861	-0.25647	0.11137
VAR	101	-0.39038	0.22374	-0.16760	0.21675
VAR	102	-0.08744	0.06618	0.28352	0.37438
VAR	103	-0.43755	-0.13680	0.08645	-0.15813
VAR	104	-0.52332	-0.05134	0.23494	-0.00096
VAR	105	-0.55632	-0.05360	-0.20489	-0.48806
VAR	106	-0.51013	0.17778	-0.08401	-0.55785
VAR	107	-0.22763	0.02300	-0.31280	-0.25857
VAR	108	-0.23393	0.18017	-0.03230	-0.20734
VAR	109	-0.64342		0.28044	-0.07504
VAR	110	-0.25056	-0.06730	-0.01181	-0.01383
VAR	111	-0.25050	0.33951	0.14470	0.27913
VAR	112	-0.21763	0.21615	0.32081	0.12349
VAR	113	0.28071	0.02507	0.26273	0.10680
VAR	114	-0.58927	-0.23200	0.04883	-0.20147
VAR	115	-0.33773	-0.09236	0.04235	0.22225
VAR	117	-0.57268	-0.11641	0.06937	0.22859
VAR	118	-0.38702 0.55868	0.21790 -0.34635	0.34433	0.11288
VAR	119	-0.55868 -0.41750	-0.34635 -0.20128	0.09459 0.18177	0.10411
VAR	120	-0.11374	0.58233	0.18177	-0.05180 -0.10151
VAR	121	-0.08854	0.37419	0.48863	
VAR	122				-0.24880
VAR	123	-0.29907	0.13170	0.37663	-0.01147
VAR	124	0.23900	0.19423	0.38277	-0.06436

Table 5: (Continued)

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	125	-0.50591	0.01319	-0.23602	-0.02538
VAR	126	-0.38673	-0.32591	-0.37605	-0.09557
VAR	127	-0.15574	0.34377	0.31792	0.30466
VAR	128	-0.15216	0.35383	0.32110	0.06768
VAR	129	-0.55957	0.18746	0.07710	0.20854
VAR	130	-0.44971	0.00688	-0.00042	-0.23755
VAR	131	-0.40797	0.28011	-0.10708	0.32401
VAR	132	-0.49652	0.10959	0.12256	-0.00131

Table 6: The Factor Pattern of the English Main Sample, Unrecoded Principal Component, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	0.01434	-0.24140	0.02791	0.26711
VAR	75	0.25344	-0.15765	0.33190	0.18471
VAR	76	-0.26431	0.04561	-0.25651	-0.05034
VAR	77	0.14242	-0.14706	-0.08842	0.09853
VAR	78	0.22004	-0.31537	0.05957	0.48041
VAR	79	- 0.13592	0.04906	-0.15806	0.07592
VAR	80	-0.32541	0.23292	-0.06650	-0.16812
VAR	81	0.04740	-0.27788	0.10585	0.20800
VAR	82	-0.07590	0.25090	-0.13002	0.11100
VAR	83	-0.07327	-0.08372	-0.19478	0.01432
VAR	84	-0.07807	-0.45151	-0.16032	0.10494
VAR	85	0.07058	-0.49900	-0.12141	-0.02851
VAR	86	-0.10244	-0.41807	0.03508	-0.03774
VAR	87	-0.01148	-0.50857	0.12045	-0.01408
VAR	88	0.23365	-0.29453	-0.05753	0.00009
VAR	89	-0.01184	-0.49688	-0.12054	-0.25335
VAR	90	-0.03633	-0.51774	-0.03638	-0.28719
VAR	91	-0.11206	-0.49671	0.05668	-0.28101
VAR	92	0.19853	-0.45397	-0.04170	0.32148
VAR	93	-0.19420	-0.25415	0.07698	0.16948
VAR	94	-0.23379	-0.29160	-0.19452	0.06751
VAR	95	-0.23877	0.09040	0.09087	-0.03274
VAR	96	-0.43296	0.28214	0.04266	-0.11747
VAR	97	-0.29633	-0.41708	0.02916	0.04475
VAR	98	-0.48607	0.02360	0.16307 -0.22035	0.17185
VAR	98	-0.30630	-0.10645 0.00698	0.10686	0 .1 7401 0 . 39532
VAR VAR	99 100	-0.40748 -0.45387	-0.06491	-0.30400	0.08266
VAR	101	-0.45837	-0.06491	-0.30400	0.08266
VAR	102	-0.42695	0.10946	-0.20662	0.14165
VAR		-0.33491	-0.29948	0.02557	0.12594
VAR	-	-0.41766	-0.15613	-0.15676	0.15586
		-0.33692	-0.21390	-0.45935	0.01096
VAR VAR		-0.43031	-0.09691	-0.57287	-0.06781
VAR		-0.48130	0.01817	-0.39900	0.07004
VAR	-	-0.49806	0.04733	-0.41543	-0.11062
VAR		-0.21426	-0.21286	0.14191	0.08866
VAR	-	-0.25485	-0.18431	0.32885	0.20984
VAR		-0.35587	0.08557	0.24741	-0.02344
VAR		-0.38300	0.13544	0.09623	0.05147
VAR		-0.23327	0.02772	-0.19565	-0.25273
VAR	-	-0.26047	-0.33933	-0.07192	-0.29344
VAR		-0.34495	-0.01914	-0.17279	-0.31168
VAR	•	-0.34336	-0.28930	-0.10347	0.03120
VAR		-0.46704	-0.04953	0.32869	-0.09563
VAR		-0.50936	0.06104	0.35995	-0.19614
VAR		-0.45316	-0.27954	0.39575	-0.18786
VAR		-0.39746	-0.29056	0.44670	-0.26732
VAR		-0.26044	0.45486	0.04081	-0.33266
VAR		-0.28285	0.36901	-0.07112	-0.07563
VAR		-0.40257	0.09561	0.00625	0.02198
VAR	_	-0.34808	0.16792	-0.02671	-0.01810
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Table 6: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 125	-0.39248	-0.07453	0.22226	-0.19717
VAR 126	-0.22095	-0.40979	0.22143	-0.38692
VAR 127	-0.37453	0.35445	0.20282	0.03459
VAR 128	-0.39832	0.16760	0.17500	0.17104
VAR 129	-0.58710	0.19590	0.13274	0.25893
VAR 130	-0.39602	-0.16776	0.07220	0.16841
VAR 131	-0.52338	0.11433	0.21317	0.42661
VAR 132	-0.32243	-0.04404	-0.14621	0.31221

Table 7: The Factor Pattern of the English Sample, Recoded Data, Principal Component, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	+0.08035	-0.22447	-0.09431	+0.29583
VAR	75	+0.28521	-0.17113	0.22606	+0.31813
VAR	76	-0.24908	+0.06332	-0.25500	-0.07006
VAR	77	+0.13015	-0.11916	-0.13329	0.13592
VAR	78	+0.25257	-0.32115	-0.08688	+0.42562
VAR	79	-0.14470	+0.06308	-0.18410	0.00660
VAR	80	-0.30796	+0.28199	0.03248	-0.13427
VAR	81	+0.04736	-0.30009	-0.02901	+0.26963
VAR	82	-0.06763	+0.23586	-0. 16101	0.09675
VAR	83	-0.04499	-0.04858	-0.23147	-0.06055
VAR	84	-0.07405	-0.46413	-0.12953	-0.01340
VAR	85	+0.06202	-0.44212	-0.10487	-0.10581
VAR	86	-0.10123	- 0.34025	-0.00693	0.01582
VAR	87	-0.02740	-0.48447	0.02899	0.08880
VAR	88	+0.24809	-0.29434	-0.07064	-0.06574
VAR	89	+0.00975	-0.48251	0.02469	-0.21077
VAR	90	-0.03658	-0.52820	0.16245	-0.26177
VAR	91	-0.15977	-0.51489	0.09693	-0.24414
VAR	92	+0.21057	-0.46235	-0.17340	0.23116
VAR	93	-0.11899	-0.32154	0.14070	0.07572
VAR	94	-0.19371	-0.34836	-0.18114	-0.09179
VAR	95	-0.25301	+0.10231	0.14243	-0.06454
VAR	96	-0.45428	+0.22018	0.13787	-0.14465
VAR	97	-0.28128	-0.44580	-0.02814	0.03302
VAR	98	-0.48027	-0.01817	0.12482	0.21759
VAR	99	-0.31575	-0.11348	-0.17966	0.05884
VAR	100	-0.38759	-0.02910	0.05582	+0.41738
VAR	101	-0.47099	-0.05827	-0.35661	0.03770
	102	-0.40787	+0.16333	-0.24369	0.09491
VAR	-	-0.33946	-0.32445	-0.01672	0.11062
VAR	•	-0.39830	-0.13477	-0.21125	0.09299
VAR	-	-0.34430	-0.19133	-0.47181	-0.11577
VAR		-0.42450	-0.01323	-0.61576	-0.14793
VAR		-0.45755	+0.14874	-0.40802	0.05116
VAR		-0.44542	+0.14167	-0.40512	-0.15239
VAR		-0.25231	-0.25750	0.10508	0.05635
VAR	110	-0.23610	-0.20780	0.22947	0.21675
VAR	111	-0.33032	+0.09864	0.26195	0.01193
VAR	112	-0.36958	+0.20100	0.04687	0.09770
VAR	113	-0.14660	+0.08166	-0.17529	-0.22739
VAR	114	-0.22740	-0.31500	-0.10495	-0.26880
VAR	115	-0.35432	-0.01537	-0.16230	-0.25108
VAR	·	-0.36601	-0.28155	-0.03275	0.02138
VAR	117	-0.46796	-0.11522	+0.28143	-0.25216
VAR		-0.48400	+0.01189	0.33972	-0.18157
VAR		-0.47364	-0.34458	0.27923	-0.03181
	120	-0.40854	-0.31874	+0.32783	-0.05423
VAR		-0.26864	+0.44239	0.21237	-0.25904
VAR		-0.29973	+0.35894	0.04774	-0.13041
	123	-0.36439	+0.13550	0.02842	0.05097
	124	-0.34880	+0.16280	-0.00241	- 0.02659

Table 7: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 125	-0.38477	-0.14067	0.27814	-0.16975
VAR 126	-0.24831	-0.37706	0.25177	-0.32727
VAR 127	-0.34261	+0.32776	0.22452	0.09695
VAR 128	-0.37307	+0.12577	0.16808	0.13886
VAR 129	-0.56248	+0.18022	0.07927	+0.37752
VAR 130	- 0.38286	-0.18430	0.02659	0.27330
VAR 131	-0.52376	+0.12779	0.14708	+0.48803
VAR 132	-0.33492	-0.06223	-0.15916	0.26901

Table 8: The Factor Pattern of the Egyptian Sample, Unrecoded Data, Principal Component, 59 Items

		Factor 1	Factor 2	Factor 3
TVATO	74	-0.06462	0.20134	-0.21669
VAR VAR	75	-0.09280	-0.04357	-0.00356
VAR	76	-0.23148	-0.09496	0.04202
VAR	77	-0.02696	0.06069	0.07115
VAR	78	0.09872	0.32205	-0.12540
VAR	79	-0.13633	0.08894	-0.17815
VAR	80	-0.34591	-0.38111	0.03987
VAR	81	-0.18121	-0.28656	0.16560
VAR	82	-0.17996	0.25777	-0.16919
VAR	83	-0.20362	0.31574	0.01281
VAR	84	-0.41997	-0.22302	0.13163
VAR	85	-0.21758	0.09197	0.11061
VAR	86	-0.36827	0.05007	0.28127
VAR	87	-0.35556	0.02273	0.27954
VAR	88	-0.15937	-0.04030	-0.05222
VAR	89	-0.30137	0.14454	0.11701
VAR	90	-0.37087	-0.05237	0.22924
VAR	91	-0.13597	0.34073	0.14987
VAR	92	-0.27758	0.07818	0.18674
VAR	93	-0.28751	-0.12976	-0.21972
VAR	94	-0.44245	-0.21535	0.09943
VAR	95	-0.25543	-0.40918	-0.21013
VAR	96	-0.34051	-0.49883	0.13838
VAR	97	-0.42430	0.35101	0.09807
VAR	98	-0.46010	0.03278	0.08755
VAR	99	-0.57399	-0.02397	-0.12669
VAR	100	-0.47292	-0.07386	0.01797
VAR	101	-0.37929	0.30008	0.07492 0.09600
VAR	102	-0.55777 -0.50888	-0.22079 -0.22866	0.01111
VAR VAR	103	-0.48332	0.20119	-0.05606
VAR VAR	104	-0. 4 8186	0.15835	0.27693
VAR	106	-0.53155	-0.05765	0.16532
VAR	107	-0.59862	-0.21058	0.10910
VAR		-0.54050	-0.13624	0.17218
VAR		-0.22470	-0.00711	-0.30940
VAR	110	-0.36158	-0.35116	0.12451
VAR	111	-0.35317	0.02661	-0.05194
VAR	112	-0.00076	0.22052	-0.46759
VAR	113	-0.13088	-0.35915	-0.36187
	114	-0.27685	-0.08264	-0.34346
VAR	•	-0.22245	0.17637	-0.25332
	116	-0.14271	0.35886	0.08855
VAR	117	-0.48871	0.32192	0.00884
VAR	118	-0.48624	-0.05948	-0.00799
VAR	119	-0.54862	0.16592	-0.00675
VAR	120	-0.44938	0.49844	0.10387
VAR	121	-0.31319	-0.45537	-0.29548
VAR	122	-0.30950	-0.38419	-0.36208
VAR		-0.20643	0.03156	-0.56125
VAR	124	-0.25773	0.01799	-0.37438

Table 8: (Continued)

	Factor 1	Factor 2	Factor 3
VAR 125	-0.35004	0.29461	-0.06576
VAR 126	-0.34309	0.19764	0.11504
VAR 127	-0.17827	0.29465	-0.42645
VAR 128	-0.24459	0.30760	-0.16718
VAR 129	-0.34760	-0.08141	-0.18369
VAR 130	-0.46321	0.04334	-0.09661
VAR 131	-0.42760	0.40035	-0.13256
VAR 132	-0.44368	-0.03747	-0.07070

Table 9: The Factor Pattern of the Egyptian Sample, Recoded Data, Principal Component, 59 Items

				 	
		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	-0.04363	_0.25890	0.19262	0.02615
VAR	75	-0.10590	0.03612	-0.02353	0.27335
VAR	76	-0.34447	0.11334	-0.09980	-0.13935
VAR	77	-0.08179	-0.00989	-0.13818	0.13087
VAR	78	0.17869	-0.32324	0.02870	0.10874
VAR	79	-0.18419	-0.08688	0.12094	-0.22465
VAR	80	-0.42258	+0.35269	0.06947	-0.04192
VAR	81	-0.26204	+0.28173	-0.02597	0.16992
VAR	82	-0.22527	-0.30465	0.18844	0.15812
VAR	83	-0.20494	-0.18534	-0.09244	0.34780
VAR	84	-0.47013	0.20926	-0.05811	0.02815
VAR	85	-0.18129	0.04659	-0.19745	0.23582
VAR	86	-0.34904	0.00378	-0.20566	0.01814
VAR	87	-0.35542	0.14173	-0.20113	0.30441
VAR	88	-0.22355	0.00771	0.05619	0.22007
VAR	89	-0.25192	-0.08394	-0.05329	0.33218
VAR	90	-0.42693	0.12410	-0.14175	0.19241
VAR	91	-0.08951	-0.29252	-0.15761	0.40181
VAR	92	-0.29747	0.13411	-0.22195	0.05363
VAR	93	-0.29329	0.07473	0.21965	-0.21765
VAR.	94	-0.53705	0.20011	-0.14070	-0.14537
VAR	95	-0.22346	0.20577	0.41133	-0.13458
VAR	96	-0.44145	0.46264	-0.02021	-0.01988
VAR	97	-0.33221	-0.26332	-0.02544	0.25049
VAR	98	-0.39693	0.02484	-0.05060	-0.01814
	-	-0.53251	-0.02168	0.12637	0.07324
VAR VAR	99 100	-0.47954	0.05989	-0.01421	0.08105
VAR	101	-0.24423	-0.42173	-0.12060	-0.01089
VAR		-0.60656	0.18678	-0.04569	-0.01796
VAR		-0.50736	0.07634	0.03059	0.04365
	-				
VAR		-0.46868 0.40198	-0.25372 0.01055	0.03325 -0.25527	0.02163
VAR	-	-0.40198	-0.01055		-0.24041
VAR		-0.55625	0.10038	-0.10774	-0.04691
VAR	•	-0.61920	0.15327	-0.06836	-0.12787
VAR VAR		-0.54935 -0.27855	0.13465 -0.11789	-0.13596 0.24796	-0.28121
VAR		-0.48668	0.31668	-0.09822	-0.18683
VAR		-0.43355	-0.00162	-0.01781	0.00910
VAR		0.12143	-0.36576	0.31044	0.08007
VAR		-0.20605	0.23119	0.43588	-0.10297
VAR	-	-0.33457	0.01216	0.36492	0.01700
VAR	•	-0.17323	-0.36509		0.07994
VAR		-0.16575	-0. 27950	0.08323 -0.25326	-0.26075
VAR					-0.10093
VAR		-0.37377 -0.49886	-0.37165 0.00297	-0.15493 -0.06570	-0.26325
VAR		-0.51165	• •	-0.06570	-0.19857
VAR	-	-0.35306	-0.18090 -0.50010	-01897	0.08272
VAR			-0.50019	-0.18636	0.10806
VAR		-0.37792 -0.29653	0.24816 0.25125	0.39356	0.09900
VAR		-0.26262	0.25125	0.45131	0.17163
VAR	-	-0.29616	-0.15528	0.54291	0.11499
AWI	124	-0.27010	-0.18947	30924	0.14342

Table 9: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 125	-0.31693	-0.38435	-0.00750	-0.21765
VAR 126	-0.46219	-0.13205	-0.22992	-0.06381
VAR 127	-0.15407	-0.43310	0.30603	0.13562
VAR 128	-0.32998	-0.40383	-0.01814	0.12603
VAR 129	-0.38410	-0.06923	0.20425	-0.16466
VAR 130	-0.54312	-0.13388	0.00771	0.06198
VAR 131	-0.30465	-0.45380	0.03293	-0.31416
VAR 132	-0.51021	-0.03541	0.04272	0.02101

Table 10: The Factor Pattern of the English Pilot Sample, Principal Component, 32 Items

		Factor 1	Factor 2	Factor 3
VAR	74	0.50139	0.09872	-0.16631
VAR	75	0.47171	-0.15411	-0.46067
VAR	76	-0.30476	0.08420	-0.03683
VAR	77	0.08716	0.02397	-0.07948
VAR	78	0.36552	-0.03877	0.18628
VAR	79	-0.34285	-0.17772	0.15049
VAR	80	-0.33287	-0.21046	-0.27452
VAR	81	0.06200	0.15802	0.11808
VAR	82	-0.15816	-0.24112	-0.38682
VAR	83	0.09565	-0.20547	0.44858
VAR	84	0.29624	0.40008	0.11266
VAR	85	0.16712	0.34833	0.13020
VAR	86	0.42797	0.47456	-0.12397
VAR	87	0.01897	0.55463	-0.29298
VAR	88	0.33525	0.43312	0.17516
VAR	89	- 0 . 10435	0.72989	-0.18469
VAR	90	-0.02140	0.47749	-0.09967
VAR	91	0.32986	0.31356	0.29662
VAR	95	-0.59074	0.23727	0.13479
VAR	98	-0.52165	0.14160	0.22874
VAR	100	- 0 . 55648	-0.14644	0.39475
VAR	102	-0.08902	0.16453	-0.42822
VAR	107	-0.14628	-0.02078	0.31684
VAR	108	-0.30840	0.09237	0.28169
VAR	111	-0.43351	0.06149	-0.34114
VAR	113	0.09965	-0.24032	-0.47698
VAR	-	-0.23004	0.23458	-0.33257
VAR		-0.44776	0.36014	-0.20243
VAR		-0.33813	-0.41853	-0.32231
VAR		-0.42674	0.08358	-0.29563
VAR		- 0.53548	0.36109	0.05902
VAR	-	-0.56373	0.22167	0.09703
	-			

Table 11: The Factor Pattern of the English Pilot Sample, Principal Factor, 32 Items

		Factor 1	Factor 2	Factor 3
VAR	74	0.44285	0.10349	-0.06673
VAR	75	0.44213	-0.11758	-0.33852
VAR	76	-0.25782	0.04977	-0.04671
VAR	77	0.07142	0.03941	0.00456
VAR	78	0.31185	-0.02642	0.14315
VA R	79	-0.29414	-0.15893	0.10340
VAR	80	-0.28358	-0.17708	-0.22143
VAR	81	0.04977	0.11063	0.07521
VAR	82	-0.13093	-0.18594	-0.28779
VAR	83	0.07836	-0.18221	0.29893
VAR	84	0.25493	0.31796	0.05670
VAR	85	0.14175	0.25786	0.05582
VAR	86	0.39062	0.42034	-0.09558
VAR	87	0.01515	0.48544	-0.22592
VAR	88	0.29201	0.37362	0.17278
VAR	89	-0.10952	0.71030	-0.15128
VAR	90	-0.02161	0.37739	-0.09763
VAR	92	0.28364	0.26381	0.26099
VAR	95	-0.55381	0.20849	0.14011
VAR	98	-0.48092	0.12257	0.23961
VAR	100	- 0.53099	-0.15185	0.36508
VAR	102	-0.07408	0.13680	-0.32651
VAR	107	-0.12678	-0.01634	0.24124
VAR	108	-0.26446	0.05797	0.17302
VAR	111	-0.38504	0.05082	-0.31898
VAR	113	0.09536	- 0.18865	-0.37283
VAR	115	-0.19828	0.20131	-0.23176
VAR	117	-0.40757	0.29926	-0.1 7788
VAR	121	-0.30080	-0.38294	- 0.35308
VAR	127	-0.37562	0.05474	-0.29367
VAR	129	-0.50188	0.31373	0.04135
VAR	131	-0.51759	0.18510	0.07792

Table 12: The Factor Pattern of the English Pilot Sample, Varimax Rotations, 32 Items

		Factor 1	Factor 2	Factor 3
VAR	74	-0.48227	0.23025	-0.05653
VAR	75	-0.66839	-0.10803	-0.00780
VAR	76	0.22064	-0.08604	0.21245
VAR	77	-0.11488	0.02353	0.02715
VAR	78	-0.16950	0.21397	-0.30870
VAR	79	0.34215	-0.22783	-0.05295
VAR	80	0.06478	-0.43249	0.19801
VAR	81	0.04143	0.20245	-0.00723
VAR	82	-0.14365	-0.42665	0.17356
VAR	83	0.18741	0.07576	-0.46014
VAR	84	-0.11958	0.49459	0.03997
VAR	85	-0.01379	0.40377	0.05474
VAR	86	- 0.36255	0.50977	0.18007
VAR	87	-0.14462	0.3160 9	0.52248
VAR	88	-0.10735	0 .5 6493	0.00225
VAR	89	0.03559	0.44471	0.61538
VAR	90	0.00032	0.32108	0.36783
VAR	92	-0.03861	0.52137	-0.14760
VAR	95	0.56413	-0.02096	0.32367
VAR	98	0.56036	-0.02429	0.17290
VAR	100	0.66346	-0.19306	-0.09621
VAR	102	-0.18373	-0.09604	0.41879
VAR	107	0.30972	0.05495	-0.15256
VAR	108	0.42395	0.05565	0.01250
VAR	111	0.12716	-0.29354	0.45360
VAR	113	-0.39938	-0.34936	0.11679
VAR	115	-0.60797	-0.06314	0.46314
VAR	117	0.25408	-0.00629	0.55369
VAR	121	0.01872	-0.61833	0.10343
VAR	127	0.15260	-0.25356	0.43463
VAR	129	0 .4 8590	0.06800	0.42412
VAR	131	0.51807	-0.03737	0.32643

Table 13: The Factor Pattern of the English Pilot Sample, Oblique, 32 Items

		Factor 1	Factor 2	Factor 3
VAR	74	0.35482	0.23930	0.03210
VAR	75	0.60765	-0.08709	-0.04002
VAR	76	-0.17293	-0.09347	-0.14965
VAR	77	0.04272	0.06369	0.00052
VAR	78	0.14610	0.18065	0.21742
VAR	79	-0.25605	-0.20176	0.07853
VAR	80	-0.03334	- 0.36542	-0.12640
VAR	81	-0.03368	0.14382	-0.00586
VAR	82	0.12605	-0.33846	-0.11525
VAR	83	-0.09914	0.03215	0.34940
VAR	84	0.09078	0.38574	-0.08817
VAR	85	0.01848	0.28963	-0.08625
VAR	86	0.27107	0.45204	-0.21461
VAR	87	0.06120	0.28059	-0.46994
VAR	88	0.03201	0.50030	-0.03405
VAR	89	-0.12577	0.43913	-0.60935
VAR	90	-0.02817	0.24081	-0.32341
VAR	92	-0.00967	0.45230	0.09579
VAR	95	- 0.54809	-0.00708	-0.22558
VAR	98	-0.54094	0.00383	-0.07712
VAR	100	-0.60521	-0.17363	0.17335
VAR	102	0.12935	-0.07905	- 0.33661
VAR	107	-0.24864	0.04720	0.13274
VAR	108	-0.32240	0.01425	-0.00816
VAR	111	-0.09156	-0.27616	-0.37703
VAR	113	0.35159	-0.28397	-0.09657
VAR	115	-0.03828	-0.03668	-0.35599
VAR	117	-0.24984	-0.02387	-0.45331
VAR	121	0.08047	-0.59683	-0.08502
VAR	127	-0.10174	-0.25705	-0.35934
VAR	129	- 0.46598	0.05099	-0.34521
VAR	131	-0.47583	-0.03941	-0.24034

Table 14: Comparison Between Four Types of Analysis, Factor I on the Principal Component and the Other Types of Analysis. The 32 Items, English Pilot Sample Responses

Item	Principa	al Comp.	Varin I	ax	Principa	l Factor I	Oblic I	que
	Load	R	Load	R	Load	R	Load	R
74 75 78 79 80	+501 +471 -365 -342 -332	6 7 12 13 16	-482 -668 +342	7 1 11	+442 +442 +311	6 7 12	+354 -607	7
85 86 88	- 427 +335	1 0 1 5	- 362	10	+390	10		
95 98 100 107	-950 -521 -556 (•294)	1 5 3	+560 +663 +309	4 2 12	- 553 - 480 - 530	1 5 2	- 548 - 540 - 605	3 4 2
108 111 113 115	-308 -433 (.313)	1 7 9	+423 -399 -607	8 9 3	- 385	9	- 322 +351	9
117 121 127 129	-447 -338 -426 -535 -563	8 14 11 4 2	+485 +518	6 4	-407 -300 -375 -501 -517	8 13 11 4 3	-465 -475	6
% of variance	12.2		12.1		12.2	-	12.1	

Table 15: Comparison Between the Four Types of Analysis, Factor II on the Principal Component and the Other Types of Analysis
The 32 Items, English Pilot Sample Responses

	P.C. An	alysis I	ł	imax I	1	actor II		.ique II
	Load	R	Load	R	Load	R	Load	R
80 82 84 85 86 87 88 89 90 92 113 117 121	- +400 +348 +474 +554 +433 +729 477 +313 +360 -418 +361	7 10 4 2 5 1 3 11 96 8	-432 -426 +494 +403 +509 +316 +564 +444 +321 +521 -349	7 8 5 9 4 12 2 6 11 3 10 1	- +317 +420 +485 +373 +710 +377 -382 +313	- 7 326 1 4	-365 -338 +385 +452 +500 +439 +452	7 8 4 2 5 3
% of variance	8.9		8.7		8.9		8.7	

Table 16: Comparison Between the Four Types of Analysis, Factor III on the Principal Component and the Other Types of Analysis.

The English Pilot Responses to the 32 Items

	P.C. An	alysis II	l	imax II		actor II		ique II
	Load	R	Load	R	Load	R	Load	R
75 78 82 83 87 89	-460 -386 +448	1 6 3	-308 -460 +522 +615	13 4 3 1	- 388	1	+349 -469 -609	7 2 1
90 95 100	+394	5	+367 +323	10 12	+365	3 4	- 323	10
102 107 111	-428 +316 -341	4 10 7	+418	9	-326 -318	6	-336 -377	9
113 115 117	-476 -332 -322	1 8 9	+463 +553	5 2	- 372	2	- 355 - 453	6 6
121 127 129 131			+434 +424 +326	7 8 11	- 353	5	-359 -345	5 8
% of variance	7•3		7.1		7•3		7.1	

Table 17: The Factor Pattern of the English Pilot Sample, Principal Factor, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	0.24732	-0.48755	-0.10301	-0.33710
VAR	75	0.50505	-0.09512	0.36124	-0.24689
VAR	76	-0.32964	0.04484	0.07179	-0.15522
VAR	77	0.02206	-0.06943	-0.18137	-0.23064
VAR	78	0.05445	-0.10634	-0.02818	0.06792
VAR	79	-0.36969	0.09315	-0.00041	0.03009
VAR	80	- 0.15686	0.14902	-0.10557	-0.16656
VA R	81	-0.06808	-0.22504	0.05383	-0.04756
VAR	82	0.15537	0.35500	0.08371	-0.30030
VAR	83	0.02847	0.12174	0.10808	0.38308
VAR	84	0.01050	-0.37293	0.23379	0.10882
VAR	85	-0.11130	-0.30167	0.31768	0.22354
VAR	86	0.02387	-0.51454	0.27243	-0.02646
VAR	87	-0.14661	-0.41333	0.16078	-0.13239
VAR	88	0.02226	-0.42603	-0.04779	-0.03286
VAR	89	-0.31743	-0.31114	0.10591	-0.24513
VAR	90	-0.27173	-0.21308	0.30310	-0.07601
VAR	91	-0.31889	-0.31853	-0.01475	0.05586
VA R	92	0.17396	-0.42342	-0.09763	-0.13037
VAR	93	-0.33867	-0.00469	0.14069	0.14901
VAR	94	-0.46237	-0.34296	0.12834	0.00782
VAR	95	-0.62164	0.09021	-0.36790	-0.06925
VAR	96	-0.42873	0.28352	-0.38496	-0.19086
VAR	97	-0.31162	-0.31782	0.06036	-0.00128
VAR	98	-0.45093	0.21386	-0.28066	-0.28304
VAR	99	-0.32215	-0.37999	-0.08031	-0.31717
VAR	100	-0.40973	0.34023	-0.22877	-0.13814
VAR	101	-0.36760	0.20027	-0.13593	-0.18038
VAR	102	-0.07105	0.05503	0.24183	-0.29010
VAR	103	-0.40930	-0.12400	0.08251	0.12721
VAR	104	-0.49629	-0.04841	0.21248	-0.00492
VAR	105	-0.53238	-0.05063	-0.19242	0.47247
VAR	106	-0.51160	0.18144 0.06417	-0.06839 -0.26096	0.56535
VAR	107	-0.21320			0.19219
VAR	108	-0.21550	0.16385	-0.01768	0.13552
VAR	109	-0.41735	-0.04122	0.25231 -0.00123	0.09522
VAR	110	-0.22850	-0.00627	•	0.01606
VAR	111	-0.22222	0.28315	0.12301 0.26675	-0.23421
VAR	112	-0.20118	0.18037		-0.10363
VAR	113	0.09270	0.09566	0.19847	-0.06150
VAR	114	-0.56082	-0.21952	0.05227	0.19071
VAR	115	-0.31249	-0.08641	0.03696	-0.16179
VAR	116	-0.41459	-0.13150	0.24093	-0.04711
VAR	117	-0.54774	-0.11467	0.06761	-0.19839
VAR	118	-0.36457	0.19404	0.27957	-0.11376
VAR	119	-0.53894	-0.33109 0.55758	0.09625	-0.08678
VAR	120	-0.11041	0.55758	0.34183	0.11021
VAR	121	-0.08390	0.35058	0.45376	0.20698
VAR	122	-0. 08399	0.35058 0.11535	0.45376	0.20698
VAR	123	-0.27805 0.22465	0.11525	0.32286	-0.01053
VAR	124	0.22465	0.17054	0.31147	0.04053

Table 17: (Continued)

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	125	-0.47913	0.00924	-0.20248	-0.00632
VAR VAR	126 127	-0.37139 -0.14600	-0.30376 0.30931	-0.53131 0.27613	0.09090 -0.27119
VAR	128	-0.14090	0.31121	0.27192	-0.10055
VAR	129	-0.53607	0.17168	0.08081	-0.20577
VAR	130	-0.42203	0.00707	0.01206	0.17903
VAR	131	-0.38878	0.25381	-0.08692	-0.31653
VAR	132	-0.46631	0.09447	0.10816	-0.03020

Table 18: The Factor Pattern of the English Pilot Sample, Varimax, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	0.18834	-0.04985	. 0 50590	0.40540
VAR		-0.08062	-0.33858	-0.52582 -0.60240	-0.40519
VAR		0.25808	0.26277	0.04786	0.17984
VAR	•	0.00486	0.26119	-0.23189	0.17223
VAR		0.01196	-0.11075	0.01818	-0.19479 -0.12969
VAR	•	0.17636	0.20317	0.29837	0.12318
VAR		-0.00833	0.35670	-0.02828	0.06232
VAR	81	0.24938	-0.05758	-0.07687	-0.09562
VAR	82	-0.26071	0.22163	-0.29733	0.33155
VAR	83	-0.14179	-0.32276	0.36960	0.13419
VAR	84	0.33121	-0.39825	-0.02296	-0.07210
VAR	85	0.10200	+0.13214	-0.00512	+0.10120
VAR	86	0.45366	-0.36493	-0.21322	-0.12040
VAR	87	0.41975	-0.09870	-0.18063	-0.10447
VAR	88	0.27713	-0.13733	-0.14680	-0.34330
VAR	89	0.53358	0.15213	-0.15397	-0.03836
VAR	90	0.48182	-0.08611	-0.01814	0.17389
VAR	91	0.42750	-0.00895	0.17843	-0.18429
VAR	92	0.16518	-0.14363	-0.29035	-0.38165
VAR	93	0.26527	-0.00238	0.31276	0.15074
VAR	94	0.60065	0.03856	0.14986	-0.05016
VAR	95	0.22469	0.60112	0.37164	-0.11736
VAR	96	-0.01987	0.66404	0.22618	-0.02114
VAR	97	0.47335	0.02104	0.06227	-0.11830
VAR	98	0.09534	0.65133	0.13619	0.01824
VAR	99	0.50605	0.26103	-0.16080	-0.22495
VAR	100	-0.02910	0.55186	0.27375	0.12449
VAR	101	0.08736	0.49553	0.12262	0.10756
VAR	102	0.17861	0.13519	-0.29493	0.30645
VAR	103	0.37785	0.03145	0.31241	0.03581
VAR	104	0.46151	0.12158	0.22392	0.23191
VAR	105	0.22653	0.07620	0.69659	-0.14680
VAR		0.09257	0.04455	0.77040	0.07757
VAR		-0.05681	0.15395	0.40462	-0.17663
VAR	_	-0.01714	0.08900	0.33864	0.10947
VAR		0.40625	0.01891	0.23265	0.25114
VAR		0.16229	0.12119	0.14624	0.02742
VAR		0.05523	0.32830	-0.05029	0.38049
VAR		0.14890	0.09548	0.00298	0.42228
VAR		-0.02633	-0.08742	-0.15425	0.26245
VAR		0.51171	0.06110	0.40978	-0.03339
VAR		0.33673	0.23872	-0.02381	0.05733
VAR	_	0.49078	0.06962	0.10070	0.18985
VAR		0.51531	0.33991	0.08771	0.09900
VAR		0.25021	0.18132	0.10522	0.45051
VAR		0.63989	0.15997	0.12248	-0.04275
VAR		0.45926	0.00914	0.18452	0.07414
VAR		-0.18695	0.04084	0.20105	0.63787
VAR		-0.04576	-0.20883	0.22986	0.59159
VAR		0.24769	-0.00041	0.12417	0.41474
VAR		-0.15215	-0.28072	-0.11054	0.36240

Table 18: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 125	0.23286	0.36636 0.20859	0.34161	-0.08561
VAR 126	0.30724	0.22192	0.28562	-0.43226
VAR 127	0.05280		-0.14370	0.51345
VAR 128	0.00350	0.08509	0.04301	0.49692
VAR 129	0.31246	0.43397	0.16229	0.29253
VAR 130	0.24864	0.09127	0.43070	0.05532
VAR 131	0.10713	0.55468	0.04679	0.19949
VAR 132	0.30036	0.22736	0.26770	0.24486

Table 19: The Factor Pattern of the English Pilot Sample, Oblique, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	-0.04499	-0.13541	-0.10749	-0.59722
VAR	75	0.15184	-0.40767	0.38291	-0.30025
VAR	76	-0.24411	0.21242	0.13437	-0.02486
VAR	77	0.06043	0.17373	-0.05219	-0.26572
VAR	78	-0.00809	-0.09169	-0.09901	-0.01060
VAR	79	-0.21518	0.21514	0.00590	0.15116
VAR	80	0.01878	0.28985	0.05835	-0.05151
VAR	81	-0.19890	-0.08340	-0.03535	-0.12731
VAR	82	0.27595	0.17483	0.37334	-0.09613
VAR	83	0.03698	-0.19872	-0.05445	0.39627
VAR	84	-0.30695	-0.37491	-0.03543	-0.05376
VAR	85	-0.39372	-0.38474	-0.00417	0.11938
VAR	86	-0.39272	-0.41031	0.00120	-0.23398
VAR	87	-0.40832	-0.16009	0.00355	-0.25618
VAR	88	-0.20060	-0.16706	-0.20173	-0.25190
VAR	89	-0.44904	0.05879	0.05297	-0.27351
VAR	90	-0.45105	-0.11701	0.16353	-0.05731
VAR	91	-0.40263	-0.00688	-0.19190	-0.04444
	92	-0.06629	-0.16632	-0.18240	-0.37437
VAR	-	-0.31183	0.01208	0.01389	0.22128
VAR	93	-0.58382	-0.01314	-0.07675	-0.04074
VAR	94	-0.23321	0.61216	-0.23882	0.05523
VAR	95 96	0.02310	0.67279	-0.09859	0.00377
VAR	-	-0.43020	-0.03050	-0.10558	-0.08053
VAR	97 98	-0.07796	0.62877	-0.00429	-0.08518
VAR	-	-0.40682	0.17674	-0.08291	-0.40029
VAR VAR	99 100	-0.00196	0.56938	0.01951	0.09985
VAR VAR	101	-0.09114	0.44439	0.05336	0.00230
VAR	102	-0.12664	0.04449	0.38454	-0.15921
	103	-0.40337	0.03715	-0.07440	0.14876
	104	-0.48116	0.09625	0.11836	0.11656
	105	-0.33081	0.14539	-0.43036	0.45408
	106	-0.24236	0.12513	-0.28140	0.66476
VAR		-0.00272	0.21024	-0.27774	0.19361
VAR		-0.05730	0.13385	-0.02151	0.23875
VAR		-0.43879	-0.01019	0.10602	0.19458
VAR	-	-0.16827	0.10470	-0.02323	0.05951
VAR		-0.05540	0.27530	0.32039	0.01243
		-0.16332	0.06794	0.32196	0.09256
VAR		0.03200	-0.09587	0.22758	0.01065
VAR	-	-0.55332	0.05763	-0.17770	0.18234
VAR		-0.28947	0.16660	0.05565	-0.10524
VAR		-0.48101	0.01801	0.12953	0.02726
VAR		•	0.26868	0.07312	-0.09392
VAR		-0.48880 -0.27945	0.15275	0.33434	0.12830
VAR		-0.27945	0.19279	-0. 05296	-0.10380
VAR	_	-0.61734	-0.01493	-0.00106	0.07082
VAR		-0.45753 0.07789	,		0.45333
VAR		0.07789	0.05599 -0.16800	0.43931	
VAR		-0.06989		0.38901	0.44656 0.16533
VAR		-0.28130	-0.00147 -0.24304	0.28658	0.16533
VAR	124	0.11772	-0.24304	0.30179	0.12529

Table 19: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 125	-0.25027	0.37186	-0.17154	0.06675
VAR 126	-0.29055	0.20592	-0.44688	-0.05230
VAR 127	-0.05408	0.17178	0.47056	0.00487
VAR 128	-0.04887	0.09478	0.38358	0.14785
VAR 129	-0.32596	0.39281	0.21031	0.04145
VAR 130	-0.30804	0.12506	-0.09826	0.24762
VAR 131	-0.09734	0.51208	0.18030	-0.07275
VAR 132	-0.33250	0.22451	0.11426	0.14105

Table 20: Comparison Between the Four Types of Analysis. Factor I on the Principal Component and its Correspondence with the Other Types of Analysis, English Pilot Sample, 59 Items

Items		al Comp.		imax II	Princ	ipal F.		ique II
	Load	R	Load	R	Load	R	Load	R
75 76 79 80	+516 -356 -398	7 19 17	-338 +356	14 12	+505 -329 -359	8 20 1 9	- 407	8
84 85			-398 -421	9 8			- 374	11
86 89	-337	21	- 364	11	-317		-41 0	7
91 94 95	-340 -485 -629	20 1	+60 1 +664	3 1	-318 -462 -621	12 1	+628	3 1
96 98 100 101	- 466 - 426		+651 +551 +495	5	- 450 - 409	13 16	+672 +628 +569 +444	1 2 4 6
103 104 105	- 437 - 523 - 536	15 7 6 9 13	. 423		-409 -496 -532	17 9 6 7	• • • •	Ü
106 109 111	-510 -443	-	+328	15	-511 -417	14		
114 116 117	-580 -443 -572	2 14 34	+339	13	-560 -414 -547	2 15 3 4		
119 125 126	- 558 - 505 - 386	5	+366	10	-538 -479 -371	4 10 18	+371	12
129 131 132	- 559 - 496	4	+433 +554	7 4	- 536 - 466	5 11	+392 +512	9 5
% of variance	12.7		12.6		12.7		12.6	

Table 21: Comparison Between the Four Types of Analysis, Factor II on the Principal Component and Its Correspondence with the Other Types of Analysis, English Pilot Sample, 59 Items

The items		al Comp.	Va	rimax IV	Princi	pal F.		lique III
with loading greater than .300	Load	R	Load	R	Load	R	Load	R
74 75	- 511	3	-4 05	7	- 487	3	+382	6
76 82 84 86 87 88 89 92 94 97 99	+394 -413 -551 -456 -478 -340 -465 -366 -354 -400 +368	9 7 2 6 4 15 5 11 12 8	+331 -343 -381	10 11 8	+355 -372 -514 -413 426 -311 -423 -342 -317 -379 -340	9 8 2 6 4 15 5 11 7 12	+373 -430	7
105 111 112 119 121 122	+319 -346 +582 +374	14	+380 422 +637 +591	9 1 2	+283 -331 +557 -350	15 13 1 10	+320 +321 +334 +439 +389	11 10 9 3 5
123 126 127 128 102			-432 +513 +496 +306	3 4		1	-446 +470 +383 +348	2 1 8
% of variance	7.5	* 1	7•4	,	7•5		7•4	

Table 22: Comparison Between the Four Types of Analysis, Factor III on the Principal Components and its Correspondence with Other Types of Analysis, English Pilot Sample, 59 Items

The items with	Principa II		ŀ	imax I	Princ II	ipal F.		ique I
loading greater than .300	Load	R	Load	R	Load	R	Load	R
75 84 85 86 87	+399 +360 +305	11	+331 +371 +453 +491	17 16 13	+361 +317	4 7	-306 -393 -392 -408	18 15 16 11
89 90 91	+354	5	+533 +481	3 9	+303	8	- 449 - 451 - 402	8 7 14
94 95 96 97	-389 -410	4 2	+600 +473	2 1 0	-367 -384	3 2	- 583	10
98 99 103 104	- 314	8	+509 +377 +461	6 15 11			- 406 - 403 - 481	12 13 6 18
105 107 112	+314 +320	9 7	+406	14			-330 -438	9
114 116 117	740	10	+511 +515	5 4			-553 -481 -488	3 6 4
118 119 121 122	+348 +488	10	+490 +6 59	8 1	+34 1 +453	5 1 6	-617	1
126 129 132 120	- 376		+312 +459	18 12	-331	6	-325 -332 -457	19 17 5
% of variance	5•4		5•2		5•4		5•2	

Table 23: Comparison Between Four Types of Analysis, Factor IV on the Principal Component and its Correspondence with Other Types of Analysis, English Pilot Sample, 59 Items

items	Principa I	l Comp.		imax II	Princ	ipal F.	0b1	ique V
with loading greater than •300	Load	R	Load	R	Load	R	Load	R
74 75	+377 +314	4 8	- 525 - 602	4 3	- 337	4	- 597 - 300	2 9
77 82 83 92	+314 +351 -489	6 2	+369	8	- 300 - 383	7 3	+396 - 374	7 8
95 99 1 02	+343 +374	7 5	+371	7	-317	5	- 400	6
105 106 113	-481 -557	7 5 3 1	+696 +770 +312	2 1 10	+472 +565	2 1	+454 +664	3 1
121 122 126							+453 +446	4 5
127 128 131	+304 +324	7			- 316	6		
130 114 125	• /	ž.	+430 +409 +341	5 6 9	,,,	-		
% of variance	4•9		4.8		4•9		4.8	

Table 24: The Factor Pattern of the English Main Sample, Principal Factor, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	0.07262	-0.19489	-0.05964	0.00764
VAR	75	0.26284	-0.15174	0.18349	0.20764
VAR	76	-0.22600	0.05551	-0.19883	0.23368 -0.04872
VAR	77	0.11649	-0.10228	-0.09178	0.09154
VAR	78	0.23525	-0.29053	-0.06160	0.34270
VAR	79	-0.12979	0.05512	-0.13272	-0.00168
VAR	80	-0.28109	0.24966	0.02912	-0.10198
VAR	81	0.04289	-0.26158	-0.01408	0.18791
VAR	82	-0.06087	0.20358	-0.11449	0.05937
VAR	83	-0.04046	-0.04186	-0.16653	-0.03389
VAR	84	-0.06718	-0.41501	-0.10942	0.00970
VAR	85	0.05692	-0.39355	-0.09085	-0.05605
VAR	86	-0.09146	-0.29657	-0.00805	0.02353
VAR	87	-0.02634	-0.43571	0.02601	0.06985
VAR	88	0.22682	-0.25908	-0.06021	-0.03906
VAR	89	0.00988	-0.43710	0.00974	- 0.15421
VAR	90	-0.03371	- 0 .4 9202	0.13301	-0.21932
VAR	91	-0.15026	-0.47924	0.07718	- 0.20868
VAR	92	0.19821	-0.42481	-0.14771	0.22008
VAR	93	-0.10718	-0.27935	0.10750	0.05178
VAR	94	-0.17688	-0.30931	-0.14663	-0.06216
VAR	95	-0.22735	0.08825	0.10416	-0.04844
VAR	96	-0.42310	0.19761	0.11236	-0.12657
VAR	97	-0.26151	-0.40475	-0.01754	0.02479
VAR	98	-0.44987	-0.01473	0.10928	0.19133
VAR	99	-0.28702	-0.09848	-0.14196	0.05885
VAR	100	-0.36333	-0.02400	0.05594	0.34836
VAR		-0.44369	-0.05385	-0.29013	0.02445
VAR		-0.37941	0.14696	-0.19233	0.06411
VAR	-	-0.31290	-0.28994	-0.01315	0.07672
VAR		-0.36697	-0.12007	-0.16804	0.08227
VAR	-	-0.32726	-0.17771	-0.41982 -0.60496	-0.08014
VAR		-0.42083	-0.01319		-0.12483
VAR		-0.43618	0.14017	-0.35598 -0.35320	0.04394 -0.12511
VAR		-0.42352	0.13351 -0.22565	0.07627	0.03771
VAR		-0.22775 0.21458	-0.18248	0.18013	0.14493
VAR		-0.21458 -0.30046	0.08571	0.19896	0.00542
VAR		-0.33854	0.17804	0.03837	0.06097
VAR		-0.13110	0.06994	-0.13045	-0.15324
VAR	_	-0.20853	-0.28220	-0.08904	-0.19782
VAR			-0.01537	-0.12689	-0.18017
VAR		-0.32534 -0.33639	-0.25112	-0.02369	0.02577
VAR		-0.44212	-0.10982	0.24121	-0.22266
VAR		-0.45874	0.00773	0.29167	-0.16835
VAR		-0.45339	-0.32831	0.24941	-0.04830
VAR	120	-0.38667	-0.29999	0.28122	-0.05841
VAR VAR		-0.25327	0.41053	0.18300	-0.24478
	122	-0.27683	0.32307	0.04069	-0.12842
	123	-0.33178	0.12039	0.02910	0.01844
	124	-0.31823	0.14306	0.00167	-0.04642
4.041))			

Table 24: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 125	-0.35710	-0.12949	0.21941	-0.14155
VAR 126	-0.23295	-0.35098	0.20262	-0.27547
VAR 127	-0.31862	+0.29675	0.18458	0.05963
VAR 128	-0.34333	0.11209	0.14023	0.10528
VAR 129	- 0 . 54816	0.17509	0.08822	0.34594
VAR 130	-0.35621	-0.16387	0.03196	0.21547
VAR 131	-0.51583	0.12888	0.15893	0.46184
VAR 132	-0.30896	-0.05267	- 0 .1 1558	0.21158

Table 25: The Factor Pattern of the English Main Sample, Varimax, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	0.04429	-0.36742	0.12658	-0.01658
VAR	75	0.00446	-0.31679	0.08693	-0.39371
VAR	76	-0.01327	0.08551	0.05512	0.35420
VAR	77	-0.01848	-0.25680	-0.02519	0.02147
VAR	78	0.02990	-0.57094	0.10402	-0.13385
VAR	79	-0.05459	0.02083	0.05834	0.22811
VAR	80	-0.08807	0.38182	0.12588	0.15509
VAR	81	0.14417	-0.34965	0.14189	-0.05167
VAR	82	-0.25068	0.03170	0.08507	0.15622
VAR	83	0.01859	-0.06309	-0.07114	0.22857
VAR	84	0.39157	-0.25309	-0.01171	0.14259
VAR	85	0.36530	-0.23972	-0.16019	0.07026
VAR	86	0.31561	-0.14321	0.06157	0.04903
VAR	87	0.39935	-0.28107	0.06772	-0.03350
VAR	88	0.17445	-0.25807	-0.23916	-0.05716
VAR	89	0.48330	-0.12198	-0.17165	0.00506
VAR	90	0.58812	-0.03829	-0.14673	-0.07978
VAR	91	0.59467	-0.01162	- 0.06839	0.03453
VAR	92	0.20640	-0.54571	-0.03410	-0.00683
VAR	93	0.32224	-0.10053	0.15210	-0.07741
VAR	94	0.34481	-0.11215	0.00338	0.26198
VAR	95	0.05138	0.26620	0.15827	0.01946
VAR	96	0.04148	0.46604	0.23702	0.14035
VAR	97	0.45291	-0.13411	0.18243	0.15278
VAR	98	0.13027	0.13426	0.49965	0.09630
VAR	99	0.13507	-0.02516	0.20144	0.29838
VAR	100	0.02664	-0.06028	0.56465	0.07230
VAR	101	0.10151	0.01932	0.24826	0.53058
VAR	102	-0.09855	0.11814	0.28415	0.39626
VAR	103	0.34568	-0.08508	0.28396	0.16017
VAR	104	0.16087	-0.02765	0.27155	0.36013
VAR	105	0.19582	-0.06485	0.02227	0.59001
VAR	106	0.04510	0.02557	0.02510	0.76033
VAR	107	-0.09629	0.09237	0.24559	0.56786
VAR	•	-0.02641	0.20450	0.09257	0.59559
VAR		0.30847	-0.00866	0.21996	0.02402
VAR	-	0.23883	-0.03429	0.35577	-0.11733
VAR		0.08384	0.30341	0.29205	-0.05658
VAR		-0.07202	0.23678	0.33206	0.13123
VAR		0.00949	0.17321	-0.10471	0.26370
VAR	-	0.40451	0.05637	-0.08137	0.24653
VAR	-	0.17044	0.23759	0.01362	0.35983
VAR		0.34319	-0.00425	0.23560	0.20361
VAR		0.40249	0.41909	0.18919	0.04020
VAR	_	0.29062	0.47492	0.26950	-0.01189
VAR		0.52649	0.17087	0.34008	0.00228
VAR		0.50287	0.18737	0.29406	-0.06714
VAR VAR		-0.15175	0.59439	0.06075	0.00771
VAR		-0.15376	0.42215	0.13016	0.13844
VAR		-0.00709	0.22027	0.28806	0.15166
VAR		-0.01746	0.26060	0.21620	0.18417
V.A.D.	124	~ ~ ~ . 1 ~ ~			~··~~·!

Table 25: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 125	0.36925	0.31742	0.19162	-0.01386
VAR 126	0.57171	0.21333	-0.02683	-0.03523
VAR 127	-0.14447	0.36331	0.36167	-0.03069
VAR 128	0.00962	0.22412	0.38952	0.02200
VAR 129	-0.07601	0.16279	0.66543	0.15033
VAR 130	0.19751	-0.07032	0.44499	0.11821
VAR 131	-0.06353	0.07988	0.73296	0.05302
VAR 132	0.03346	-0.10174	0.37128	0.25382

Table 26: The Factor Pattern of the English Main Sample, Oblique, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	0.11127	-0.01005	0.01144	0.29340
VAR	75	-0.10103	0.00431	0.32260	0.25691
VAR	76	-0.02823	0.02346	-0.28894	-0.05747
VAR	77	0.01680	0.02682	-0.01947	0.20203
VAR	78	-0.13255	0.02084	0.10252	0.50440
VAR	79	-0.03475	0.05108	-0.17831	-0.01747
VAR	80	-0.08799	0.06020	-0.10996	-0.31687
VAR	81	-0.12008	-0.10207	0.03700	0.28529
VAR	82	-0.06429	0.21319	-0.12034	-0.02996
VAR	83	0.05668	-0.00499	-0.17758	0.05760
VAR	84	0.00805	-0.31028	-0.13061	0.23708
VAR	85	0.12613	-0.29531	-0.07179	0.21906
VAR	86	-0.05235	-0.25007	-0.04413	0.13236
VAR	87	-0.05881	-0.33213	0.02264	0.24344
VAR	88	0.18881	-0.14078	0.03303	0.21543
VAR	89	0.15829	-0.42523	-0.01643	0.10728
VAR	90	0.15808	-0.55506	0.06713	0.01540
VAR	91	0.10030	-0.55430	-0.03245	-0.00252
VAR	92	-0.01580	-0.12733	-0.01538	0.50969
VAR	93	-0.11913	-0.26643	0.06111	0.08482
VAR	94	0.01467	-0.27910	-0.22407	0.10892
VAR	95	-0.11740	-0.05344	-0.00901	-0.21279
VAR	96	-0.16570	-0.06256	-0.09837	-0.40095
VAR	97	-0.13821	-0.38197	-0.12608	0.12610
VAR	98	-0.44142	-0.08632	-0.05781	-0.08004
VAR	99	-0.16218	-0.08507	-0.24436	0.04543
VAR	100	-0.51320	0.02494 -0.06066	-0.04246	0.09301
VAR	101	-0.17859 -0.21598	0.10476	-0.45429 -0.32817	0.00684 -0.08493
VAR		-0.21938 -0.21834	-0.28118	-0.13421	0.08412
VAR VAR	-	-0.21755	-0.10526	-0.29870	0.05399
VAR	•	0.01867	-0.13278	-0.54357	0.09845
VAR	_	0.04990	0.01352	-0.76184	0.03423
VAR		-0.18270	0.12883	-0.50745	-0.04260
VAR	-	-0.03094	0.04474	-0.52932	-0.15507
VAR		-0.16706	-0.25426	-0.02156	0.01635
VAR		-0.28390	-0.19947	0.09931	0.02812
VAR		-0.23068	-0.08278	0.05688	-0.24494
VAR		-0.25835	0.06158	-0.09765	-0.19256
VAR		0.09333	-0.01121	-0.20342	-0.13337
VAR	-	0.09602	-0.35140	-0.20812	-0.03879
VAR		0.01348	-0.14974	-0.28850	-0.18612
VAR	-	-0.18649	-0.27779	-0.16278	0.02472
VAR		-0.11406	-0.40460	-0.00601	-0.38259
VAR	-	-0.19046	-0.30611	0.04379	-0.43203
VAR		-0.26083	-0.50181	0.02627	-0.15919
VAR		-0.22614	-0.47556	0.08263	-0.16938
VAR		-0.00247	0.07612	0.02002	-0.55731
VAR		-0.07013	0.10362	-0.10167	-0.37562
VAR		-0.21274	0.00016	-0.11109	-0.18687
	124	-0.14261	0.00012	-0.14205	-0.22644

Table 26: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 125	-0.12989	-0.34940	0.02441	-0.27301
VAR 126	0.06977	-0.55005	0.03714	-0.20242
VAR 127	-0.29429	0.11220	0.04656	-0.31172
VAR 128	-0.32462	-0.00592	0.00197	-0.17705
VAR 129	-0.63224	0.11994	-0.09101	-0.09352
VAR 130	-0.38086	-0.14103	-0.08583	0.08228
VAR 131	-0.73479	0.12329	0.00842	-0.00832
VAR 132	-0.31500		-0.20200	0.11000

Table 27: Comparison Between the Four Types of Analysis, Factor I on the Principal Component and its Correspondence on the Other Types of Analysis, The English MainSample (the 59 Items)

1 R 7 18 8 4 8 7 6 7 10	1.0ad +499 +564	R 4 3	423 -449 -363 -443	9 5 11	Load	R
8 4 7 7 6 7 10 4		4	- 449 - 363	9 5 11		
0 6 7 1 0 4	. , ,			';		
			- 379 - 327	6 10 17		
7 7	+255	7	-420 -436 -424	7 8	•	
1 16	+332		-301 -338	14		
1 ·	+340	8	-458 -453 -331	16		
3 13 2 1	+361 +389 +655 +732	6 5 2 1	-343 -548 -515	13 1 2	-324 -632 -731	3 2 1
	9 14 4 16 6 15 4 3 3 5 4 12 3 13 2 1	9	9	9	9	9

Table 28: Comparison Between the Four Types of Analysis, Factor II on the Principal Component and Its Correspondence on the Other Types of Analysis. The English Main Sample, 59 Items.

Items Coding No.	_	oal Comp.	Rot	imax ation I		pal F.	0ы	ique I
2.00	Load	R	Load	R	Load	R	Load	R
78	-321	16						
81	-300	17	Į					
84	-464	5	+391	10	-415	6	-415	6
85	-442	9	+365	12	-393	9		
86	-340		+315	17			-300	
87	-484		+399	9	-435	4	-437	4 3
89	-482	4	+483		-437	3	-437	3
90	-528	1	+588	2	- 492	1	- 555	1
9 1	-514	2 6	+594	1	-479	2 5	-479	2
92	- 462	6			-4 25	5		
93	-322		322	16				
94	-348		+344	14	-309	13		
97	-445		+452	7	-404	8	-382	
103	-324	15	345	13	-299		-289	15
109			308	18				
114	-315		+404	8			381	8
119	-344		+526	4	-328	12	502	! !
120	-318		+502	5	-300	14	-475	5
121	+442	8	Ī	[410	7	•	
122	+358	10		l	323	11		
125			+369	11			-349	9
126	-377		571	3	-350	10	-550	3
127	327	13		1	-297			

Table 29: Comparison Between the Four Types of Analysis, Factor III
on the Principal Component and Its Correspondence on the
Other Types of Analysis. The English Main Sample, 59 Items

Items	Princip II	al Comp.	1	imax V		ipal F.	ОЪ1 II	ique I
	Load	R	Load	R	Load	R	Load	R
75 76 101 102 105 106 107 108 115 118	-356 -471 -615 -408 -405 +339 +327	3 2 1	-393 +354 +530 +396 +590 +760 +567 +595 +359	5 7 3 4 1 2 6	-419 -604 -355 -353	2 1	+322 +300 -454 328 -543 -761 -507 -529	3 4 2 1

Table 30: Comparison Between the Four Types of Analysis, Factor IV on the Principal Component and Its Correspondence on the Other Types of Analysis, The English Main Sample, 59 Items

Items		oal Comp.	Var I	imax I		ipal F.	i1d0 7I	ique T
ļ !	Load	R	Load	R	Load	R	Load	R
74	+300	7	+367					
75	+318	6	-316					
78	425	2	-570	2	842	4	504	2 8 ·
80	, -		-381	2 8			316	8
81		;	-349	11				
92			-545				+509	1
96			+466				-400	1 5
100	427	3			348	2		
117	, ,	-	+419	7			-382	6
118			+474	4			-432	4
121			+594	1		,		
122			+422	6				
125			+317	12				
126	+327	5						
127			+363	10	:		311	
129	+377	4			+345	3 1		
131	+488	1			+461	1		

Table 31: The Factor Pattern of the Egyptian Sample, Principal Factor, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
TAD	74	-0.04001	-0.20906	0.13582	-0.00420
VAR VAR	74 75	-0.09765	0.02930	-0.00880	-0.16204
VAR	76	-0.32220	0.09220	-0.07559	0.08084
VAR	77	-0.07553	-0.00810	-0.08967	-0.08475
VAR	78	0.16702	-0.26538	0.02954	-0.04721
VAR	79	-0.17064	-0.07131	0.09014	0.12841
VAR	80	-0.40276	0.30971	0.05308	0.00225
VAR	81	-0.24538	0.23510	-0.01423	-0.12139
VAR	82	-0.21056	-0.25724	0.15039	-0.10526
VAR	83	-0.19148	-0.15788	- 0.06039	-0.24913
VAR	84	-0.44657	0.18066	-0.05058	-0.03608
VAR	85	-0.16801	0.03792	-0.14187	-0.16054
VAR	86	-0.32690	0.00117	-0.15474	-0.04699
VAR	87	-0.33625	0.12055	-0.15825	-0.24069
VAR	88	-0.20693	0.00607	0.04590	-0.11968
VAR	89	-0.23457	-0.07129 0.10534	-0.03239 -0.11082	-0.21068 -0.16099
VAR	90	-0.40443	-0.24814	-0.11082	-0.29437
VAR VAR	91 92	-0.08338 -0.27811	0.10946	-0.16781	-0.05374
VAR	93	-0.27472	0.06403	0.16203	0.17372
VAR	94	-0.51710	0.17896	-0.13051	0.11617
VAR	95	-0.21117	0.18897	0.32110	0.11967
VAR	96	-0.42702	0.42222	-0.02369	0.00012
VAR	97	-0.31239	-0.22732	-0.00835	-0.18223
VAR	98	-0.37253	0.01879	-0.03767	0.01937
VAR	99	-0.50844	-0.01853	0.10925	-0.04387
VAR		-0.45407	0.05015	-0.01247	-0.06922
VAR	101	-0.22993	-0.36480	-0.09492	0.00566
VAR	102	-0.58778	0.17160	-0.04263	0.01851
VAR	103	-0.48223	0.06600	0.02403	-0.03462
VAR	104	-0.44544	-0.22328	0.03106	-0.01336
VAR	105	-0.3808 <u>4</u>	-0.01289	-0.20572	0.16360
VAR	106	-0.53375	0.08846	-0.09459	0.04669
VAR		-0.60274	0.14088	-0.06602	0.13449
VAR		-0.53348	0.12287	-0.13054	0.25564
VAR	_	-0.26056	-0.09991	0.18420	0.12711
VAR		-0.46694	0.28102	-0.08031	-0.00522
VAR		-0.40838	-0.00354	-0.00996	-0.07937
VAR		0.11509	-0.31117	0.24651	0.09019
VAR	-	-0.19449	0.20046 0.00825	0.33833	-0.02306 -0.06635
VAR		-0.31553 0.46300	-0.31013	0.28489 0.06334	0.16243
VAR	-	-0.16200	-0.23428	-0.18787	0.05633
VAR		-0.15479	-0.33544	-0.13610	0.17285
VAR	-	-0.35713 -0.47469	0.00021	-0.05856	0.17203
VAR			-0.16480	-0.06744	
VAR		-0.48839 -0.34093	-0.46594	-0.06744 -0.15642	-0.08372 -0.13351
VAR VAR		-0.36260	0.22269	0.34472	-0.07069
VAR VAR		-0.28428	0.22732	0.39538	-0.12246
VAR		-0.25173	-0.13700	0.48000	-0.05541
VAR	-	-0.27896	-0.16039	0.25134	-0 08742
AWII	164		00.00//	0.27174	- 0 00142

Table 31: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 125	-0.30069	-0.33555	-0.00817	0.15825
VAR 126	-0.43928	-0.12005	-0.18869	0.02867
VAR 127	-0.14587	-0.37996	0.26299	-0.09871
VAR 128	-0.31273	- 0.35328	-0.00712	-0.08654
VAR 129	-0.36240	-0.05770	0.16106	0.14953
VAR 130	-0.51951	-0.12217	0.00912	-0.05142
VAR 131	-0.29284	-0.41427	0.02511	0.26975
VAR 132	-0.48476	-0.03501	0.03435	-0.00686

Table 32: The Factor Pattern of the Egyptian Sample, Varimax, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
VAR	74	-0.15328	0.22458	0.17248	0.05515
VAR	75	0.04997	-0.08649	0.05740	0.27297
VAR	76	0.38881	0.09280	0.01804	-0.02788
VAR	77	0.07565	-0.00494	-0.08126	0.17500
VAR	78	-0.32690	0.16198	-0.04997	0.11603
VAR	79	0.11601	0.22650	0.13522	-0.15338
VAR	80	0.48977	-0.11458	0.23740	-0.01334
VAR	81	0.31298	-0.19414	0.11741	0.16779
VAR	82	-0.05729	0.28807	0.24626	0.23909
VAR	83	0.03006	0.11358	0.01837	0.43786
VAR	84	0 .4 8498	0.00127	0.13294	0.12689
VAR	85	0.17750	-0.05018	-0.08116	0.29837
VAR	86	0.34018	0.13126	-0.06566	0.16495
VAR	87	0.34735	-0.08569	-0.00551	0.38923
VAR	88	0.11669	0.00282	0.16156	0.24879
VAR	89	0.10632	0.05204	0.07796	0.40448
VAR	90	0.40140	-0.00252	0.05640	0.30079
VAR	91	-0.10349	0.13911	-0.08399	0.49270
VAR	92	0.35803	-0.01185	-0.08139	0.15383
VAR	93	0.24655	0.13025 0.09891	0.28012 0.05430	-0.17608
VAR	94 95	0.59709 0.17947	-0.04816	0.45765	0.01197 -0.19950
VAR		0.57999	-0.20691	0.17460	0.00579
VAR	96 97	0.09451	0.26451	0.10315	0.39186
VAR VAR	98	0.34740	0.14424	0.09073	0.10647
VAR	99	0.35829	0.20300	0.30973	0.19966
VAR	100	0.39696	0.11155	0.17038	0.20314
VAR VAR	100	0.03581	0.45806	-0.06722	0.19118
		0.58899	0.49000	0.18303	0.12847
VAR	102	0.42805	0.12182	0.21753	0.16375
VAR	103	0.23841	0.39269	0.17277	0.21144
VAR	•		0.25800	-0.12952	-0.03699
VAR		0.44601		0.09619	0.12247
VAR		0.53390 0.61397	0.15491 0.16419	0.14768	0.04686
VAR	-		0.10419	0.03744	-0.09148
VAR		0.60373 0.12856	• •	0.28764	-0. 05148
VAR	-	0.56544	0.27548 -0.07551	0.10893	0.09791
VAR		• • •	0.14549	0.14526	0.20429
VAR		0.33271		0.19550	-0.11027
VAR		-0.34421 0.13266	0.29435 -0.12296	0.19930	-0.07802
VAR VAR		0.14047	0.09098	0.46517	0.08514
VAR	-	-0.00424	0.47012	0.06565	-0.11348
VAR		0.10129	0.34045	-0.21647	0.08301
VAR		0.22748	0.55865	-0.08541	-0.00108
VAR		0.46171	0.26843	0.08432	-0.01649
VAR		0.32993	0.32745	0.09691	0.28741
VAR		0.08053	0.52536	-0.08040	0.36372
VAR		0.27310	-0.09793	0.53127	0.05175
VAR		0.17608	-0.15965	0.56697	0.07902
VAR	123	-0.05904	0.18927	0.59384	0.09540
VAR	124	0.01870	0.22336	0.39085	0.19182

Table 32: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 125 VAR 126 VAR 127 VAR 128 VAR 129 VAR 130 VAR 131	0.12024 0.39144 -0.20652 0.05097 0.24444 0.35348 0.08580	0.52894 0.32066 0.37506 0.42688 0.26891 0.30698 0.61701	0.03619 -0.07312 0.31487 0.07827 0.29163 0.19194 0.04896	-0.00724 0.16310 0.20223 0.31181 -0.06360 0.24653 -0.08980
VAR 132	0.37151	0.22525	0.21610	0.16846

Table 33: The Factor Pattern of the Egyptian Sample, Oblique, 59 Items

		Factor 1	Factor 2	Factor 3	Factor 4
				,	
VAR	74	0.14422	-0.17957	0.11770	-0.04744
VAR	75	-0.02721	0.08210	0.05084	-0.17301
VAR	76	- 0.34332	-0.06348	0.00918	0.01757
VAR	77	-0.05822	0.01331	-0.05361	-0.11856
VAR	78	0.28931	-0.14634	-0.01475	-0.07806
VAR	79	-0.09233	-0.17534	0.10159	0.08253
VAR	80	-0.42585	0.14088	0.20010	0.00880
VAR	81	-0.25813	0.18866	0.10455	-0.10943
VAR	82	0.09290	-0.21543	0.18979	-0.19546
VAR	83	0.01336	-0.05701	0.01657	-0.34194
VAR	84	-0.42230	0.03720	0.09994	-0.09450
VAR	85	-0.14314	0.06333	-0.06038	-0.20987
VAR	86	-0.28644	-0.07523	-0.05604 -0.00606	-0.14844
VAR	87	-0.28325	0.12518		-0.30552
VAR	88	-0.08425	0.00976	0.12312	-0.15309 -0.28447
VAR	89	-0.06453	-0.01697 0.05142	0.05996 0.04232	-0.23903
VAR	90	-0.33271			
VAR	91	0.13422	-0.07798	-0. 06052	-0.39551
VAR	92	-0.31162	0.03274	-0.06655 0.20960	-0.11550
VAR	93	-0.22181 -0.56620	-0.11470 -0.06904	0.20980	0.15488 0.02212
VAR VAR	94 95	-0.14866	0.04261	0.37528	0.18200
VAR	96	-0.53614	0.22628	0.14619	0.01897
VAR	97	-0.03840	-0.18458	0.07882	-0.31447
VAR	98	-0.30014	-0.10545	0.06154	-0.06748
VAR	99	-0.28652	-0.13783	0.24906	-0.14311
VAR	100	-0.32944	-0.05502	0.12839	-0.15850
	101	-0.01882	-0.37854	-0.08064	-0.16836
VAR		-0.53553	-0.04075	0.13441	-0.07459
VAR		-0.35437	-0.06732	0.16761	-0.11996
VAR	•	-0.18184	-0.30928	0.12293	-0.17204
VAR	•	-0.42210	-0.21713	-0.13199	0.03052
VAR	-	-0.48793	-0.11118	0.05282	-0.06831
VAR		-0.58500	-0.13365	0.09023	0.02164
VAR	-	-0.60177	-0.19527	-0.01620	0.13800
VAR		-0.09817	-0.22180	0.21465	0.07020
VAR	•	-0.51460	0.09754	0.08366	-0.04607
VAR		-0.26377	-0.08092	0.11346	-0.17282
VAR		0.32271	-0.26600	0.15452	0.07109
VAR		-0.08051	0.13400	0.41528	0.05332
VAR		-0.07425	-0.04080	0.37783	-0.08080
VAR	-	0.01345	-0.39138	0.03545	0.04454
VAR		-0.09511	-0.27765	-0.18433	-0.08214
VAR		-0.20742	-0.48219	-0.11376	-0.03402
VAR	-	-0.41659	-0.21306	0.04497	0.01169
VAR		-0.26112	-0.23876	0.05801	-0.25188
VAR	-	-0.02013	-0.42333	-0.09931	-0.36915
VAR		-0.19098	0.12882	0.47813	-0.02346
VAR		-0.09469	0.18510	0.51706	-0.04525
VAR		0.13194	-0.14265	0.53168	-0.06071
VAR	-	0.03271	-0.16079	0.31681	-0.14726
	. – 7		- 17	,	

Table 33: (Continued)

	Factor 1	Factor 2	Factor 3	Factor 4
VAR 12	5 -0.10321	-0.45356	-0.00036	-0.01160
VAR 12	6 -0.34759	-0.25111	-0.08904	-0.14129
VAR 12	7 0.25202	-0.29862	0.26598	-0.18839
VAR 12	•	-0.34102	0.04619	-0.25718
VAR 12	9 -0.21198	-0.22926	0.22057	0.07658
VAR 13	•	-0.22698	0.14134	-0.20115
VAR 13		- 0.57550	-0.00035	0.08235
VAR 13		-0.16694	0.16014	-0.12039

Table 34: Comparison Between the Four Types of Analysis, Factor I on the Principal Component and the Other Types of Analysis, Egyptian Sample, 59 Items

The items with loading greater than .300	Principal Comp.		Varimax I		Principal F.		Oblique I	
	Load	R	Load	R	Load	R	Load	R
76 78	-344		+388 -326	14 19	-322		-343	12
80 81	-422		+489 +347	7 17	-402	19	-425	7
84 86	-47 0 -34 9		+484 +340	8 18	-446 -326	14	-422	8
90 92	-4 26		+401 +358	11 16	-404	18	-332 -311	13 15
94 9 5	-537 -441	15	+597 +579	3 5	-519 -427	6 16	-566 -536	3 4
98 99	-396 -532	6	+347 +358		-372 -508	7	-300	17
100 102	-479 -606	2	+396 +588 +420	13 4 10	-454 -587 -482	13 2 10	-329 -535 -354	14 5 10
103 106 107	-556 -619	3	+420 +533 +613	10	-533 -602	3	-487 -585	2
108 110	-549 -486	9	+603 +565	2 6	-533 -454	4 12	-601 -514	1 6
111 118	-433 -498	16 - 8	+332 +461	5	-408 -474	17	-416	9
119 126	-511 -462	14	+329 +391	12	-488 -439	8 15	-347	10
130 132	-543	4	353 +371	15	-519 -484	5 8	-309	16
% of variance	13.6	_						

Table 35: Comparison Between Four Types of Analysis, Factor II on the Principal Component and the other Types of Analysis, Egyptian Sample, 59 Items

The items with loading greater than .300	Principal Comp.		Varimax II		Principal F		Oblique II	
	Load	R	Load	R	Load	R	Load	R
78 80 82 91	-323 +352 -304	12 11 14			+309	11		
96 101 104	+462 -421	2 5	+458 +392	6 8	+422 - 364	2 5	-378 -309	7 8
110 112 115	+316 -365 -365	9 10	+294 +470	11 5	-311 -310	9 1 0	-391	6
116 117 120	-371 -500	8 1	+340 +558 +525	9 2 4	- 465	1	-482 -423	2 5
125 127	-384 -433	7 4 6	+528 +375	3	-335 -379	7 4 6	-453 -341	5
128 130 131	-403 -453	3	+426 +306 +617	7 10 1	-353 -414	3	-341 -575	4
% of variance	5.6							

Table 36: Comparison Between the Four Types of Analysis, Factor III on the Principal Component and the Other Types of Analysis, Egyptian Sample, 59 Items

Items with loading	Principa III	_	Var.	imax I		ipal F.	0bl	ique I
greater than .300	Load	R	Load	R	Load	R	Load	R
95 99 105 109	+411	4	+457 +309	5 7	+321	4	+375	5
112 113 114 116	+310 +435 +364	7 3 6	+497 +465	3 4	+338 +284	3 5	+415 +377	3 4
121 122 123 127 129	+393 451 +542 +306	5 2 1 8	+531 +566 +593 +314 +291	2 1 6 8	+344 +395 +480	2 1	+478 +517 +531	1 2
% of variance	3.9							

Table 37: Comparison Between the Four Types of Analysis, Factor IV on the Principal Component and the Other Types of Analysis, Egyptian Sample, 59 Items

Items with loading	Principa IV	_	Var:	imax 7	1	pal F.	0b1 I	ique V
greater than .300	Load	R	Load	R	Load	R 	Load	R
82								
83	+347	2	+437	2		;	-341	3
87	+304	2 5 3	+389	2 5			-305	3 5
89	+332	3	+404	3			-284	
90								
91	+401	1	+492	1	-294	1	-395	1 4
97			+391	4			-314	4
108								
119			+287	9			_	
120			+363	5 6		•	-369	2
128			+311	6				
131	-314	4		ļ	+269	2		
% of variance	2.9							

Table 38: The Highest Loading Items on Factor 3, English Pilot Sample, 59 Items

Items	Loading
No other type of punishment is over so quickly or leaves so little resentment	+488
Children must acquire proficiency in spelling, punctuation and grammar	-41 0
Direct moral instruction does little to improve children's characters	+399
A person who uses English incorrectly is handicapped in his career	-389
Increased expenditure on adult education	+360
Higher proportion of the national income to be spent on education	+354
Instruction in one's duties to the state should come later	+320
The progress of industry demands workers equipped with scientific techniques	-314
It instils a sense of duty	+314
Teacher must know how to control children	- 312
School courses in parenthood	+305

Table 39: The Highest Loading Items on Factor 4, English Pilot Sample, 59 Items Principal Component Analysis

Items	Loading
The knowledge of a living God meets a deep-felt need in children	- 557
The raising of the school leaving age to 16	-4 89
It develops a sense of spiritual values	-481
The time to begin reading lessons is when the children feel the need for them	+377
A study of international affairs should show which countries are our friends	+374
Fewer free school meals	+351
The study of science is satisfying to one's intellectual curiosity	+343
Technical education is a good investment for an industrial country	+324
Schools should teach Social Studies rather than History or Geography	+314
Handicapped children can be very troublesome in ordinary schools	+304

Table 40: Comparison Between the High Loading Items on Each of the Four Factors for the English Pilot and Main Samples

Items No. 74 - 132	P		tor I Analysia	3	P		tor II Analysi	3		or III Analysis		Factor IV P.C. Analysis			3	
all 59 English	Pil	ot	Ma	in	Pil	.ot	Ma:	in	Pil	ot	Mai	n	Pil	ot	Mai	n
	Load I	R	Load I	R		T _R	Load I		Load I	T _R	Load III	R	Load	I II	Load IV	R
74 75 76 77 78 79	+516 -356 -398	8 19			- 511	3	-321	15	+377 +314	9			+399	3	+295 +318 +425	7 6
80 81 82 83 84			-3 07	18	+394 -413	9	-300 -464	16 5	+351 -489	6 2						
85 86 87 88					-551 -456 -478	2 6 4 14	-340 -484	3					+360 +305	5 11		
89 90 91 92 93					-34 0 -4 65	5	-482 -528 -514 -462	1 2 6					+354	6		
94 95 96 97	-485 -625 -454	11 1 8			-366 -354	11	-348 -445	11			·		-389 -410	4 2		
98 98 99 100	- 466	12 16	-480 -387	4	- 400	8	-447		+343	7			-314	8	. 417	
100	-426	10	-201												+417	

Table 40: (Continued)

	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R	Load	R
101 102 103	- 426	15	-470 -407	6 10			-324	14	+374	5	- 356	4				
104 105 106	-523 -536	7 6	404						-481	3	-471	3				
107 108	-510 -457	9 7	-424	9					-557	1	-615	2	+314	9		
109 110	-443	13														
111 112 113			-330 -369	15 14	+319	13							+320	7		
114	-580	2														
116 117	-437 -572	14	- 366	15							! :					
118 119	-558	5	-484 -473	4 5	-347	15	-344	12					-312	10		
120 121 122					+582 +374	1 10	+442	8			+327	4	+488	1		
123 124					1,714								+400			
125 126	-505 -386	10 18	-384	12			707									
127 128 129	+559	4	-373 -562	13			+327	13	+304	10					-327 +377	5
130 131			- 523	2					+324	8					+488	1
132 % of variance	-496 12.7	11	10.2		7.5		7.3		5•4		4.4		4.9		3.8	
English Pilot English Main	30.5 25.7															

Figure 1: Responses to Item 74. Before Recoding, English Pilot Sample

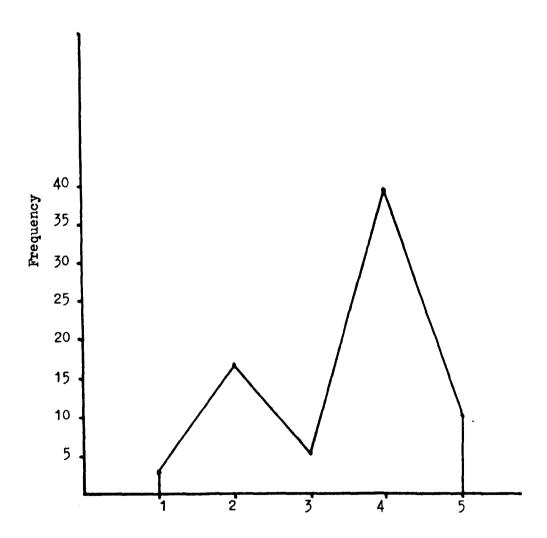


Figure 2: Responses to Item 74. After Recoding, English Pilot Sample

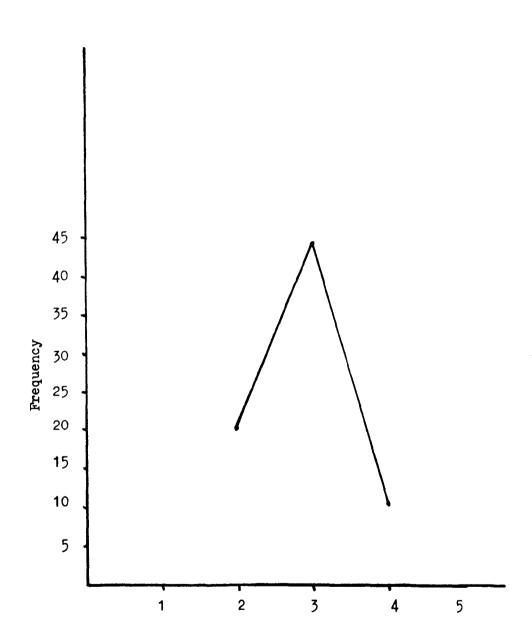


Figure 3: Responses to Item 80 Before Recoding, English Pilot Sample

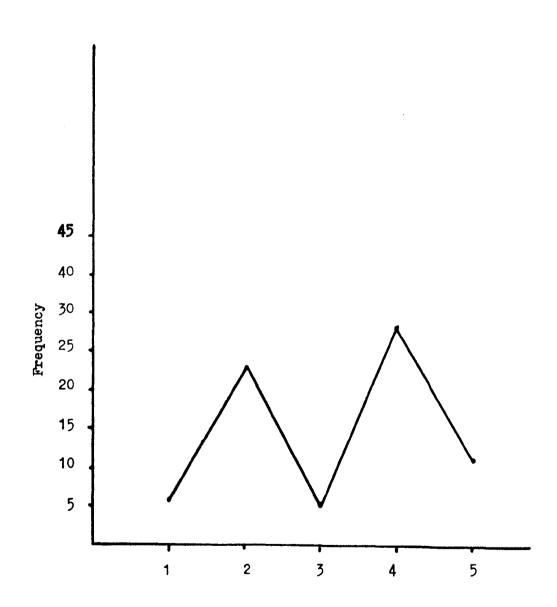


Figure 4: Responses to Item 80, After Recoding, English Pilot Sample

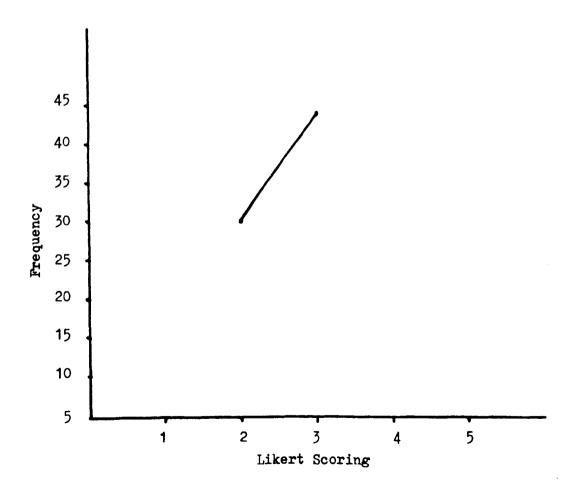
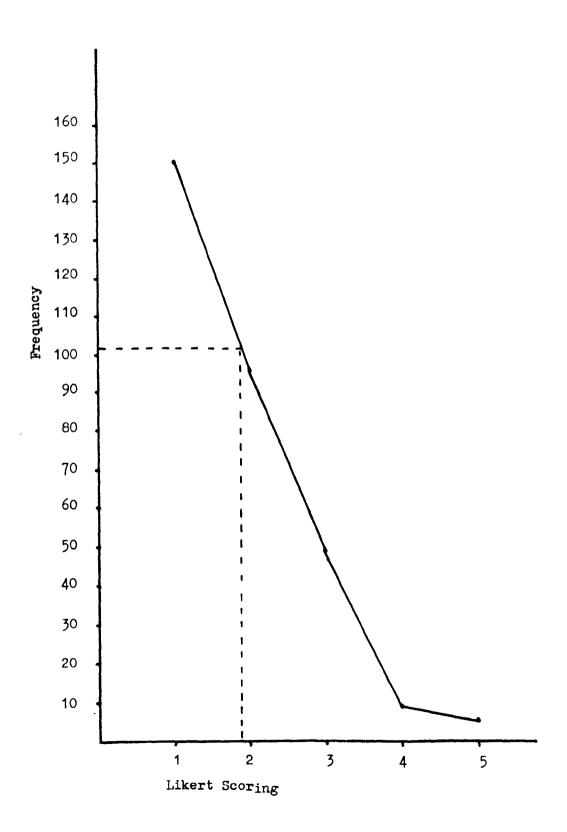


Figure 5: Response to Item 41 Before Recoding, English Main Sample



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Figure 6: Response to Item 41 after Recoding, English Main Sample

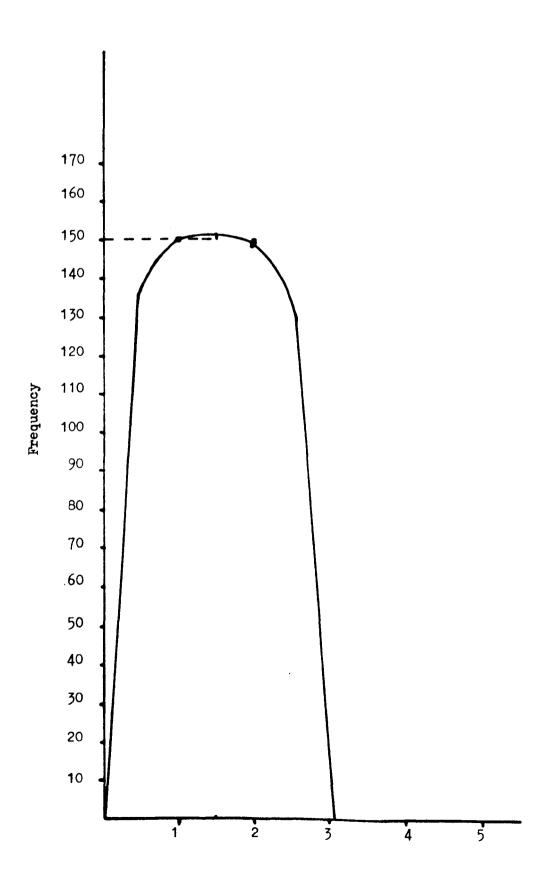


Figure 7: Response to Item 35 Before Recoding, English Main Sample

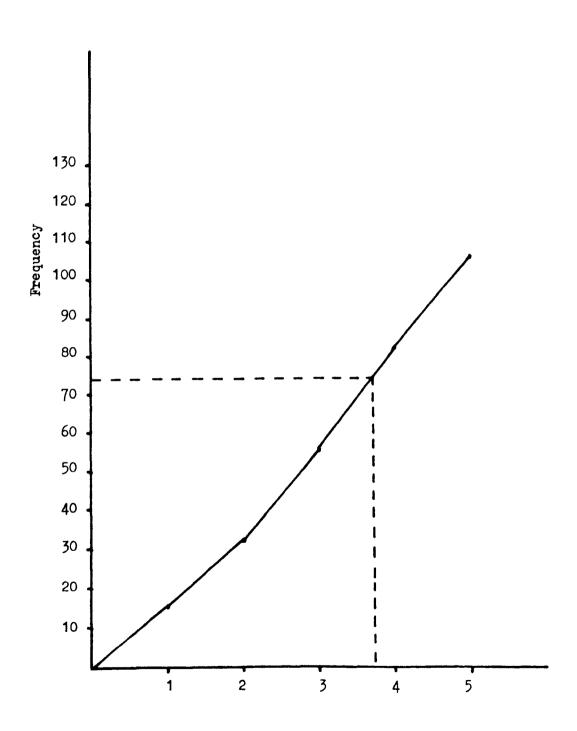
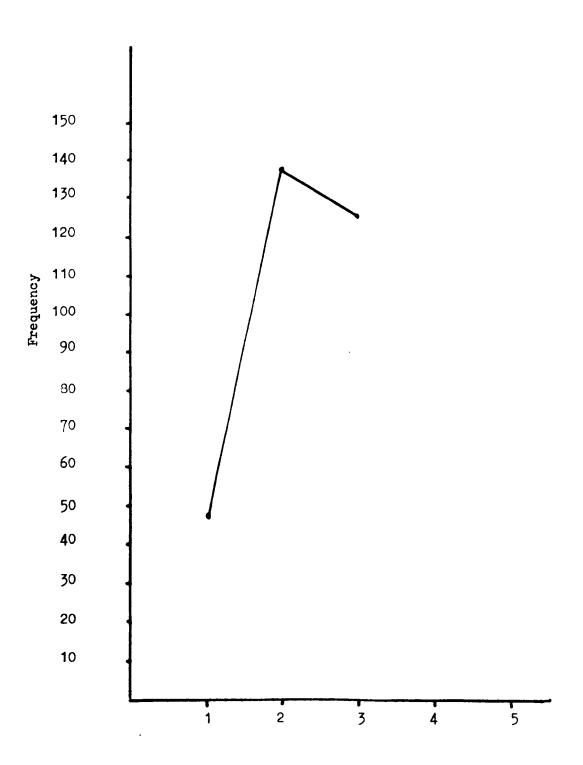


Figure 8: Response to Item 35 After Recoding, English Main Sample



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Figure 9: Response to Item 23 Before Recoding, English Main Sample

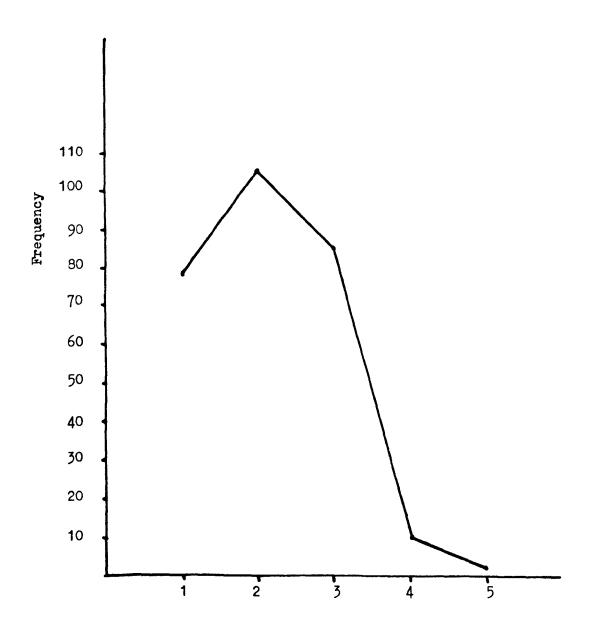
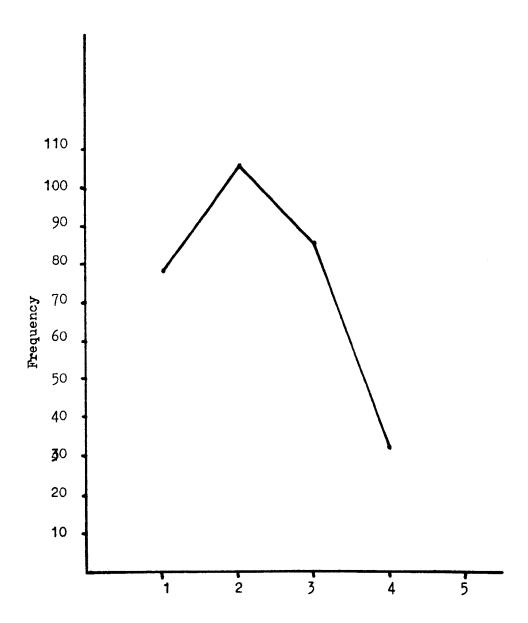
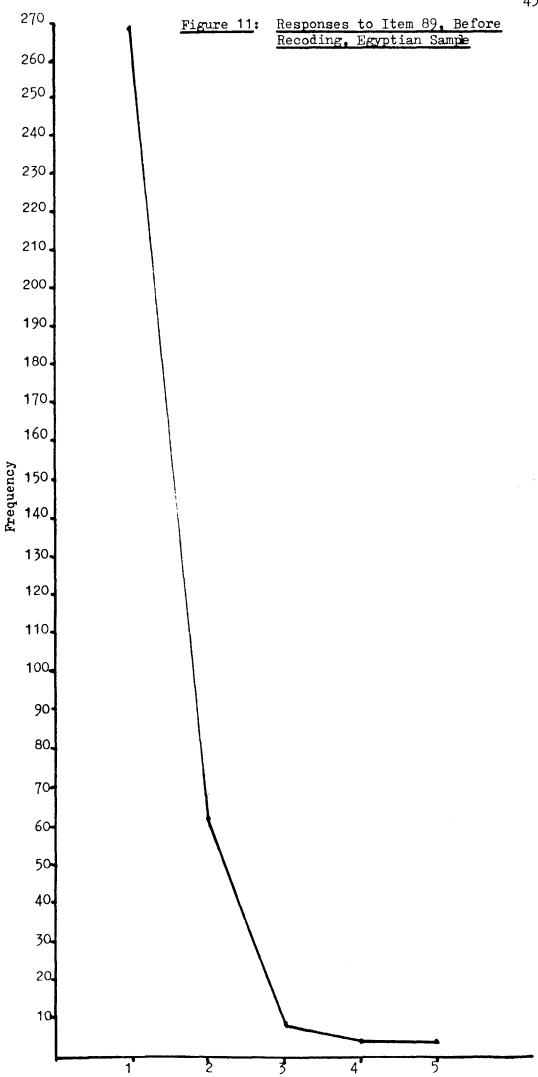


Figure 10: Responses to Item 23 After Recoding, English Main Sample





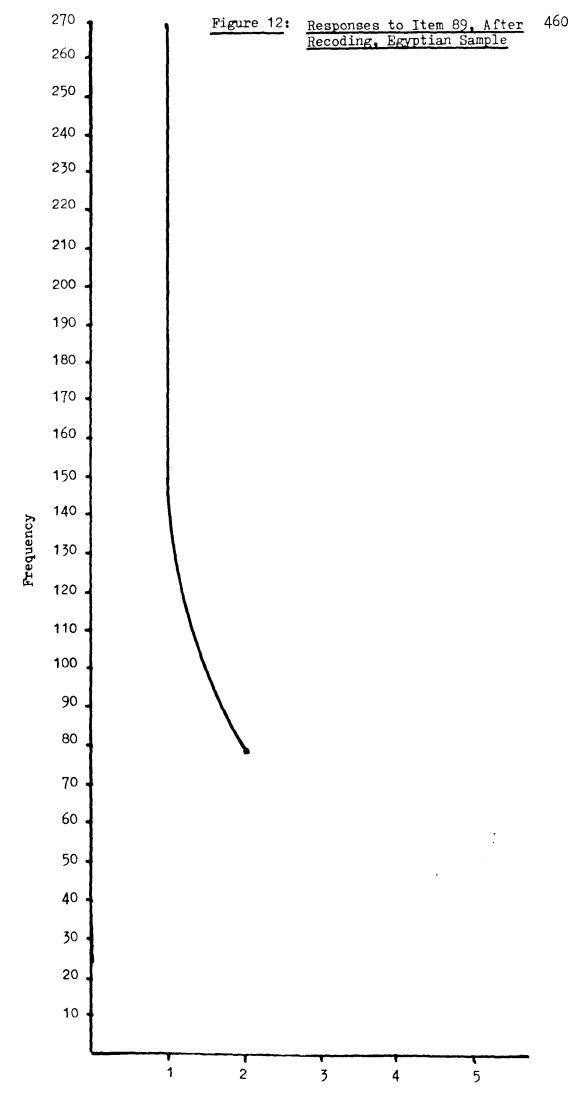


Figure 13: Responses to Item 122, Before Recoding, Egyptian Sample

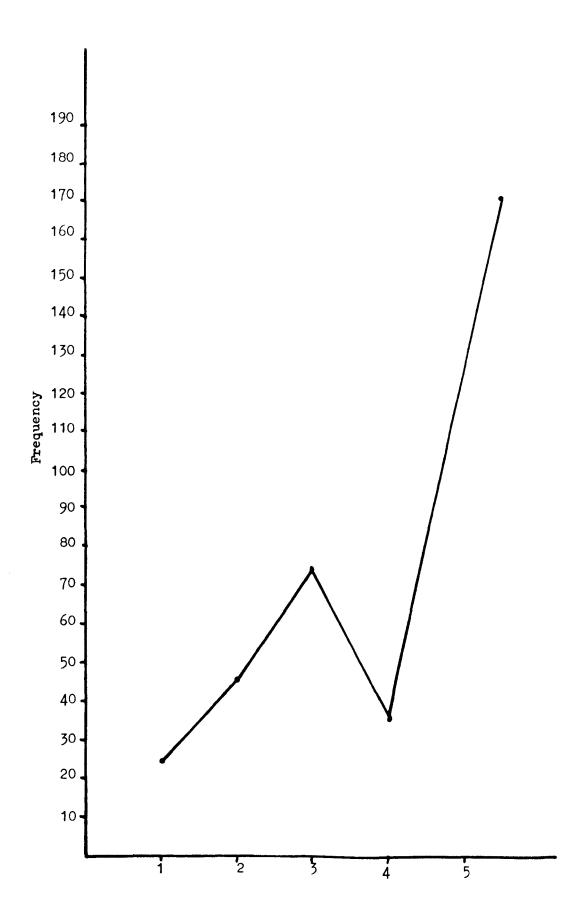
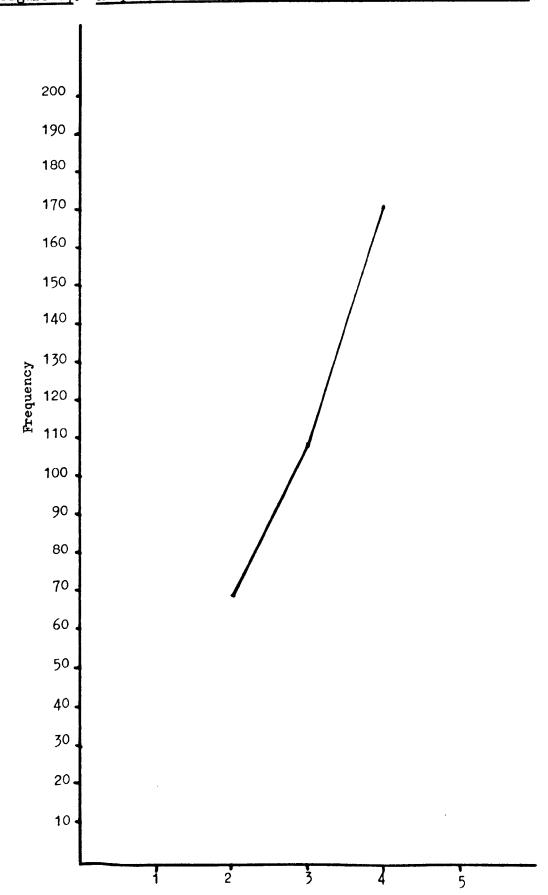


Figure 14: Responses to Item 122, After Recoding, Egyptian Sample



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Figure 15: Responses to Item 132, Before Recoding, Egyptian Sample

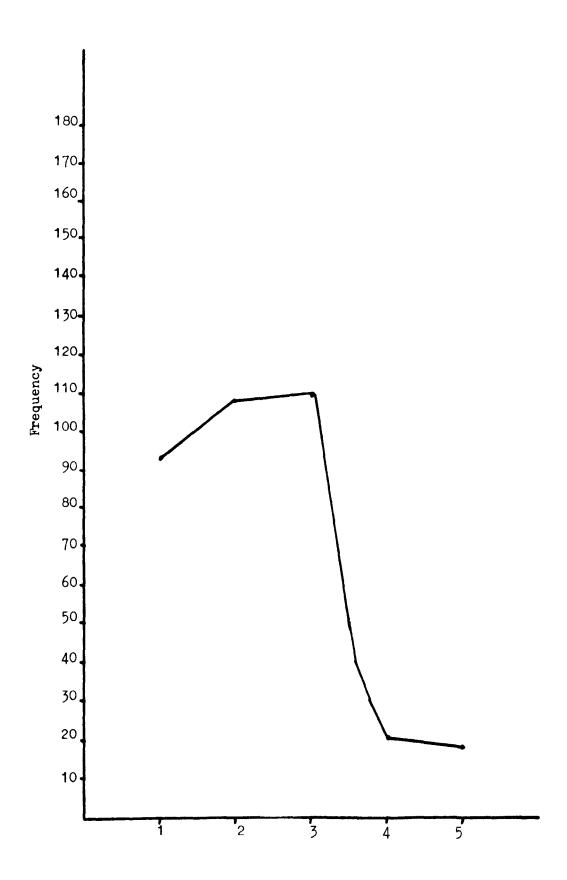
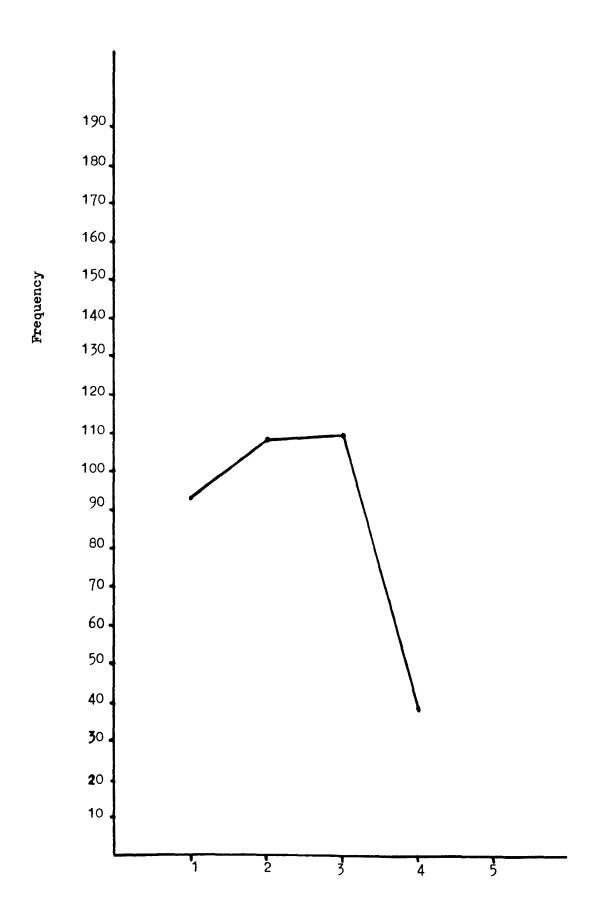


Figure 16: Responses to Item 132, After Recoding, Egyptian Sample



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APPENDIX F

Chapter VIII

Results of Ranking Data on Occupations

Table 1: The Distribution of Ranking Occupations by English Sample According to Status

Cable 1: The Distribution of	Ranki	ng 0c	cupa	tions	by E	nglish	Samp	<u>le Ac</u>	cordi	ng to	Stat	<u>us</u>								
Occupations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Accountant	5	17	29	18	34	24	28	22	17	15	18	5	14	11	7	8	11	10	6	1
2. Architect	8	24	41	45	34	31	27	26	14	6	7	6	7	3	6	5	5	3	1	1
3. Army Officer	3	-	5	8	12	18	12	12	17	16	17	14	16	15	19	25	19	14	31	27
4. Banker	6	6	11	14	15	13	12	13	20	21	16	21	23	15	22	15	16	12	19	10
5. Dentist	1	29	32	36	38	40	30	21	22	8	10	10	6	5	5	1	-	3	1	2
6. Doctor	142	70	38	17	11	5	8	1	2	-	-	5	1	-	•	-	•	•	•	-
7. Eng. (Prof.)	3	7	13	17	16	25	23	25	26	20	26	18	16	17	11	16	11	8	1	1
8. Civil Servant	2	1	6	2	9	6	8	11	10	19	13	22	20	22	29	24	26	31	17	22
9. Lawyer	94	79	38	27	10	11	8	7	2	4	5	4	1	4	1	1	1	4	1	1
10. Journalist	_	4	3	5	9	8	15	15	16	15	15	29	19	31	28	23	17	15	22	11
11. Librarian	1	-	_	2	2	3	4	3	12	7	14	15	26	28	22	26	29	34	32	40
12. Management Trainee	-	1	-	2	3	1	8	6	4	8	7	10	14	16	23	14	28	41	56	58
13. Primary School Teacher	8	5	7	9	5	12	15	20	15	33	12	28	16	21	17	19	18	14	16	9
14. Pharmacist	-	1	7	13	15	14	24	33	17	25	18	24	13	20	15	17	15	17	5	7
15. Radio/TV Announcer	7	5	3	7	6	12	7	12	15	13	14	16	20	8	17	27	24	21	25	41
16. Sec. School Teacher	3	4	5	11	18	19	18	19	34	27	31	22	19	23	19	6	9	6	5	2
17. Social Worker	1	3	7	2	5	12	4	6	6	12	16	16	20	18	25	24	25	30	31	36
18. Nurse	1	10	13	4	7	9	7	12	12	18	12	12	20	23	15	29	34	25	21	16
19. University Teacher	14	21	30	31	25	26	24	25	21	20	18	11	12	3	6	3	4	_	5	1
20. Vet	4	19	9	37	27	15	18	18	20	19	28	9	14	9	11	13	10	3	4_	7

Table 2: Ranking of Occupations by English Sample According to Status (Mean, Median, Score Ranks)

Occupation	Mean (300) Subjects	Median	Ranks
Doctor Lawyer Architect Dentist University Teacher Accountant Vet Engineer Secondary Teacher Pharmacist Banker Primary Teacher Journalist Army Officer Nurse Radio/TV Announcer Civil Servant Social Worker Librarian Management Trainee	2.35 3.54 6.43 6.49 7.19 8.33 10.29 11.31 11.58 12.76 12.97 13.64 14.32 15.35 16.20	1.61 2.21 5.44 5.83 6.63 7.32 8.60 9.31 10.56 11.64 11.79 13.34 13.60 14.07 14.46 14.79 15.34 15.92 17.6	1 2 3 4 5 6 7 8 9 0 11 12 14 5 6 17 8 9 0 12 14 5 6 17 8 9 0 19 0 19 0 19 0 19 0 19 0 19 0 19

Table 3: The Distribution of the Subjects According to their Ranking to Teaching Occupations as to Public Esteem in England

Stages of Educ.	Excellent	Good	Average	Below-Average	Low	I don't know
Higher Ed.	11 8	125	41	12	2	2
Per cent	39•3	41•7	13•7	4•0	0.7	0.6
Further Ed.	48	118	109	21	1 0.3	3
Per cent	16.0	39•3	36.3	7•0		1.0
Second Ed.	31	119	119	21	8	2
Per cent	10•3	39•7	39•7	7•0	2•7	0 .6
Primary Ed.	37	103	106	44	9	1
Per cent	12.3	34•3	35•3	14•7	3.0	0•3
Nursery Ed.	14	52	130	71	28	5
Per cent	4•7	17•3	43•3	23•7	9•3	1.7
Adult Ed.	15	83	145	40	14	3
Per cent	5•0	27•7	48•3	13•3	4•7	1.0

Table 4: The Distribution of the Subjects According to their Preferences in Teaching at the Different Levels in England

The levels of teaching	1	2	3	4	5	6	Non respondents
Secondary Education	106	69	69	2 1	12	21	2
	35•3	23.0	23.0	7.0	4.0	7.0	0•7
Primary Education %	145	46	13	20	71	3	2
	48•3	15•3	4•3	6.7	23.7	1.0	0•7
Nursery Education %	4	78	50	20	28	118	2
	1.3	26 . 0	16.7	· 6•7	9•3	39•3	0•7
Higher Education %	29 <i>(</i>	39	60	60	66	45	1.
	9 . 6	13.0	20•0	20 . 0	22 . 0	15•0	0 . 3
Further Education %	7	47	56	92	68	28	2
	2.3	15•7	18•7	30•7	22 . 7	9•3	0•7
Adult Education %	8	19	50	84	53	84	2
	2•7	6.3	16.7	28.0	17•7	28•0	0 .7

Table 5: The Distribution of Ranking Occupations by Egyptian Sample According to Status

Occupations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Accountant	5	4	11	14	24	21	21	37	51	47	47	40	40	36	39	25	12	11	7	2
2. Agr. Eng.	6	7	11	17	15	17	40	36	43	48	3 8	42	42	46	32	13	13	15	9	2
3. Army Officer	21	15	20	45	42	39	35	43	20	3 8	24	25	25	24	12	15	17	6	11	21
4. Dentist	6	25	48	54	63	46	39	45	23	24	26	18	24	15	12	9	5	6	5	0
5. Journalist	19	26	17	30	23	42	40	44	55	27	29	3 9	27	29	20	15	5	9	2	0
6. Administrator		7	2	3	4	6	5	6	7	10	15	22	18	3 9	56	62	80	61	4 9	39
7. Geologist	12	17	12	18	34	26	28	29	23	32	45	46	45	40	25	21	19	10	19	7
8. Engineer	53	40	74	46	65	41	34	36	24	22	13	18	7	5	3	7	2	3	2	1
9. Social Worker	5	12	14	11	15	6	14	16	17	14	18	14	24	32	49	62	69	54	33	13
10. Sec. School Teacher	15	44	35	21	22	28	32	22	22	26	28	36	29	37	29	23	27	22	7	4
11. Pharmacist	17	60	60	60	61	49	34	17	29	24	18	15	11	10	6	9	5	4	0	3
12. Lawyer	10	12	15	23	23	29	35	32	46	52	41	38	32	32	26	10	14	10	8	8
13. Nurse		5	3	5	7	13	8	11	8	8	2	9	23	17	44	40	37	60	74	119
14. Translator	15	16	22	25	21	22	22	28	22	30	39	32	34	24	30	33	23	27	20	20
15. Doctor	123	134	55	40	23	14	12	9	10	12	13	12	5	3	5	5	10	8	4	2
16. Radio/TV Announcer	13	25	28	25	22	33	46	37	31	34	37	26	32	20	21	14	19	8	17	9
17. Primary School Teacher	36	11	9	12	5	4	3	7	6	10	8	11	13	11	15	35	37	57	91	114
18. University Teacher	144	56	61	41	26	36	23	18	19	8	16	8	3	12	5	4	4	6	4	2
19. Librarian	1	9	3	5	5	5	9	10	8	3	12	14	19	18	27	40	67	84	97	58
20. Vet	2	5	9	14	10	21	22	21	33	32	39	33	32	35	41	48	23	28	21	22

^{*} In some cases, the number of the ranking category groups of the sample does not add up to 500 respondents because of non-respondents.

Table 6: The Distribution of Subjects According to Their Ranking of the Teaching Profession at Different Levels as to Public Esteem in Egypt

The levels of teaching	Held in High	Held in Good	Held in Average	Held in Below	Held in Low	Non
	Esteem	Esteem	Esteem	Average Esteem	Esteem	Respondent
Adult Education (No) %	28	56	110	81	191	34
	5•6	11 . 2	22.0	16•2	38•2	6.8
Primary Education (No) %	39	82	200	99	4 1	39
	7•3	16•4	40•0	19.8	8•2	7.8
Higher Education (No) %	325	115	28	5	4	2 3
	65•0	23•0	5•6	1.0	0•8	4.6
Technical Education (No) %	21	124	243	58	23	31
	4•2	24•8	48•6	1(•6	4•6	6•2
Primary Education (No) %	52	317	88	10	5	28
	10•4	63•4	17 . 6	2.0	1.0	5•6
Nursery Education (No) %	35	65	119	96	149	36
	7•0	13•0	23.8	19•2	29•8	7•2

Table 7: The Distribution of the Subjects According to their Preferences in Teaching at the Different Levels in Egypt

The levels of teaching	1	2	3	4	5	6	Non respondents
Secondary Education	143	228	79	18	22	6	4
	28.6	45•6	15 . 8	3.6	4•4	1 . 2	0.8
Higher Education %	207	110	55	55	40	28	5
	4 1. 4	22.0	11.0	11.0	8.0	5•6	1. 0
Primary Education %	49	75	74	138	139	21	4
	9•8	1 5•0	14•8	27.6	27.8	4•2	0•8
Technical Education %	11	35	186	103	93	67	5
	2•2	7•0	37•2	20.6	18.6	13. 4	1.0
Adult Education %	25	29	68	130	108	134	6
	5•0	6.	13.6	26.0	21.6	26 . 8	1 . 2
Nursery Education	64	20	33	47	95	233	. 8
%	12 . 8	4.0	6.6	9•4	1 9.0	46 . 6	1.6

APPENDIX G

Chapter IX

The Relationship Between the English Subjects

Perceptions of the Status of the Teaching Profession

and Their Attitudes to Education

Figure 1: Distribution of the Scores of English Main Sample on the Tenderminded Theoretical Factor

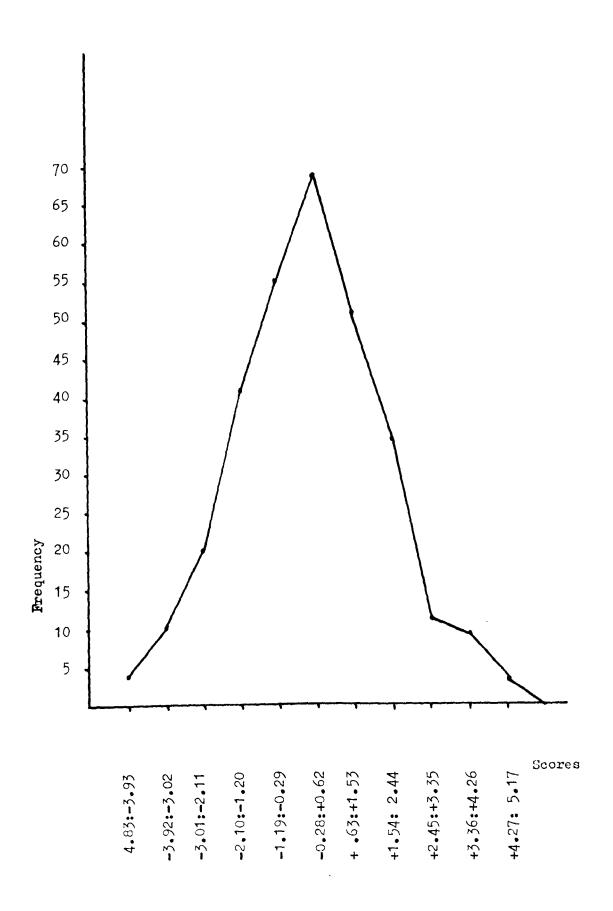
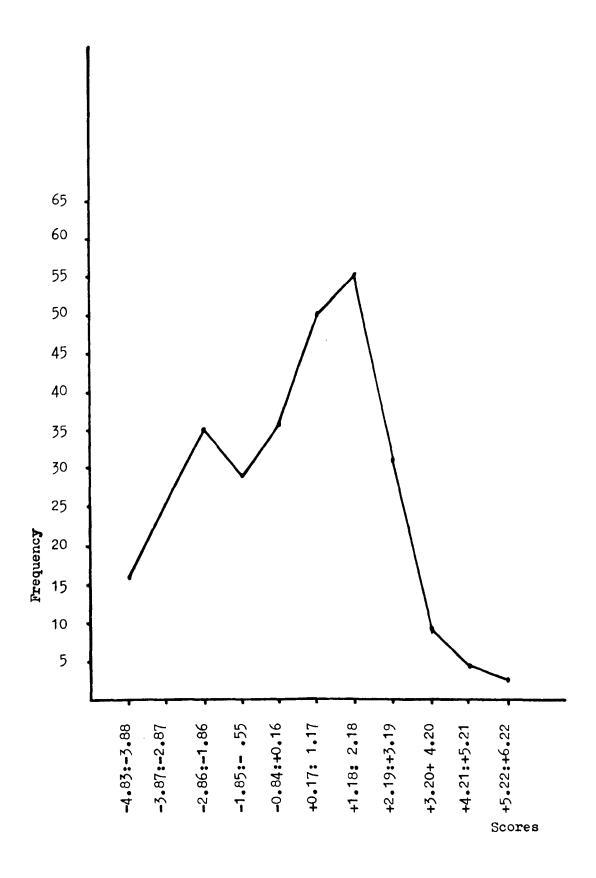


Figure 2: Distribution of the Scores of English Main Sample on the Progressive Radical Factor



APPENDIX H

Chapter X

The Relationship Between the Egyptian Subjects

Perceptions of the Status of the Teaching Profession

and Their Attitudes to Education

The Distribution of the Scores on the Commitment to Education Factor Made by the Egyptian Sample

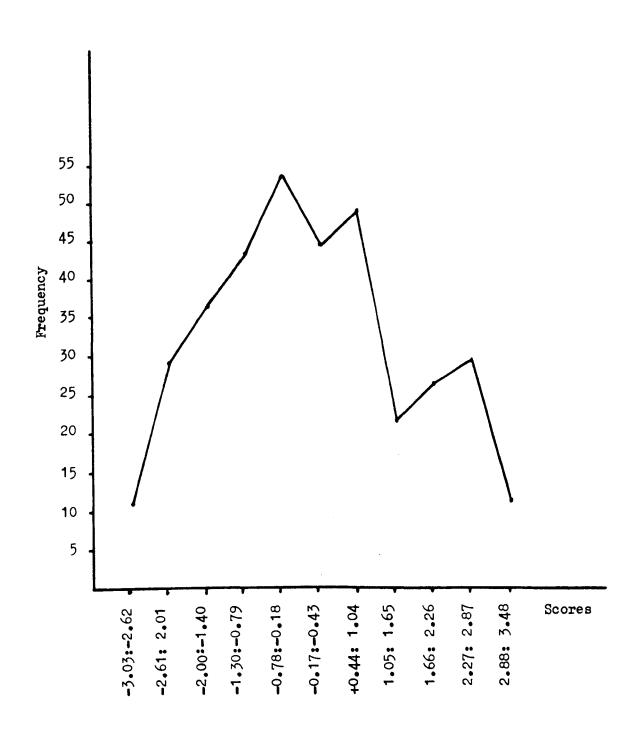


Figure 2: The Distribution of the Scores on the Unsentimental Efficiency Factor made by the Egyptian Sample

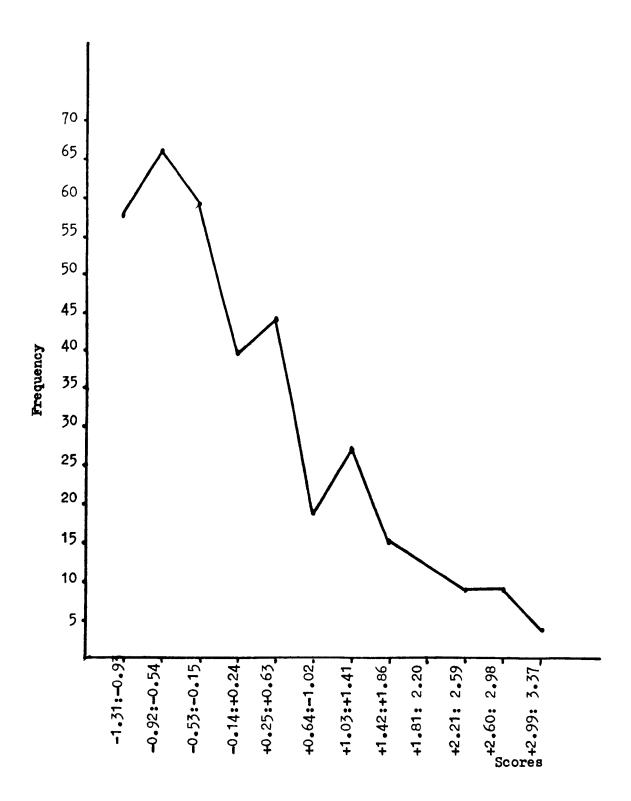


Figure 3: The Distribution of the Scores on the Conventionality
Factor Made by the Egyptian Sample

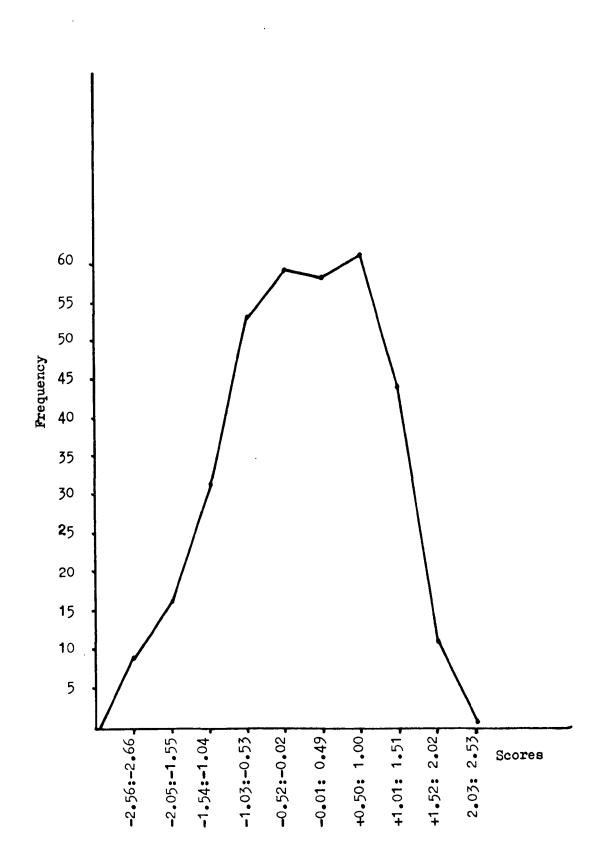
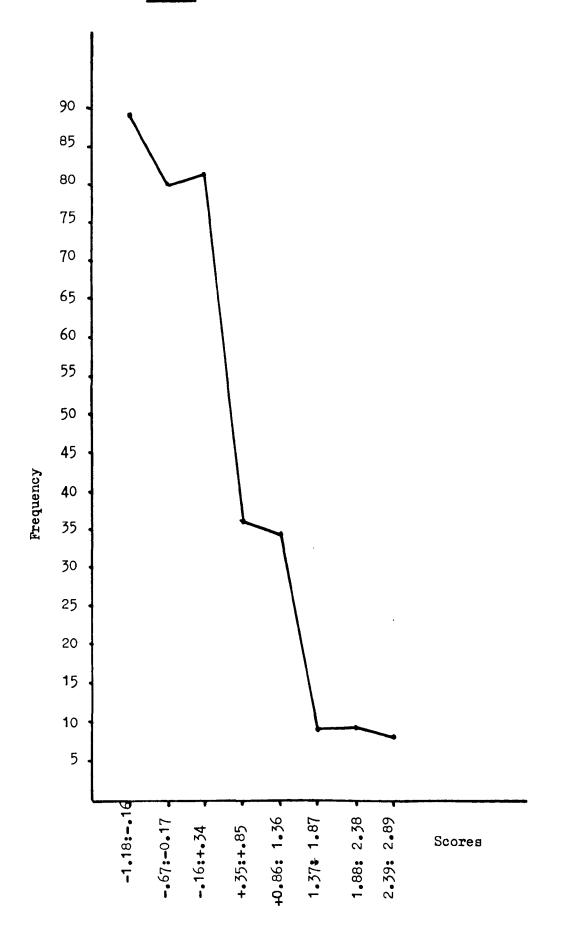


Figure 4: The Distribution of the Scores on the Allocation of Resources to Education Factor Made by the Egyptian Sample



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