SYSTEM VERSUS OPEN ORIENTATION IN NEW ZEALAND

SECONDARY SCHOOL GUIDANCE COUNSELLORS

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ABSTRACT

Guidance counsellors working in schools are often faced with the choice of supporting the system or of being open in orientation by supporting the individual.

In November 1979 one hundred and twenty-seven New Zealand guidance counsellors out of a sample of two hundred replied to a postal questionnaire made up of Law's (1977) System Orientation (SOI) and Teacher Identification Inventories (TII), plus twelve situations which highlighted dilemmas often faced by counsellors. The first purpose was to determine the extent to which the SOI and TII measure the same thing in New Zealand as in Britain. The second purpose was to find whether New Zealand guidance counsellors were system or open in orientation. The third purpose was to examine the influence of sex, university training, length of teaching service, other experience, teaching subject and length of counselling service on counsellor orientation. Finally counsellor preferences were compared with their practices.

A factor analysis of the distribution of scores on all items yielded six major factors : System-Open Orientation, Interventionist Orientation, Ingressive Orientation, Teacher Identification, Counselling Distinctiveness and Social Education. The first five factors corresponded approximately with those identified by Law (1979).

New Zealand counsellors were shown to be a relatively homogeneous group leaning towards an open orientation but often adopting a compromise position in conflicts between the needs of the individual and the needs of the institution.

CHAPTER I

INTRODUCTION

A counsellor is a servant. Whom does he serve? This is a central question for New Zealand guidance counsellors working in the institutional context of the school. The very title "guidance counsellor" expresses the ambiguities and dilemmas of the role. The essence of guidance is direction. The client is led along a path determined by an expert. The essence of counselling is facilitation. The counsellor follows the lead of the client and helps him to go in the direction he chooses.

A school guidance counsellor has responsibilities towards pupils, staff, parents and the community. These may conflict. The present study seeks to discover whether New Zealand secondary school guidance counsellors desire to be 'open', putting the needs of an individual pupil first, or whether they feel an obligation to support the school system. It is, in part, a replication of Law's 1974 British study of system orientation in school counsellors.

The study aims to find out to what extent Law's System Orientation and Teacher Identification Inventories measure the same thing in New Zealand as in Britain. It also seeks to establish where New Zealand secondary school guidance counsellors lie on the open-system continuum and to what extent sex, university training, length of teaching service, other experience, teaching subject and length of counselling service influence their orientation. Finally an attempt is made to discover any discrepancies between counsellor preferences and practices with regard to such tasks as subject teaching, playground duty and extra-curricular activities.

CHAPTER II

REVIEW OF LITERATURE

Much American literature on school counselling has examined the question of counsellor orientation. Aubrey maintained that "the counselor's allegiance is constantly challenged and put to the test by the conflict between the needs of students and the institutional demands of the school." (Aubrey, 1969, p.274). The counsellor cannot operate solely on behalf of a pupil because "problems are invariably enmeshed with institutional demands, and choices are frequently limited to an area circumscribed by institutional norms." (Aubrey, 1969, p.274). Holly (1972, p.140) also acknowledged the power of the school system in that however much the counsellor valued a client-centred relationship he, in fact, was involved in "interpreting received perceptions and official attitudes."

Much of the debate has centred round whether the counsellor is a specialised teacher or whether he has a separate professional role. (Arbuckle, 1966). One way of asserting that counselling is merely a specialization of teaching is to insist on teaching service prior to counselling service in spite of evidence that this may inhibit counselling effectiveness. Initial acceptance by school administrators is greater for counsellors with prior teaching experience. However, in their review of nine research studies, Lister and Northop concluded generally, "that teaching experience per se had a deleterious effect upon the counsellor's interview behavior." (Lister and Northop, 1972, p.178).

Counsellors who retain their identification with teaching "and see their major function as the provision of information and advice rather than the development of a therapeutic atmosphere" (Arbuckle, 1970, p.107) meet the expectations of many school administrators. Arbuckle quoted the words of Sexton, President of the National Association of Secondary School Principals: "I feel the less we emphasize the psychological, the psychiatric and anything therapeutic the better the feeling the students will have towards counselling." (Arbuckle, 1966, p.145).

Counsellors may not agree with this. Sweeney's 1966 research showed that principals expected more clerical and administrative help than counsellors saw as appropriate to their role.

Counsellors are employed by institutions to help individuals and therein lies the source of "the ambiguity of their relations with other school personnel" (Cicourel and Kitsuse, 1963, p.84). Such personnel often assume that "the counselor's professional knowledge, as well as his professional skills, are not in any way different from those of the teacher or the administrator." (Arbuckle, 1970, p.122). If this were accepted it would be pointless to have a person functioning under the title "counsellor" in a secondary school.

However, Arbuckle saw the American school counsellor "emerging as a professionally competent individual whose function and professional education are quite different from those of the teacher and the administrator." (Arbuckle, 1970, p.109).

In New Zealand this trend has not been evident. In spite of the requirement for additional professional training at university the guidance counsellor has been seen as a type of teacher and thus has been expected to be "system-oriented." He is a "specialist teacher" (Circular Memorandum B69/31, 1969) and his emphasis "should be upon guidance rather than upon its essential but subordinate activities" (Department of Education Working Party, 1971, p.7). Indeed the Working Party rebuked those "teachers holding the position of guidance counsellor (who) have tended to see themselves - as their colleagues and pupils also tend to see them - as counsellors instead of, as we believe they should be seen, as guidance teachers who have counselling skills." (Department of Education Working Party, 1971, p.7). To emphasize this point the Working Party recommended that guidance counsellors be renamed "guidance teachers", a recommendation not implemented.

However, the issue did not die in 1971. In the current review of guidance services the debate continues. In official statements the guidance function is emphasized. For example, "schools are reminded that guidance programmes in secondary schools should focus attention on work exploration

and careers education programmes in preparation for leaving school as well as on other aspects of counselling." (Education Gazette, 1979, p.1).

The Post-Primary Teachers' Association (P.P.T.A.) has also assumed such a stance in relation to guidance counselling. Their Members' Handbook stated that "the guidance counsellor is a teacher." (P.P.T.A., 1978, p.25). In their paper, The Functions of School Guidance Counsellors, it was stated that "Guidance counsellors see themselves as members of the teaching team." (P.P.T.A., 1979, p.1). This view was supported by Small (1978) when he maintained that guidance counselling more properly belonged with teaching than with therapy or administration. Yet the P.P.T.A. allowed that while "the guidance counsellor's work in the school should contribute directly to the aim and goals of the school" (P.P.T.A., 1979, p.3) in putting "a priority on the needs of pupils and staff" the counsellor may well have to contribute to "well-founded changes to the school as a whole" (P.P.T.A., 1979, p.1).

Although he may work for change in the school it is still very difficult for a counsellor to operate for an individual pupil against the school. As Webster (1970) pointed out parents do not directly entrust their children to the guidance counsellor but to the school which is expected to pursue certain goals defined by it in accordance with the purposes of society.

A recent national survey again underlined the counsellor's dilemma. A principal was quoted as stating "my guidance counsellor is here to help pupils make vocational and academic choices, not deal with emotional problems - that's the job of teachers and psychologists." (McDiarmid, 1979, p.112). Yet Munro's analysis of data collected over eight years as a counsellor showed that 50% of self-referrals by pupils were for personal-social problems (see Small, 1979, Table 1). In the McDiarmid (1979) survey counsellors ranked sixth among their problems the conflicts which ensued when principals expected them to uphold the school system while they wanted to act as confidantes for the pupils.

The foregoing discussion tends to suggest that the way out of such dilemmas is to lean towards a particular pole. Law (1977, 1978, 1979) concluded that British counsellors tend to work for the school system rather than for the

individual client. During his own experience as a counsellor he became very aware of the context of "the demands, expectations and cues offered ... by the school as a social system." (Law, 1977, p.129). This context produced a potential for conflict in each counselling situation: conflict between the value system of the individual and that of the institution, conflict between the need for change and the demand for maintenance of the system, conflict over the status of clients who are legally regarded as minors and conflict between the needs of the individual and the needs of the group.

Law hypothesized that once he knew how a counsellor resolved one such dilemma he would be able to predict how that counsellor would resolve others. He predicted that school counsellors would show a bias either towards the school, namely "system-orientation" or towards the individual, namely "open-orientation." The "system-oriented" counsellor would be basically loyal to the school, identifying with teachers, legitimating the demands of the school system and putting the needs of the group before the needs of the client. The "open-oriented" counsellor would tend to work for the individual, concentrating on personal and emotional concerns and if necessary challenging the school system.

Law acknowledged that "system" and "open" orientation represent theoretical polar positions and that in practice many counsellors would operate along a continuum or from a compromise or middle position designated as the "participant" position by Antonouris (1975). The latter maintained that the "open" position was not possible for school counsellors. They could not be "change agents safeguarding the interests of pupils" because in training they were "insufficiently helped to examine critically the institutional and societal framework of education" and would therefore be likely "to continue to operate primarily as the servants rather than the critics of their employing institutions." (Antonouris, 1975, p.209).

To test his hypothesis Law constructed a System Orientation Inventory (see Appendix A) and administered it to a main sample of 398 British secondary school teachers having some responsibility for guidance and/or counselling. He concluded that "system orientation is a measurable parameter operating as

a coherent consideration in the minds of trainee and practising school counsellors." (Law, 1977, p.141).

Law also explored the degree of teacher identification in counsellors and whether counselling is seen as "ingression into the traditional practices of teaching" or"an egression from them." (Law, 1978, p.59). He considered the concomitants of system orientation e.g. personality, title, inter and intra-role conflict with teaching colleagues, time spent in counselling and amount of training (Law, 1978(b). He also discussed the extent to which open-oriented trainees can resist the pressures of the school system. Law isolated four factors (Teaching Identification, Person Focus, System Orientation, and Interventionist Orientation) within his System Orientation and Teacher Identification Inventories (Law, 1979).

In resolving their dilemmas British Counsellors tend to justify and support the school system. Yet a middle position, that of "withstand(ing) the tension between the polarities" (Harris, 1972, p.38) may be just as viable. Experience in New Zealand may support this. The task now is to find out where most New Zealand secondary school guidance counsellors lie on the system-open continuum.

This study attempts to provide answers to the following questions:

1. To what extent do Law's System Orientation (SOI) and Teacher Identification Inventories (TII) measure the same thing in New Zealand as in Britain?

2. How does the factor structure of the SOI and TII in Britain compare with the factor structure in New Zealand?

3. Are New Zealand guidance counsellors open or system-orientated?

4. How do they compare in orientation with British school counsellors?

5. Are there differences between the attitudes and proposed actions of New Zealand guidance counsellors?

6.   Are there sex differences in New Zealand guidance counsellor orientation?

7.   Does the presence or absence of university training influence guidance counsellor orientation?

8.   Do guidance counsellors differ in orientation according to length of teaching service, teaching subject, length of counselling service or other experience?

9.   To what extent are guidance counsellors free to control their involvement in non-counselling tasks such as subject teaching, playground duty and extra-curricular activities?

METHOD

Subjects

A Questionnaire was mailed to the 200 guidance counsellors and network school guidance teachers known to be actually occupying positions in New Zealand secondary schools in November, 1979. Replies were received from 131 (65.5%) but four of these came too late to be included in the results. Eight respondents failed to complete the second part of the Questionnaire. Five of these had been in training for most of 1979 and the other three objected to responding without having more information. Therefore 127 Questionnaires (63.5%) were included in part of the analysis but only 119 (59.5%) in the complete analysis.

Comparison with Strang's 1974 study which had an 85% response rate and McDiarmid's 1979 thesis (93% response rate) shows that the sample obtained is representative of the total population of guidance counsellors in several ways. Of the 127 respondents 62.2% were male, a similar proportion to that in Strang's (61%) and McDiarmid's (64%) studies. Single sex schools provided 16.5% of the respondents. (cf McDiarmid 19%). Ninety-four per cent worked full-time as guidance counsellors, a similar proportion to the 90% in the McDiarmid study.

The length of teaching service prior to counselling service was 0-4 years for 20.4% (McDiarmid 20%), 5-14 years for 55% (McDiarmid 40% 5-11 years) and 15 years or more for 24.6% (McDiarmid 31% 12 years or more). Length of counselling service ranged from 0-14 years with 51% in the 1-4 year category (McDiarmid 54%). More counsellors had previously taught English (N=33) than any other subject. English was followed by general subjects to slow learners (N=27) the social sciences (N=20) and sciences (N=12). Seven counsellors (6%) had never taught whereas in the McDiarmid study 9% had no teaching experience. Seventy-one per cent had had university training compared with 63% in McDiarmid's survey after which a further year has elapsed.

Thus in sex, type of school, percentage of time spent in guidance counselling, length of prior teaching service, length of counselling service and training the sample is similar to McDiarmid's. His survey provides the most recent (1979) and comprehensive (93%) descriptions of the New Zealand guidance counsellor population.

However there is no readily available source of data with which to compare the sample on the remaining variables. It may or may not be representative of the whole population. Of the 127 respondents 28.3% had had experience other than teaching prior to becoming counsellors (e.g. as social workers, psychologists, clergy, tradesmen, policemen, businessmen or armed service personnel.)

Examinable subjects were still taught by 22% while 80% undertook the teaching of social education or careers to class-sized groups. Forty-seven per cent reported carrying out timetabled playground duty. Extra-curricular activities involved 84.2%. Of the 47.2% whose work was supervised 75% received supervision from a senior teaching colleague, usually the principal, 16.6% received it from someone outside the school such as a psychologist or social worker and 8.4% received it from both inside and outside the school.

The characteristics of the sample are set out in Tables 3 : 1-7.

Table 3.1

Characteristics of the Sample : Sex   N = 127

Male	79	(62.2%)
Female	48	(37.8%)

Table 3.2

Characteristics of the Sample : Type of School   N = 127

Single Sex	21	(16.5%)
Co-educational	106	(83.5%)

Table 3.3

Characteristics of the Sample : Length of Teaching Service N = 127

0-4 years	26	20.4%
5-14 years	70	55.0%
15 years or more	31	24.6%

Table 3.4

Characteristics of the Sample : Teaching Subject   N = 127

English	33	(26.0%)
General subjects	27	(21.2%)
Social Sciences	20	(15.7%)
Sciences	12	(9.4%)
Other	28	(21.7%)
None	7	(6.0%)

Table   3.5

Characteristics of the Sample : Training and Experience   N = 127

	Yes	No
University Training	90 (71%)	37 (29%)
Other Experience	36 (28.3%)	91 (71.7%)

Table   3.6

Characteristics of the Sample : Other Tasks   N = 127

	Yes	No
Teaching Examinable Subjects	28 (22%)	99 (78%)
Social Education/Careers Classes	102 (80%)	25 (20%)
Playground Duty	60 (47%)	67 (53%)
Extra-curricular duties	107 (84.2%)	20 (15.8%)

Table   3.7

Characteristics of the Sample : Supervision   N = 127

	Yes	No
Supervision	60 (47.2%)	67 (52.8%)
Outside supervision	10 (7.8%)	117 (92.2%)
School supervision	45 (35.4%)	82 (64.6%)
Both	5 (3.9%)	122 (96.1%)

Questionnaire

The Questionnaire was mailed to counsellors with a return envelope. It was hoped to obtain responses from all counsellors known to hold appointments in November 1979 but because of the proximity of the end of the school year it was not possible to follow up non-respondents.

Part I

The first part of the Questionnaire consisted of Law's (1977) System Orientation Inventory (SOI) and his Teacher Identification Inventory (TII). Items 1-30 of the Questionnaire (Appendix A pp i - iv) came from the SOI and Items 31-48 from the TII.

Scoring for each item on the SOI and TII was on a five-point scale from Strongly Agree (SA) to Strongly Disagree (SD) with three as undecided. Agreement with system items (e.g. item 2 "I want to be seen to be loyal to the school") earned high scores. Agreement with open items (e.g. item 17 "I want to employ client-centred techniques") earned low scores. Respondents were invited to give the reasons for their choice if and when they chose 'Undecided.' The three main reasons given were:

(1) That the statement was unclear, ambiguous or irrelevant. (26 respondents).

(2) That any response would have to be situation-specific and would depend on the circumstances. (46 respondents)

(3) That the counsellor wanted to adopt a middle position, neither necessarily pupil-centred nor necessarily institution-centred. (17 respondents)

Part II

The SOI and TII purport to measure attitudes. To express an attitude is one thing. To act in accordance with an expressed attitude is another. Therefore the second part of the Questionnaire (see Appendix A pp.vi-vii) consisted of twelve situations to which counsellors were invited to make free responses indicating how they would act. Ten of these situations

were New Zealand versions of the cases to which Law (1977) referred to highlight counselling dilemmas over issues such as the school value system, problem definition or orientation to the client. The other two situations (6 and 9) were peculiar to New Zealand.

Responses to the twelve situations were also scored on a five-point scale, a 5 representing a system-oriented solution, a 4 one tending towards system orientation, a 3 a compromise, a 2 a solution tending towards open orientation and a 1 an open solution. (See Appendix B for the Rater's Guide). As a check on the reliability of the rating two experienced visiting teachers independently rated 50 of the Questionnaires. Rater 1 was 90% in agreement with the original ratings, Rater 2 84%. Where there were disagreements modal numbers were recorded for one place differences and concensus obtained for two place differences. Thus if two raters gave a 3 rating and the third rater a 2 rating the accepted rating would be 3. If one rater gave a 3, another a 1 and the third a 5, the ratings would be discussed until consensus was reached. The latter procedure was necessary on 35 out of 600 occasions.

Dependent Measures

1. Variables derived from SOI and TII

Initially Law (1977) aggregated scores for all items on the SOI and TII to provide a global measure of system-orientation but he later carried out a factor analysis of the scores. In the present study it was proposed to begin with a factor analysis of the SOI and TII scores and to treat the derived factor scores and the twelve situations as dependent variables. This was decided because there was no guarantee that with the New Zealand sample the SOI and TII would measure the same thing as with the British sample.

Factor Analysis

A factor analysis of the matrix of intercorrelations among the 48 SOI and TII items was conducted. A standard principal components analysis was followed by Kaiser's varimax procedure for rotation of a given number of factors. Although there were fifteen factors with eigenvalues of 1.00 or

more, it was decided to extract and rotate the first six factors. Law (1979) discovered five main factors in his analysis of the same scales and the decision to extract the first six factors was partly to enable direct comparisons with his work. Furthermore the seventh and subsequent factors proved difficult to interpret sensibly and, in any case, accounted for increasingly trivial amounts of common variance. The six factors collectively accounted for 43.8% of the total variance. They will be discussed in detail later.

2. Twelve Situations

The twelve situations, whilst they illustrate facets of the open-system dimension were each left to stand alone. It was considered that each was worthy of separate analysis as a unique behavioural response.

Each situation poses a counselling dilemma. Andrew's desire to decline to be a prefect (situation 1), Keith's refusal to attend school (situation 2), Catherine's resentment over teacher direction (situation 3) and Derek's aggressive behaviour (situation 4) all represent challenges to the school value system. How much attention a counsellor pays to Keith's family problems (situation 2) or Eddie's deep emotional problems (situation 5) may depend on whether the school identifies these problems as ones it should attempt to handle. Maintenance of the school system becomes an issue in Jillian's case (situation 7). The individual versus large group conflict is evident in situation 6. A counsellor who sees his role as limited to developmental needs would presumably not want to deal with Annette (situation 10) Keith or Eddie. Conflict over who should determine the direction of client change is implicit in Gordon's case (situation 8). Each situation thus taps one of the counselling dilemmas outlined by Law (1977).

Independent Measures

Law's (1978(b)) analysis of the concomitants of system orientation in secondary school counsellors was used as a starting point from which to choose classificatory variables. Law (1978(b)) examined personality

as measured by the 'inner-support' scale of the Personal Orientation

Inventory (P.O.I.) (Shostrom, 1968), intra-role conflict, title, amount

of time available to do counselling work and amount of training.

It was not possible to administer the P.O.I. 'inner-support' scale

to the New Zealand sample. Rather than examining intra-role conflict

by asking for counsellor perception of acceptance by teacher colleagues

the Questionnaire was mailed to a teacher sample with the words

"Counsellors should ..." substituted for the words "I want ..." The

results of this form the subject of a separate study. (Munro, 1980).

Title is not an issue in New Zealand because the national Education

Department designates role incumbents as "Guidance Counsellors." Only

7 respondents, the guidance teachers, were not entitled to do full-time

counselling work, too small a number to make it worthwhile to compare

those with different amounts of time for counselling.

A preliminary examination of the effect of single-sex versus

co-educational school showed no significant difference so this variable

was excluded.

Therefore the classificatory variables chosen on logical grounds were:

1. University Training

This was chosen because it was one of the variables Law considered and

work by Manthei and Tuck (1980) suggests that it does affect the orientation

of counsellors.

2. Sex

Sex seemed an obvious choice as there is evidence (Parsons and Bales

1955) that women are more 'expressive' (which it was hypothesized might

link with open orientation) and men more 'instrumental' (which might

link with system orientation). However women have often been shown to

be more conforming than men (Douvan and Adelson, 1966, Silcock 1966,

Steinmann and Fox 1966, Heilbrun et al 1974) and therefore might be expected

to support the institution (i.e. be more system-orientated than men).

3. Length of Counselling Service

Law (1979) suggested that while training tended to make counsellors more open they progressively returned to high levels of system orientation as their time back in schools lengthened. Therefore length of counselling service was included as a variable in the present study.

4. Other Experience

It seemed logical to assume that those who entered guidance counselling from occupations other than teaching (even if at some stage they had been teachers) might differ from those who lacked other experience. It could be hypothesized that they would be more open because their experience had not been confined to the school system.

5. Length of Teaching Service

It seemed logical that this might prove to be significant. There was a possibility that long teaching service might tend to be associated with system orientation.

6. Teaching Subject

Because the distribution of respondents among specialist teaching subjects was very uneven it was decided to divide this variable into two categories : those (usually primary-trained) who taught all subjects (often to slow learners) and those who taught only one or two specialist subjects. A general assumption in New Zealand is that primary-trained teachers are more child-centred than secondary-trained teachers who, it is believed, tend to be subject-oriented.

Statistical Analysis

Multivariate analyses of variance (MANOVAS) were used to look at the relationship between classificatory and dependent variables. Various three-way permutations of classificatory variables were carried out using the six factor scores as dependent variables. Then a further series of three-way MANOVAS were carried out using the twelve situations as dependent measures.

Wilk's Lambda Criterion (likelihood ratio test) was adopted using Rao's approximate F distribution (Bock, 1975). The computer programme used was a revision of Bock's (1963) MANOVA programme developed at the University of North Carolina Psychometric Laboraboratory and held on disc at the University of Canterbury Computer Centre.

CHAPTER   IV

RESULTS

Factor Analysis

Six factors were extracted. They were defined as:-

1.   System/open orientation

2.   Interventionist Orientation

3.   Ingressive Orientation

4.   Teacher Identification

5.   Counselling Distinctiveness

6.   Social Education

The standards set for selecting those items defining each of the six factors were as follows. Forty-one of the original 48 items showed loadings of 0.30 or higher on one or more of the six factors. Where a particular item loaded on two factors and the squared factor loadings differed by less than 0.10 the item was considered equivocal and was eliminated for factor definition purposes. This left a total of 36 items used for the definition of the six extracted factors. Twenty-nine of these items showed loadings of 0.40 or higher. Factor scores were obtained by summing scores on their constituent items.

Details of factor score composition are given in Table 4 : 1

Table   4.1

Factors Derived from the SOI and TII with their Constituent

Items and Possible Score Ranges

Factor	Items	No.of Items	Range of Possible Scores	Mid-point of Range
one	2, 3, 4, 12,13,14, 22,24,25,	9	9 - 45	27
two	1, 5, 7, 8, 9,15,16,19, 23,	9	9 - 45	27
three	17,33,35,36 43,44,	6	6 - 30	18
four	34,37,38,45,	4	4 - 20	12
five	18,20,21,40	4	4 - 20	12
six	26,41,42,46,	4	4 - 20	12

The six factors derived from the 48 SOI and TII items are listed below. The items have been classified into four categories according to varying degrees of acceptability:

A. Unequivocal loadings of or greater than 0.40.

B. Loadings of or greater than 0.40, but having a smaller loading on another factor.

C. Loadings between 0.30 and 0.39 with no significant loadings on other factors.

D. Loadings greater than 0.30 but having loadings on other factors.

Factor loadings are given in parentheses preceding each item; where applicable loadings on other factors are indicated in parentheses after the items concerned.

Factor intercorrelations are given in Table 4.2

Table   4.2

Intercorrelations* among Factors   I   to   VI   (N = 119)

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Factor 1						
Factor 2	.046					
Factor 3	.173	.076				
Factor 4	.186	− .077	.247			
Factor 5	.299	− .122	.295	.186		
Factor 6	.203	.046	− .058	.073	.148	

* Significance Levels: r = 0.180, p < 0.05

r = 0.234, p < 0.01

Factor I: SYSTEM/OPEN ORIENTATION

A.   Unequivocal loadings of or greater than 0.40:

2.   (0.53)   I want to be seen to be loyal to the school.

3.   (0.54)   I want to be able to bring about changes in the
school on behalf of the pupils.

4.   (0.45)   I want to be free to act as an advocate on
behalf of the pupil.

12.   (0.54)   Where the interests of the school and the pupil
clash I want to put the interests of the school
first.

13.   (0.50)   I want to be free to acknowledge to certain pupils
that they are right to oppose the demands of the
school.

22.   (0.41)   I want my work to be assigned to me by the school
in which I work.

24.   (0.64)   I want to help the pupil change the school rather
than helping the school to change the pupil.

25.   (0.58)   I want to help pupils comply with the requirements
of the school.

C.   Loadings between 0.30 and 0.39 with no significant loadings on
other factors:

14.   (0.32)   I want to contact and work through the pupils'
informal social systems.

Factor I accounts for 13.2% of the variance. It measures the Counsellor's orientation i.e. his position on the system-open continuum. A system-oriented counsellor sees his role as supportive of the school (Item 2). His first loyalty in any conflict is to the school (Item 12). He accepts direction from the school (Item 22) and he wants to adjust pupils to fit into the system (Item 25). High scores on these items (2,12,22,25) indicate system-orientation, the tendency to legitimise the demands of the school.

An open-oriented counsellor puts the interests of the individual pupil first. He wants to influence the system on behalf of pupils (Item 3) and is prepared to act as their advocate (Item 4). He accepts what he considers to be legitimate pupil protest (Item 13). An open-oriented counsellor is prepared to accept a change agent's role (Item 24) and to work through pupil social systems(Item 14). Low scores on Items 3,4,13,14 and 24 thus indicate open-orientation, the tendency to uphold the rights and interests of the individual even when this conflicts with institutional demands.

Part of Factor I on the New Zealand sample approximates Law's Factor 3, System Orientation. In his 1979 article he does not specify which items load on this factor. He merely indicates that Factor 3 "is closely related to the SOI - particularly with those items which refer to the legitimacy of the demands of the school upon the counsellor and his client." (Law, 1979, p.200). Items 2,12 and 22 do so and they load on Factor I in the New Zealand study. Items 4 and 14 load on Law's Factor II, Person Focus. The New Zealand Factor I therefore represents both parts of a system-open continuum whereas on the British sample two factors (2 and 3) account for the concepts.

Further confirmation of Factor I was found in the modest inter-correlation with the sum of the twelve situations (0.313) which also purport to measure system-open orientation.

Factor II: INTERVENTIONIST ORIENTATION

A. Unequivocal loadings greater than 0.40:

    1. (0.54) I want to be a useful source of information about the pupils to the school.

    7. (0.48) I want to work with pupils, who are referred by my teaching colleagues.

    9. (0.55) I want to mediate the needs and problems of the teachers to the pupil.

    15. (0.43) I want to protect the school against potentially harmful pupils.

    19. (0.43) I want to help the teachers by showing them how they can best get the co-operation of pupils.

B. Loadings of or greater than 0.40, but having a smaller loading on another factor:

    8. (0.51) I want to help bring about socially desirable changes in the pupil.
          (0.40 Factor I)

C. Loadings between 0.30 and 0.39 with no significant loadings on other factors:

    5. (0.36) I want to work in a school where I can share in its general educational and social philosophy.

    16. (0.32) I want to achieve a position of decision-making responsibility in the school.

    23. (0.30) I want to be involved in the administrative work of helping to plan and run the school.

Factor II accounts for 9.1% of the variance. It measures a desire for active intervention, primarily in support of the school system (items 1, 7, 8, 9, 15, 19) and less strongly in support of a decision-making or administrative role (items 16, 23). High scores on the above items indicate a willingness to divulge information about pupils to colleagues (item 1), to work with referred clients (item 7), to act as an advocate and helper for teachers (items 9, 19), to adjust pupils to conform to the system (item 8), and to be involved in decision-making and planning in an organisation whose aims the counsellor shares (items 16, 23, 5).

Factor II corresponds closely to Law's Interventionist Factor 4, on which items 1, 5, 7, 9, 15, 16, 19 and 23 also loaded. However, in the New Zealand sample the items which correlated with this factor were interventionist and high system-oriented whereas in Law's analysis two additional groups of items correlated with his Factor 4. (a) items which were interventionist and low system-oriented (e.g. item 3) and (b) items which are interventionist and neither particularly high or low in system orientation (e.g. item 26).

With the New Zealand sample 'intervention' is desired on behalf of the system. This factor therefore measures a conservative dimension, high scores on it indicating support for the status quo.

It is the only Factor that does not intercorrelate significantly with the other factors. However, in reality, intervention on behalf of the system is not necessarily in conflict with the interests of the individual. Information may be divulged to colleagues so that they may better understand the pupils. The fact that clients are referred may reflect a care for the individual. Decision-making and planning can be done in the interests of the pupil.

Factor III: INGRESSIVE ORIENTATION

A. Unequivocal loadings of or greater than 0.40:

33. (0.74) I want to do work which is more like that of a
             school psychologist than that of a teacher.

35. (0.65) The work I want to do is more like that of a
             psychiatrist than it is like that of a teacher.

36. (0.42) I want my counselling and interviewing work to be
             supervised by a specialist in guidance and
             counselling rather than by the headteacher or a
             senior teaching colleague.

44. (0.73) The work I want to do is more like that of a social
             worker than it is like that of a teacher.

B. Loadings of or greater than 0.40, but having a smaller loading
on another factor:

43. (0.57) The skills I want to develop are different from
             the skills of most teachers.
             (0.42 Factor V)

D. Loadings greater than 0.30 but having loadings on other factors:

17. (0.41) I want to employ client-centred techniques.
             (0.33 Factor II)

Factor III accounts for 7.2% of the variance. Items which load on this factor define counselling as an ingression into the traditional practices of teaching from professions such as social work (item 44) psychiatry (item 35) and educational psychology (item 33). The skills of counselling are seen to be different from those of teachers and to be specialised. (items 43, 36, 17).

This factor to some extent corresponds with Law's Factor 5 which he saw as representing "a consideration of the extent to which the school can be ingressed with a new kind of supplementary provision." (Law, 1979, p.200). However he finally combined Factors 5 and 1 as Teaching Identification. The ingressive elements represent one end of a teaching-non-teaching continuum.

Some of the items which load on Factor III on the New Zealand sample load on Factor 2, Person-Focus, on the British sample. These are concerned with the use of client-centred techniques (item 17) and a psychological or social work approach (items 33, 35, 43).

While it is possible to find logical links between the way these items load on the British sample and the way they load on the New Zealand sample on the latter sample the Ingressive Factor is more strongly differentiated.

Factor IV: TEACHER IDENTIFICATION

A. Unequivocal loadings greater than 0.40:

34. (0.67) I want to have a teaching programme so that I can
             demonstrate to my colleagues my effectiveness as a teacher.

37. (0.79) I want my counselling and interviewing work to be combined
             with a timetabled teaching programme so that I can
             understand what is happening in the daily life of the school.

38. (0.78) I want to combine my counselling and interviewing role with
             a role where I am doing formal teaching from a set
             curriculum.

45. (0.77) I want to have a timetabled teaching programme so that I
             can keep in touch with the day-to-day problems of the
             classroom.

This factor accounts for 5.9% of the variance. The items which load
strongly on this factor express the desire of guidance counsellors to
identify explicitly with teachers by undertaking a traditional timetabled
subject-teaching role as one of their tasks. (items 34, 37, 38, 45). They
wish to do this in order to demonstrate their understanding of the realities
of the classroom (items 37, 45) and their competence as teachers (item 34).

This factor corresponds to Law's Factor 1, Teaching Identification,
but fewer items load on the New Zealand sample. As previously discussed Law
included his Factor 5, Ingressive, with his Factor 1 as one end of a teaching
identification-non-teaching identification continuum. The Ingressive
Orientation factor on the New Zealand sample is Factor III. It correlates
0.247 (p < 0.01) with Factor IV and so can be regarded as Law regards it but
the evidence is not as strong. Low scores were obtained by those agreeing
with items which load on Factor III (items, 17, 33, 35, 36, 43, 44) but
disagreeing with those which load on Factor IV (items 34, 37, 38, 45).

Factor V: COUNSELLING DISTINCTIVENESS

A. Unequivocal loadings greater than 0.40:

   20.   (0.51)   I want to provide a service for pupils which is not being
                  provided by any other part of the school system.

   21.   (0.50)   I want to work alongside, but separately from, the other
                  services provided by the school rather than integrally
                  with them.

   40.   (0.63)   I want my counselling and interviewing work to be seen by
                  the pupils as something different from the work of the
                  teachers.

C. Loadings between 0.30 and 0.39 with no significant loadings on other
    factors:

   18.   (0.31)   I want to put the needs of the individual before the needs
                  of the group.

Factor V accounts for 4.7% of the variance. It encompasses a view of
counselling as a distinctive and separate service for the pupils rather than
for the institution. Factor V seems to link with Factor I, System/Open
Orientation. They correlate positively (.299, p < 0.01). However New Zealand
counsellors appear to view the items loading on Factor V as distinctive ways
of being open.

It is difficult to compare this factor with any of Law's because in his
1979 article, he dows not specify the items which load on Factors 1 and 3.
However as Law states that Factor 3, System Orientation, is closely related
to the SOI and as items 18, 20 and 21 are SOI items which are not specified
as loading on other factors it is possible to suggest that Factor V on the
New Zealand sample may, in part, correspond with Law's Factor 3. Logically
the items could be seen to represent a dimension of the open end of a system-
open continuum but as previously mentioned New Zealand counsellors see this
grouping as distinctive.

Factor VI: SOCIAL EDUCATION

A.   Unequivocal loadings greater than 0.40:

41. (-0.52) I want to combine my counselling and interviewing role

with a role where I am also working with timetabled groups

in an informal way and where the pupils can choose the

topics for study and discussion.

42. (-0.72) I want to combine my counselling and interviewing role

with a teaching role where I can help pupils gain a sense

of themselves as individual persons.

46. (0.61) I want to combine my counselling and interviewing role

with a teaching role where I can help the pupil develop

self-discipline and a sense of their own value

C.   Loadings between 0.30 and 0.39 with no significant loadings on other

factors:

26.   (0.35) I want to engage in liaison, communication and consultation

work in the school.

Factor VI accounts for 3.8% of the variance. It appears to suggest the
sort of role guidance counsellors fulfil when teaching in social education
programmes, especially where work with small groups is involved. Items 41,
42 and 46 fit this conception. However there appears to be no obvious
logical explanation for the inclusion of item 26 in this factor. Its much
lower loading is consistent with the difficulty of tying it in with the factor
as a whole.

The bi-polar nature of the factor is puzzling but there appears to be
some logic to it. Items 41 and 42 which load negatively on the factor seem
to stress the individual and individual choice. Items 46 and 26 can be seen
as more system-oriented although still ultimately to the benefit of the
individual.

Law has no comparable factor but items 41 (number 40 on Law's TII) and
26 load on his Factor 2, Person Focus.

The factor analysis of the distribution of scores on all items completed by the New Zealand sample yielded six major factors. These were:

I. System-Open Orientation--a measure of the tendency to support the school as an institution or the pupil as an individual.

II. Interventionist Orientation - a measure of the desire to change situations, primarily in support of the school.

III. Ingressive Orientation - a measure of the extent to which counselling is seen as an ingression into the traditional practices of teaching.

IV. Teacher Identification - a measure of the extent to which counsellors wish to be seen as understanding and being able to perform the role of teacher.

V. Counselling Distinctiveness - a measure of the desire to be seen as offering a distinct, specialist service, different from that provided by teachers.

VI. Social Education - a measure of the desire to be involved in a personalized, pupil-centred form of teaching which would develop a positive self-image in pupils.

The first five factors correspond approximately with those identified by Law (1979) except that Law's Factor 2, Person Focus, does not appear, the items being dispersed among other factors. Of the items loading on Law's Factor 2 numbers 17, 33, 35 and 43, in New Zealand, load on Factor III, Ingressive Orientation, numbers 4 and 14 on Factor I, System-Open Orientation, number 26 on Factor VI, Social Education and number 40 on Factor V, Counselling Distinctiveness. Item 27 drops out on the New Zealand sample.

The closest correspondence between factors in the two studies is that between Law's Factor 4, Interventionist, and Factor II, Interventionist

Orientation. Eight items appear on both, leaving three Law items that do not. The major difference is that in New Zealand, intervention is desired on behalf of the system while Law isolates two additional categories of intervention.

System Orientation is an important factor on both the British and the New Zealand samples. It is not possible to make a direct comparison of item loadings as Law in his 1979 article does not specify these for the System Orientation factor. However by eliminating items specified as loading on other factors and by referring to Law's description of System Orientation it is possible to deduce that Law's Factor 3 and the New Zealand Factor I approximately correspond. Both measure the extent to which the guidance counsellor looks to the school for the legitimisation of his goals, role and behaviour compared with the extent to which he looks to the individual. The Interventionist factor can also be seen as defining a dimension of System Orientation in New Zealand in that its focus is on facilitating the purposes of the school.

Teacher Identification is a factor extracted from both samples. Fewer items load from the New Zealand sample but it would be possible, as Law did, to subsume Factor III, Ingressive Orientation under the heading Teacher Identification because logically speaking it appears to measure one end of a teaching orientation – non-teaching orientation continuum. Factors III and IV correlate modestly (r = .247) which suggests some overlap between them. However the correlation is low enough to support a claim of distinctiveness. Logically the sixth factor, Social Education could also be seen as a dimension of Teacher Identification, but one peculiar to New Zealand.

It is difficult to relate Factor V, Counselling Distinctiveness, to Law's results but it appears to be possible to see it as associated with his Factor 3, System Orientation. Certainly the modest intercorrelation (0.299) between Factors I (System/Open Orientation) and V on the New Zealand sample would tend to support the view that the two measure dimensions of the same concept.

Overall, it is possible to conclude that on the New Zealand sample, as on the British, a Questionnaire composed of the SOI and TII appears to be a valid measure of system orientation if teacher identification (including the Ingressive and Social Education aspects) is acknowledged as an important dimension of such orientation. Modest intercorrelations between Factor I and the other Factors would tend to lend support to this view. Significant inter-correlations were obtained between Factors I and IV (.186, $p < 0.05$), Factors I and V (.299, $p < 0.01$) and Factors I and VI (.203, $p < 0.05$). That between Factors I and III (0.173) almost reached significance at the .05 level. Besides correlating with Factor I the factors correlate with each other, albeit modestly. (See Figure 4 : 1)

Figure 4:1

A Model Showing the Relationships between Factors on the New Zealand Sample.

FACTOR II
Interventionist
Orientation

FACTOR III
Ingressive
Orientation

r·076

r·046

r·173

FACTOR I
System/Open
Orientation

r·046

r·247

r·203

r·186

FACTOR VI
Social
Education

r·299

FACTOR IV
Teacher
Identification

r·148

FACTOR V
Counselling
Distinctiveness

r·186
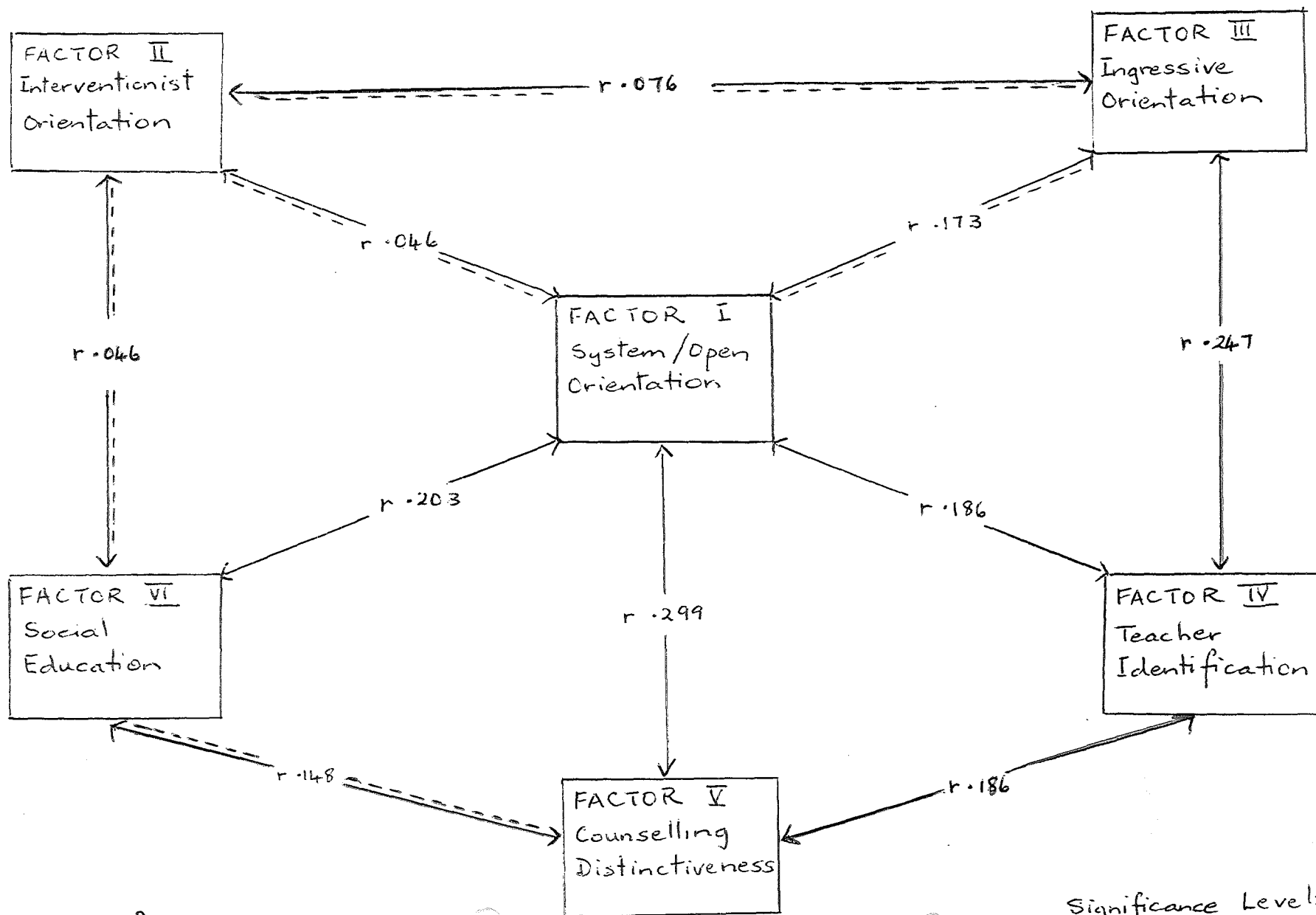
——— } = not significant

Significance Levels
r = 0·180, p<0·05
r = 0·234, p<0·01

The Orientation of New Zealand Guidance Counsellors

Law was primarily concerned with establishing whether system orientation was a measurable parameter and it is possible to deduce from his results where British respondents lie on the system-open continuum. Law aggregated scores to obtain a measure of system orientation. Of the whole sample (of 398) 73 were classified as high in system orientation (SOI scores of 135 or greater). A further 125 were classified high-average (SOI scores of 119-134) 148 as low average (SOI scores of 101-118) and 52 as low in system orientation (SOI scores of 100 or less).

However, since there is no direct information on how these scores were obtained or any indication of what the scale mid-point would be it is hard to say, on the whole, whether British counsellors are system or open in orientation.

In the New Zealand study guidance counsellors show a trend towards open orientation. The means for the factor scores demonstrate this. On Factors I (System-Open Orientation) and IV (Teacher Identification) the actual means are below the scale mid-points. The actual mean of Factor III (Ingressive Orientation) which Law combined with Teacher Identification is also below the scale mid-point (see Table 4 : 3).

However Factor II, Interventionist does not follow the open trend. In New Zealand guidance counsellors intervene on behalf of the system. In practice, however, counsellors may see little conflict in supporting the system while also supporting individuals. Dealing with referred clients or being involved in decision-making and administration (system-oriented , interventionist items) can be for the benefit of the pupil.

The trend towards openness in the distribution of scores is illustrated in Figures 4 : 2 and 4 : 3. On the frequency distribution of scores for Factor I only one respondent obtained a very high system-oriented score (40) although another 44 respondents were above the mid-point (27). On Factor IV (Teacher Identification) only 21 scored above the mid-point (12) and on Factor III (Ingressive Orientation) 41 scored above the mid-point (18). For Factor V (Counselling Distinctiveness) the number scoring above the mid-point (12) was 29.

Table 4 : 3

Means and Standard Deviations for the Factor Scores

Demonstrating the Trend towards Open Orientation

Factor	Mean	Standard Deviation	Scale Mid-Point	Law's Factors
I System/Open * Orientation	25·61	5.16	27.00	3 System Orientation
II Interventionist Orientation	35·04	4.01	27.00	4 Interventionist
III Ingressive * Orientation	16.72	4.32	18.00	5 Ingressive (finally combined with 4)
IV Teacher * Identification	9.13	3.73	12.00	1 Teacher Identification
V Counselling * Distinctiveness	10.50	2.69	12.00	
VI Social Edccation	12·20	1.41	12.00	

* Open trend evident

HISTOGRAM FOR   FACTOR1

Figure 4 : 2

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0.50 .
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0.45 .
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0.40 .
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0.35 .
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0.30 .
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0.25 .
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0.20 .                                        *027*
     .                                          *
     .                                          *
     .                                          *
0.15 .                                          *
     .                                 *017*    *
     .                                   *      *  *016*016*
0.10 .                        *015*      *      *    *    *
     .                          *        *      *    *    *
     .                          *        *      *    *    *
     .                          *        *      *    *    *
0.05 .              *008*       *        *      *    *    *    *010*
     .                *         *        *      *    *    *      *
     .                *  *006*006*       *      *    *    *      *
     .                *    *    *        *      *    *    *      *
0.00 ....*000*000*000*000*000*001*001*001*...*...*...*...*...*...*000*...*002*...*000*001*
         0   2   4   6   8   1   1   1   1   1   2   2   2   2   2   3   3   3   3   3   4   4
                                 0   2   4   6   8   0   2   4   6   8   0   2   4   6   8   0   2
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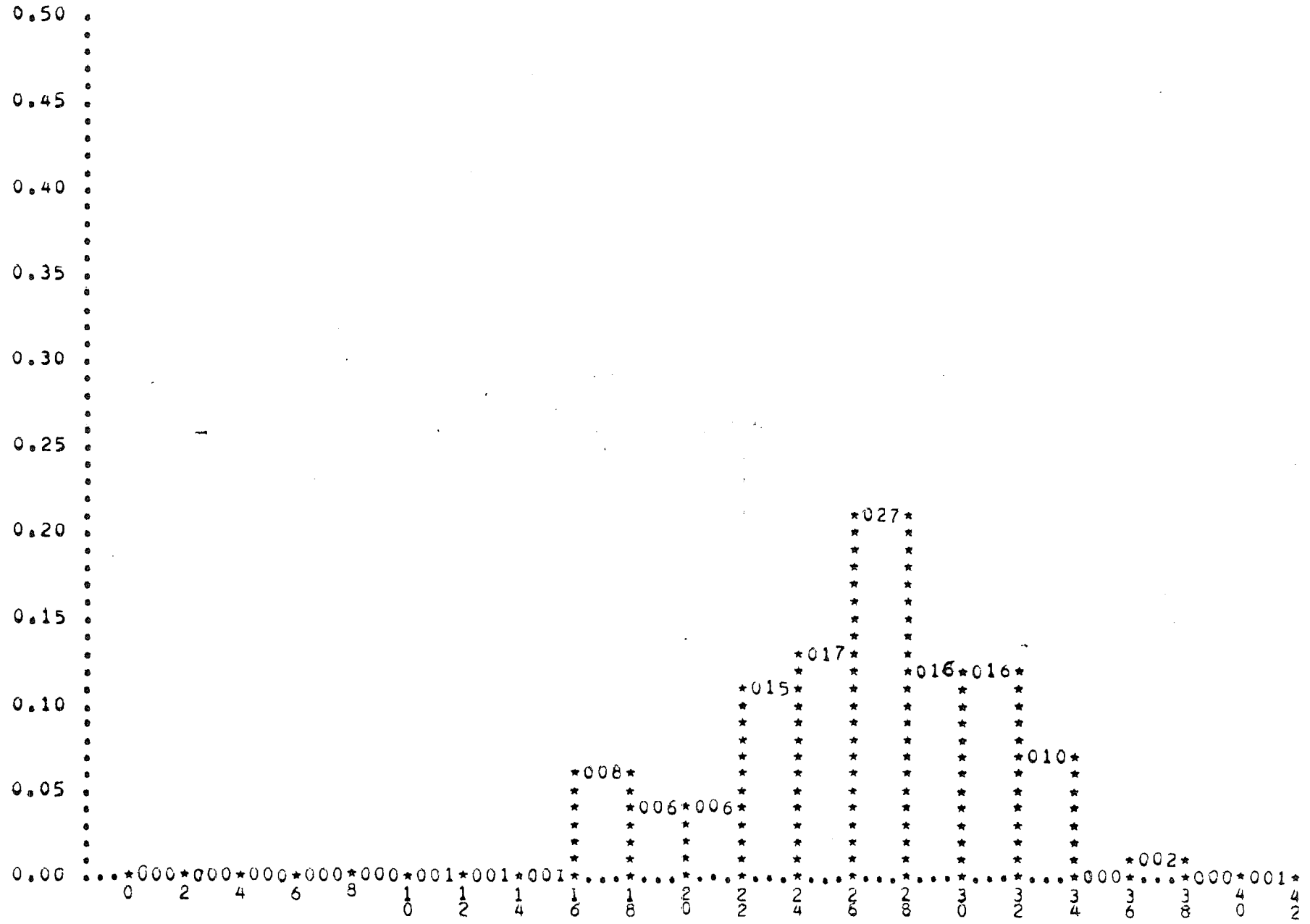
NOTE: COUNT IN EACH INTERVAL INCLUDES THAT
AT LOWER BOUNDARY BUT NOT UPPE

HISTOGRAM FOR   FACTOR5

Figure 4 : 3
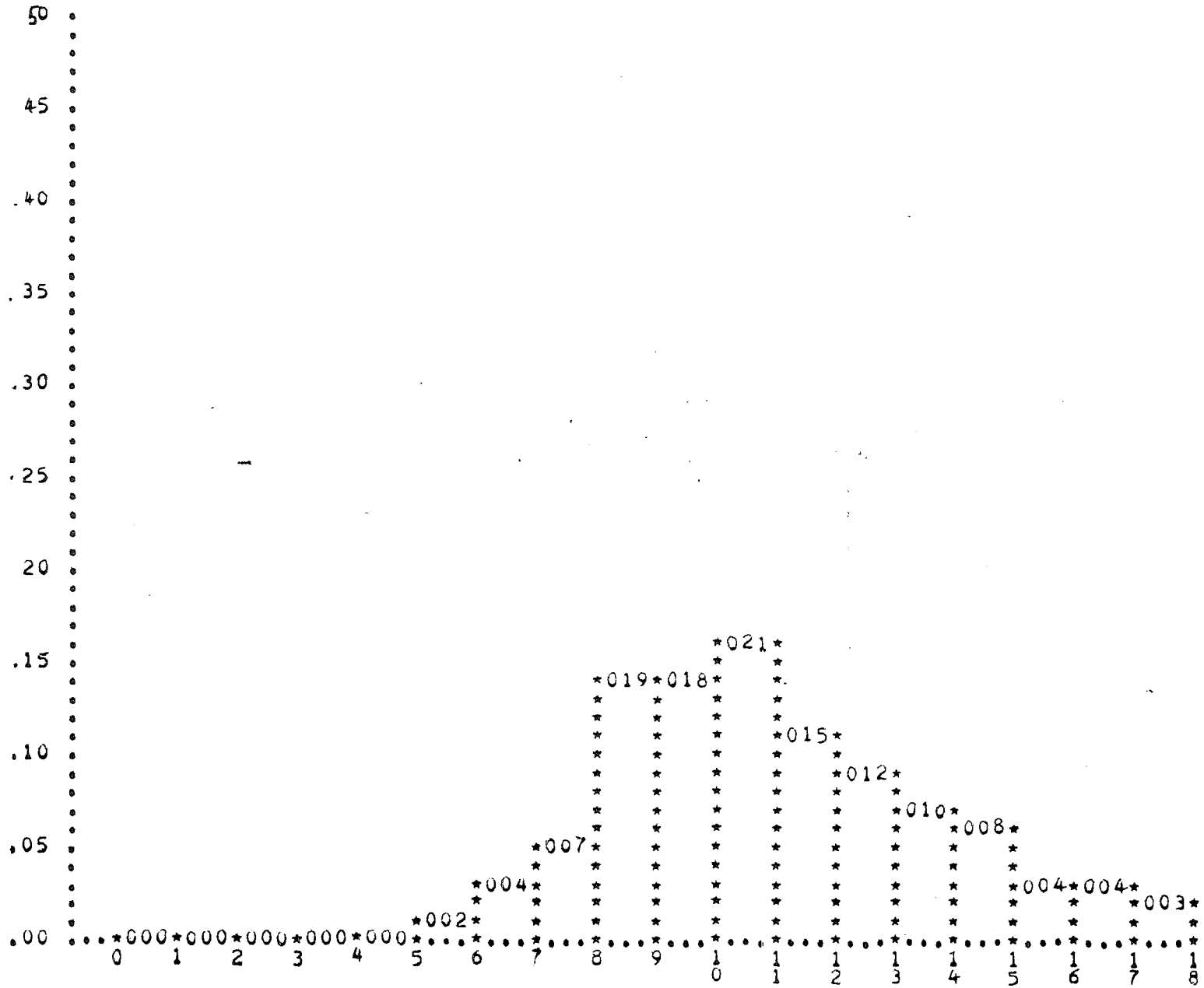
NOTE: COUNT IN EACH INTERVAL INCLUDES THAT
AT LOWER BOUNDARY BUT NOT UPPER.

Attitudes Versus Actions: The Twelve Situations

The twelve situations also purport to measure system/open orientation. However there is but weak evidence to support this view. As there are only 8 significant inter-correlations out of a possible 66 on the twelve situations (see Table 4 : 4) it appears unlikely that they measure a unitary construct.

Therefore the modest significant correlations between the sum of the situations and Factors I ($r=0.313$, $p < 0.01$) and II, interpreted as a dimension of system orientation ($r=0.231$, $p < 0.01$) must be interpreted with great caution.

Similar caution is necessary when considering the correlations between the percentage of situations scored as open and Factors I ($r= -0.337$) and III ($r= -0.206$) (See Table 4 : 5, noting the change in the direction of scoring).

Nevertheless some evidence of the validity of the twelve situations is provided by comments made voluntarily by respondents. These basically stated that the guidance counsellors concerned see the situations as real in their experience. The following two comments illustrate this point:

(i)   'I found the questions most demanding, very much to the point, (touching on many areas I seemed to have been involved in a lot) and quite thought-provoking.'

(ii)   The Questionnaire, 'certainly gave me some soul-searching times.'

When the twelve situations are taken independently the open trend in responding is evident in the means (See Table 4 : 6) and frequency distribution (See Table 4 : 7). The Frequency of Response Table provides the strongest evidence of the predominance of open responses, 824 being 1's or 2's which are open. Only 89 are 4's or 5's, system-oriented, while 515 occupy the middle position (3).

Figures 4:4 to 4:7 illustrate the open trend with regard to Situations 1, 2, 3 and 5.

Table 4 : 4

Intercorrelations among Situations 1 - 12

(N = 119)

Variable	Situation 1	2	3	4	5	6	7	8	9	10	11	12
Situation 1												
2	.031											
3	.190	.092										
4	.081	.070	−.062									
5	−.085	.102	−.106	.029								
6	.124	.093	.115	−.106	.186							
7	.252	.018	.036	.006	.006	.032						
8	.133	.064	.062	.107	.053	.031	.032					
9	.178	.019	.054	.119	.021	.132	.285	.168				
10	−.042	.016	−.163	−.026	.046	.160	.019	−.200	.094			
11	.039	−.005	.102	.134	−.052	.075	.121	−.034	.201	.034		
12	.071	−.081	.070	.154	.026	.033	.200	−.014	.019	−.068	.050	

Significance Levels : r = 0.180, p< 0.05

r = 0.234, p< 0.01

41/.

Table 4 : 5

Intercorrelations * among Factors I to VI and the 12 situations scored according to % of open responses   (N = 119)

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	% Situations
Factor 1							
Factor 2	.046						
Factor 3	.173	.076					
Factor 4	,186	-.077	.247				
Factor 5	.299	-.122	.295	.186			
Factor 6	.203	. 46	-.058	.073	.148		
% Situations (Open) (NB)	-.337	-.167	-.206	-.140	-.036	-.066	

* Significance Levels :   r = 0.180, p< 0.05

r = 0.234, p< 0.01

N.B. Correlations are negative on % situations (Open) because when scored a high score represented open orientation whereas on the factor scoring a low score represented open orientation.

Table 4 : 6

Means and Standard Deviations for the Twelve Situations Scores

Demonstrating the Trend towards Open Orientation

Situation	Mean	Standard Deviation
1	2.06	0.94
2	1.93	0.98
3	2.13	0.92
4	1.96	1.00
5	1.66	0.90
6	2.26	1.09
7	2.52	0.88
8	2.58	1.07
9	2.20	0.98
10	2.04	1.16
11	2.09	1.08
12	2.16	1.00

1 == Open

2 == Leaning towards open

3 == Half and half - compromise solution

4 == Leaning towards system

5 == System

Table 4 : 7

Twelve Situations : Frequency of Responses

Situation	Response 1	2	3	4	5
1	19	66	25	9	0
2	36	44	36	2	1
3	18	55	42	4	0
4	37	38	40	4	0
5	54	40	23	2	0
6	26	29	55	7	2
7	7	25	85	2	0
8	7	40	48	23	1
9	12	66	31	8	2
10	38	39	29	9	4
11	30	43	38	5	3
12	29	26	63	1	0
TOTALS	313	511	515	76	13

Figure 4.4

HISTOGRAM FOR SITUATION   1

Figure 4.5
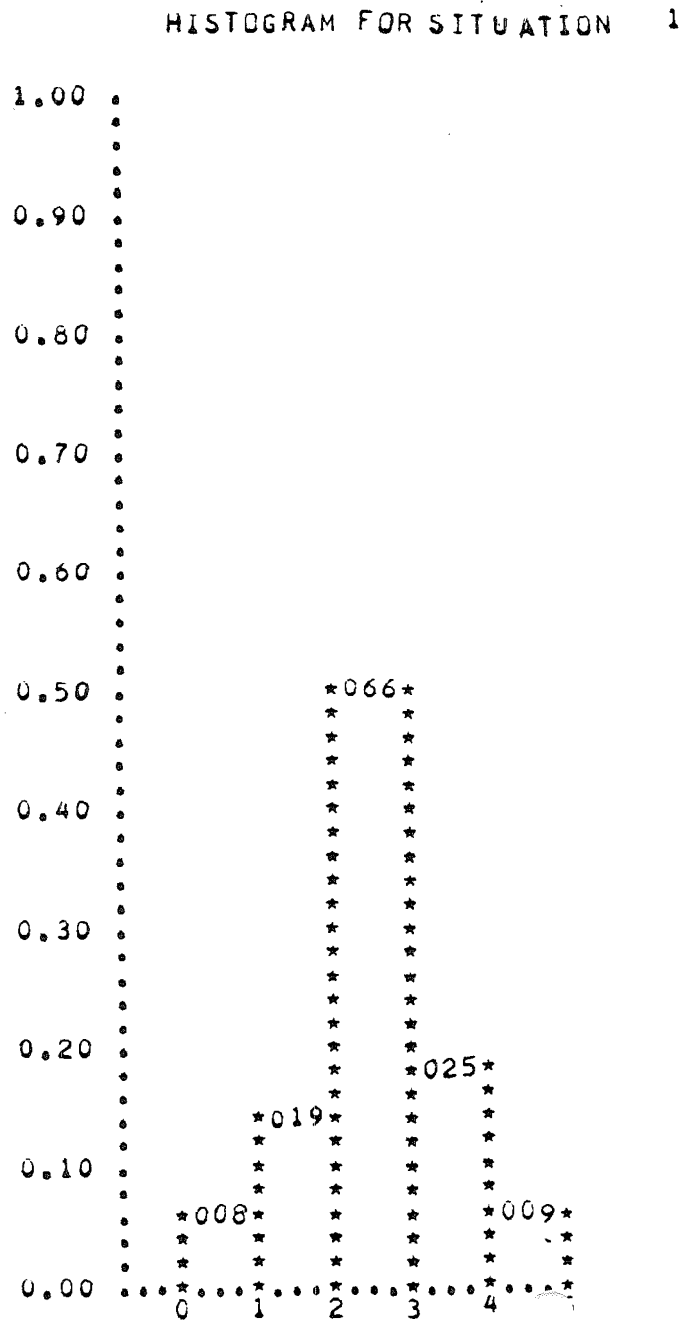
HISTOGRAM FOR SITUATION   2
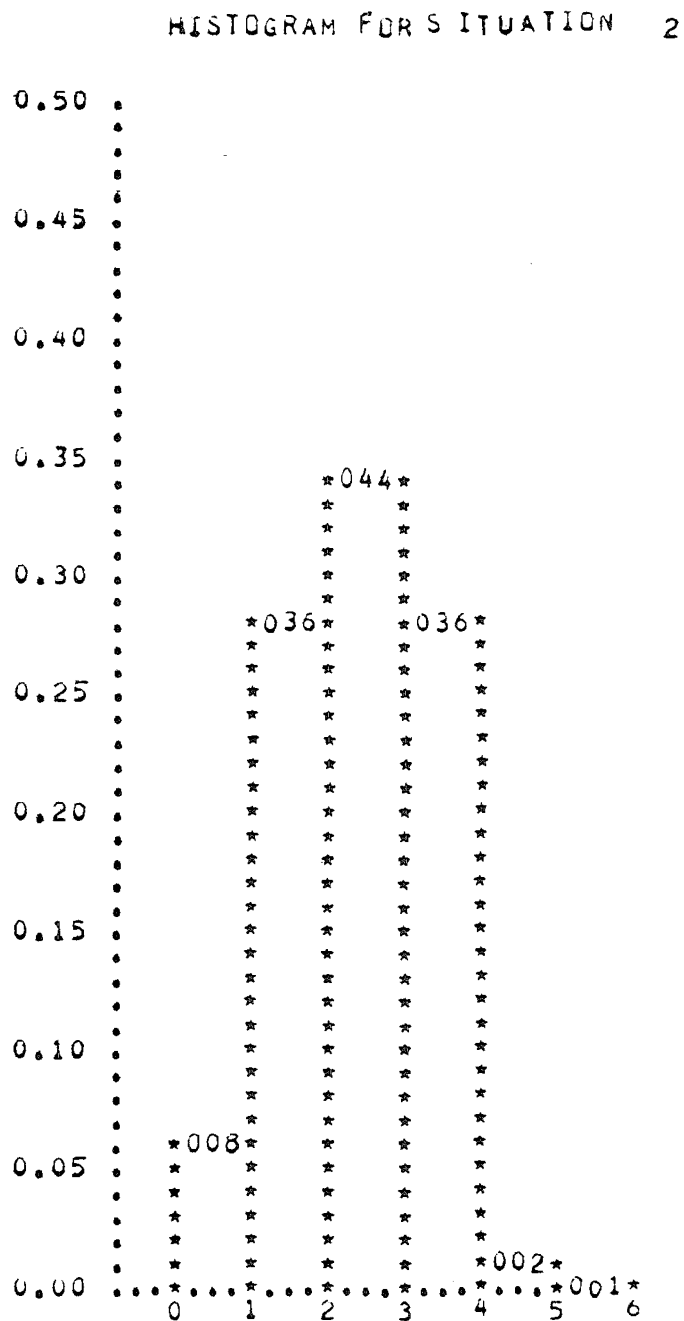
NOTE: COUNT IN EACH INTERVAL INCLUDES THAT AT LOWER BOUNDARY BUT NOT UPPER.

Figure 4.6

HISTOGRAM FOR SITUATION   3
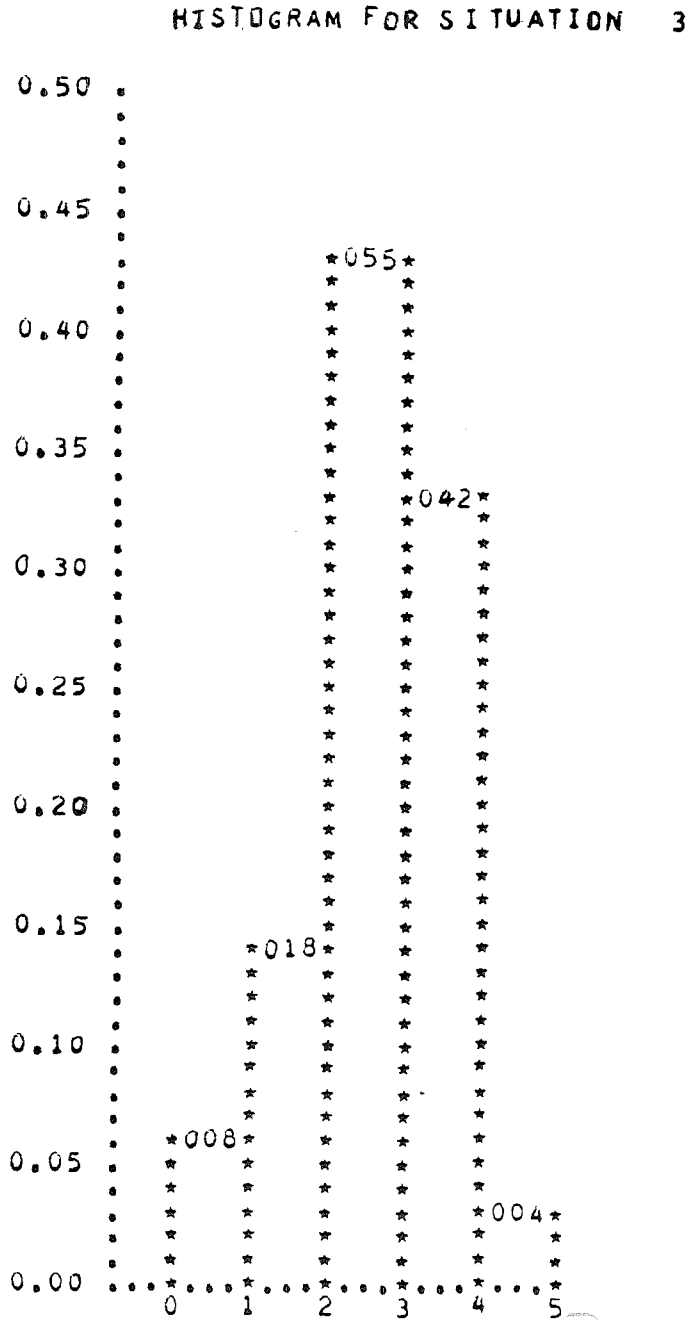
Figure 4.7

HISTOGRAM FOR SITUATION   5
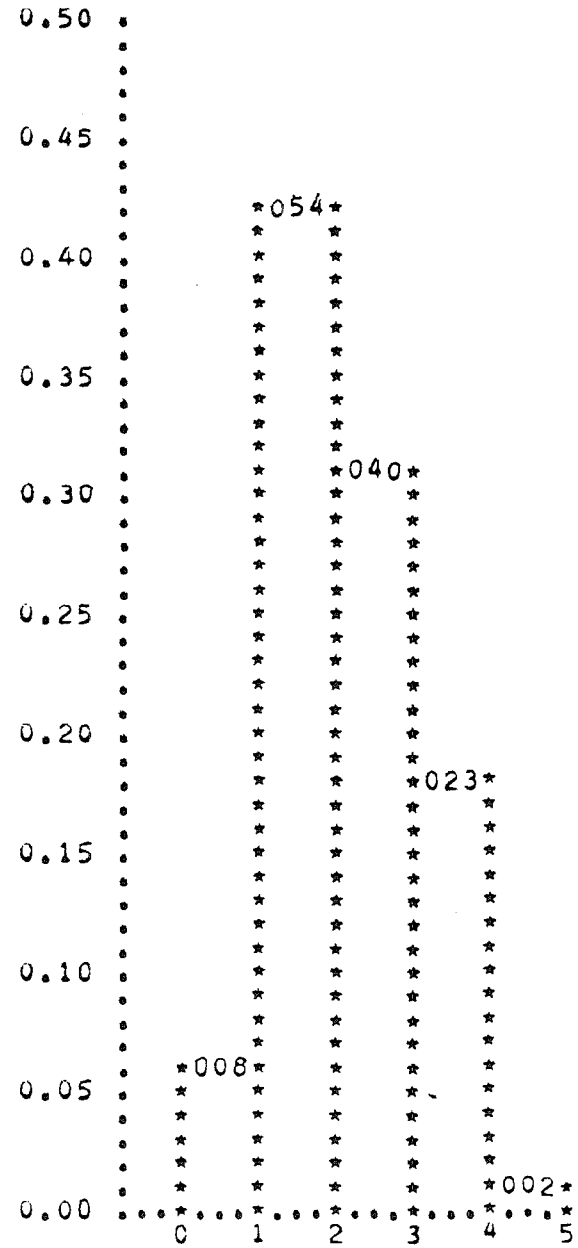
NOTE: COUNT IN EACH INTERVAL INCLUDES THAT
AT LOWER BOUNDARY BUT NOT UPPER.

On the twelve situations the constriction of the range of responses (mainly 2 or 3 rather than 1,4 or 5) (See Table 4.7) may indicate that in reality New Zealand guidance counsellors operate from a middle or participant (Antonouris, 1974) position although still leaning towards open orientation.

Further evidence of this is provided by the comments about 'Undecided' responses. Seventeen respondents used this category because they saw themselves occupying a central position. The forty-six who used the 'Undecided' category because their action would depend on knowing more about the circumstances may also see themselves as operating in the middle position.

Some of the respondents made explicit comments about their middle position:

'Life is paradoxical and the clues to dealing with paradox are balance and understanding.'

'Trained counsellors should be adaptable, in fact have to be adaptable.'

'Like the school psychologist I want to be seen as equally available to all.'

'I want to be flexible. A counsellor does not take sides.'

'I do not want to put either (individual or school) first - harmony is what I want to achieve.'

'If I am to remain effective I must be seen to be fair to both staff and students.'

So the trend among New Zealand counsellors is towards the open end of the continuum although clustering round the middle.

Law found a similar clustering in the high-average and low-average system orientation range but when scores at the extremes of the system-open continuum were considered more high system (73) than low system (52) were found. (Law, 1978(b) p.164).

Multivariate Analyses of Variance (MANOVAS) of the Factor Scores
and Twelve Situations

The classificatory variables, Sex$^{(x)}$ (male versus female), Length
of Teaching Service$^{(T)}$ (4 years or less versus five years or more),
Experience other than Teaching$^{(o)}$ (none versus some), Teaching Subject$^{(s)}$
(various specialist subjects versus all subjects), Length of Counselling
Service$^{(c)}$ (4 years or less versus five years or more) and the University
Training$^{(u)}$ (yes versus no) were used in a series of multivariate
analyses of variance (MANOVAS). Length of Teaching Service was finally
revised$^{(R)}$ to provide three categories : 0-4 years, 5-10 years, and
11 years or more. (See Table 4.8).

The dependent variables in each multivariate analysis of variance
were the scores for each of the six extracted factors : System/Open
Orientation, Interventionist, Orientation Ingressive Orientation, Teacher
Identification, Counselling Distinctiveness and Social Education. Each of
the twelve situations was also considered as a dependent variable.

Factors

The series of exploratory MANOVAS undertaken, involving three-way
comparisons of the classificatory variables yielded no significant main
effect or interactions, a somewhat surprising result It had seemed logical
to expect some variance according to sex, other experience etc. The
non-significant results are presented in Appendix D.

Table   4.8

Classificatory Variables Used in the MANOVAS with Their

Subgroups and the Number of Counsellors in Each Subgroup

(N.B.   N=119 for MANOVAS not 127)

Variable	Subgroups	Numbers	
Sex (X)	Male	72	(60.5%)
	Female	47	(39.5%)
Other Experience (O)	Some other Experience	31	(26.5%)
	No other Experience	88	(73.5%)
University Training (U)	University Training	82	(68.9%)
	Not university trained	37	(31.1%)
Teaching Subject (S)	All subjects	92	(77.3%)
	Specialised Subjects	27	(22.7%)
Length of Counselling Service (C)	0-4 years	79	(66.4%)
	5 or more years	40	(33.6%)
Length of Teaching Service (T)	0-4 years	20	(16.8%)
	5 or more years	99	(83.2%)
Revised Length of Teaching Service (R)	0-4 years	20	(16.8%)
	5-10 years	40	(33.6%)
	11 or more years	59	(49.6%)

Twelve Situations

The series of MANOVAS conducted on the twelve situations, involving three-way comparisons of the classificatory variables yielded six significant two-way interactions and one significant three-way interaction. The significant results are presented in Tables 4.9 to 4.13. Non-significant results are contained in Appendix E.

However the significant interactions occur on only a small number of situations:

(1)   Sex by University Training on Situations 7, 8, 10.

(2)   Length of Counselling Service by University Training on Situation 8.

(3)   Sex by Length of Counselling Service by University Training on Situation 5.   (See Table 4.9)

When Revised Length of Teaching Service was used it provided a significant two-way interaction with sex on Situations 1, 7, 9, 10 and 12.

The only main effect obtained was sex which was significant consistently on Situation 10 and from RX on situations 1, 7, 9 and 12 as well (See Tables 4.9 to 4.13).

As previously discussed (p. 40) the twelve situations do not appear to measure a unitary construct.   Therefore any conclusions must be viewed very tentatively.   The results come from a small number of situations but may suggest a tendency for females to be less open than males.   (However the mean is still at the open end of the continuum).   Some evidence that this trend could have been predicted was provided by the finding by Jacquiery (1979) that New Zealand female Secondary Teachers' College students expected to find their major satisfaction in teaching from the academic role (a 'system' goal) while males expected to find their major satisfaction from a helping role (an 'open' goal).

Table   4.9

Summary of Multivariate Analyses of Variance (MANOVAS) : Main Effects, Interactions, Levels of Significance and
Significant Dependent Variables for Sex, Length of Teaching Service, University Training, Length of
Counselling Service, Teaching Subject, Other Experience and Revised Length of Teaching Service

CLASSIFICATORY VARIABLES	MAIN EFFECTS		INTERACTIONS
	SEX	REVISED LENGTH OF TCHG.SERVICE	
Sex by Length of Teaching Service by University Training (XTU)	p<0.05 Situation 10		Sex by University Training Situations 7, 8, 10
Sex by Length of Counselling Service by University Training (XCU)	p < 0.05 Situation 10		Length of Counselling Service by University Training p < 0.05 Situation 8 Sex by University Training p< 0.05 Situations 7, 8 Sex by Length of Counselling Service by University Training p< 0.05 Situation 5 (almost on Situation 4, p <0.059).
Length of Teaching Service Length of Counselling Service by University Training (TCU)	–		Length of Counselling Service by University Training p< 0.05 Situation 8
Sex by Other Experience by Teaching Subject (XOS)	p< 0.05 Situation 10		–
Revised Length of Teaching Service by Sex (RX)	p< 0.05 Situations 1, 7,9,10,12	p<0.05 Situation 8	Revised Length of Teaching Service by Sex p< 0.05 Situations 1, 7, 9, 10, 12.

Table   4.10

Multivariate Analysis of Variance (MANOVA) of Situations Classified According to Sex, Length of

Counselling Service and University Training : Sex Main Effect

Test of roots	F	df (hyp)	df (error)	p less than	R
1 through 1	1.997	12.00	101.00	0.032	0.438

	UNIVARIATE F TESTS			
Variable	F(1,112)	Mean Square	p less than	Standardized Discriminant Function Coefficients
Situation 1	2.151	1.425	0.145	-0.277
2	0.386	0.306	0.536	0.025
3	1.249	0.789	0.266	0.326
4	0.098	0.081	0.754	0.108
5	3.217	2.042	0.076	0.569
6	0.466	0.451	0.496	-0.103
7	1.888	0.762	0.172	-0.037
8	0.986	0.698	0.323	0.166
9	3.030	2.087	0.085	-0.433
10	5.784	6.429	0.018	-0.516
11	0.518	0.503	0.473	0.313
12	2.746	2.065	0.100	-0.488

Table   4.11

Multivariate Analysis of Variance (MANOVA) of Situations Classified According to Sex, Length of
Teaching Service and University Training : Sex Main Effect

Test of roots 1 through 1	F 1.894	df(hyp) 12.00	df(error) 101.00	p less than 0.044	R 0.429

Variable	F(1,112)	UNIVARIATE F TESTS Mean Square	p less than	Standardized Discriminant Function Coefficients
Situation 1	2.191	1.425	0.142	-0.299
2	0.415	0.306	0.521	0.038
3	1.295	0.789	0.258	0.343
4	0.100	0.081	0.753	0.189
5	3.054	2.042	0.083	0.499
6	0.487	0.451	0.487	-0.070
7	1.935	0.762	0.167	-0.137
8	0.933	0.698	0.336	0.133
9	2.894	2.087	0.092	-0.351
10	6.002	6.429	0.016	-0.534
11	0.510	0.503	0.477	0.280
12	2.698	2.065	0.103	-0.461

Table   4.12

Multivariate Analysis of Variance (MANOVA) of Situations Classified According to Sex, Other Experience and Teaching Subject   : Sex Main Effect

Test of roots 1 through 1	F 1.904	df(hyp) 12.00	df(error) 101.00	p less than 0.042	R 0.430

Variable	F(1,112)	UNIVARIATE F TESTS Mean Square	p less than	Standardized Discriminant Function Coefficients
Situation 1	2.111	1.425	0.149	−0.342
2	0.405	0.306	0.526	0.068
3	1.276	0.789	0.261	0.378
4	0.097	0.081	0.757	0.129
5	2.893	2.042	0.092	0.471
6	0.471	0.451	0.494	−0.075
7	1.742	0.762	0.190	−0.082
8	0.853	0.698	0.358	0.228
9	3.072	2.087	0.082	−0.419
10	5.676	6.429	0.019	−0.483
11	0.504	0.503	0.479	0.335
12	2.687	2.065	0.104	−0.445

Table   4.13

Multivariate Analysis of Variance (MANOVA) of Situations Classified According to Sex, and Revised

Length of Teaching Service : Sex Main Effect

Test of roots 1 through 1	F 2.296	df(hyp) 12.00	df(error) 110.00	p less than 0.012	R 0.448

| | | UNIVARIATE   F   TESTS | | | |
Variable	F(1,121)	Mean Square	p less than	Standardized Discriminant Function Coefficients	
Situation 1	5.996	5.034	0.016	−0.357	
2	0.223	0.216	0.637	0.029	
3	0.057	0.047	0.812	0.371	
4	0.501	0.510	0.480	0.153	
5	0.400	0.325	0.528	0.470	
6	2.692	3.201	0.103	−0.078	
7	5.927	4.375	0.016	−0.180	
8	0.265	0.294	0.607	0.191	
9	6.794	6.337	0.010	−0.438	
10	9.707	12.487	0.002	−0.544	
11	0.089	0.106	0.765	0.302	
12	6.421	6.213	0.013	−0.526	

Yet it is Sex in interaction with University Training which produces the most important result. In situations 7, 8 and 10 it is evident that whereas women without university training are consistently less open than men without university training, there are either no sex differences or women are more open than men if university trained. In other words university training has a decided impact on women (i.e. towards openness) but has little impact on men in relation to system/open orientation. (See Tables 4.14, 4.15).

On Situation 7 males with no university training are significantly more open than females with no university training. (See Figure 4.8). The latter tend to occupy a middle position. The male counsellor with no university training would tend to support Jillian in her desire for a change of form whereas the female counsellor with no university training would tend to work for a compromise.

This trend is also true for Situation 10. $(F(1,112)= 9.33$ $(p < 0.01)$. Here the male counsellor without university training would be a little more inclined to accept Annette's demand for confidentiality. (See Figure 4.9).

However university training does affect the responses of females. Trained females are significantly more open than females without university training on Situations 8 $(F(1,112=10.33(p < .01)$ and 10 $(F(1,112)=5.02$ $(p < 0.05)$ (See Figure 4.10). The university trained females would tend to support Gordon in his desire to leave school and accept Annette's request for confidentiality while the females without university training would be more likely to adopt a compromise position.

University trained females are also significantly more open $F(1,112)= 4.48$ $(p < 0.05)$ than university trained males on Situation 8 although both are still inclined towards the middle of the scale.

University training influences males on Situation 7 in that they are more system-oriented than males without university training $(F(1,112)=5.79$

Table 4.14

Sex by University Training Interaction Effect : Significant

Simple Effects Results for Each Dependent Variable with F

Ratios and Levels of Significance

Situations	Simple Effects	F Ratio (df 1,112)	Significance Level
7	Males : university-trained versus those without university training	F = 5.79	$(p < 0.05)$
	No university training : males versus females	F = 14.06	$(p < 0.01)$
8	Females : university-trained versus those without university training	F = 10.33	$(p < 0.01)$
	University Training : Females versus Males	F = 4.48	$(p < 0.05)$
10	Females : university-trained versus those without university training	F = 5.02	$(p < 0.05)$
	No university training males versus females	F = 9.33	$(p < 0.01)$

Simple effects analysis after Winer, 1971, pp.445-451.

Table   4.15

Sex by University Training Interaction Effect : Subgroup Means*
for the Significant Dependent Variables Arranged According to
Sex and University Training

Situation	Sex	University	Training
		University Training	No University Training
7	Male	$\overline{X}$ = 2.71(55)	$\overline{X}$ = 2.28(18)
	Female	$\overline{X}$ = 2.65(27)	$\overline{X}$ = 2.95(19)
8	Male	$\overline{X}$ = 2.84(55)	$\overline{X}$ = 2.67(18)
	Female	$\overline{X}$ = 2.32(27)	$\overline{X}$ = 3.11(19)
10	Male	$\overline{X}$ = 1.98(55)	$\overline{X}$ = 1.94(18)
	Female	$\overline{X}$ = 2.18(27)	$\overline{X}$ = 2.84(19)

* The numbers in brackets after each mean indicate
the number of respondents in each subgroup

Figure   4.8

Graph showing the Interaction between Sex and University

Training on Situation 7 from XTU

Situation 7
Mean Scores
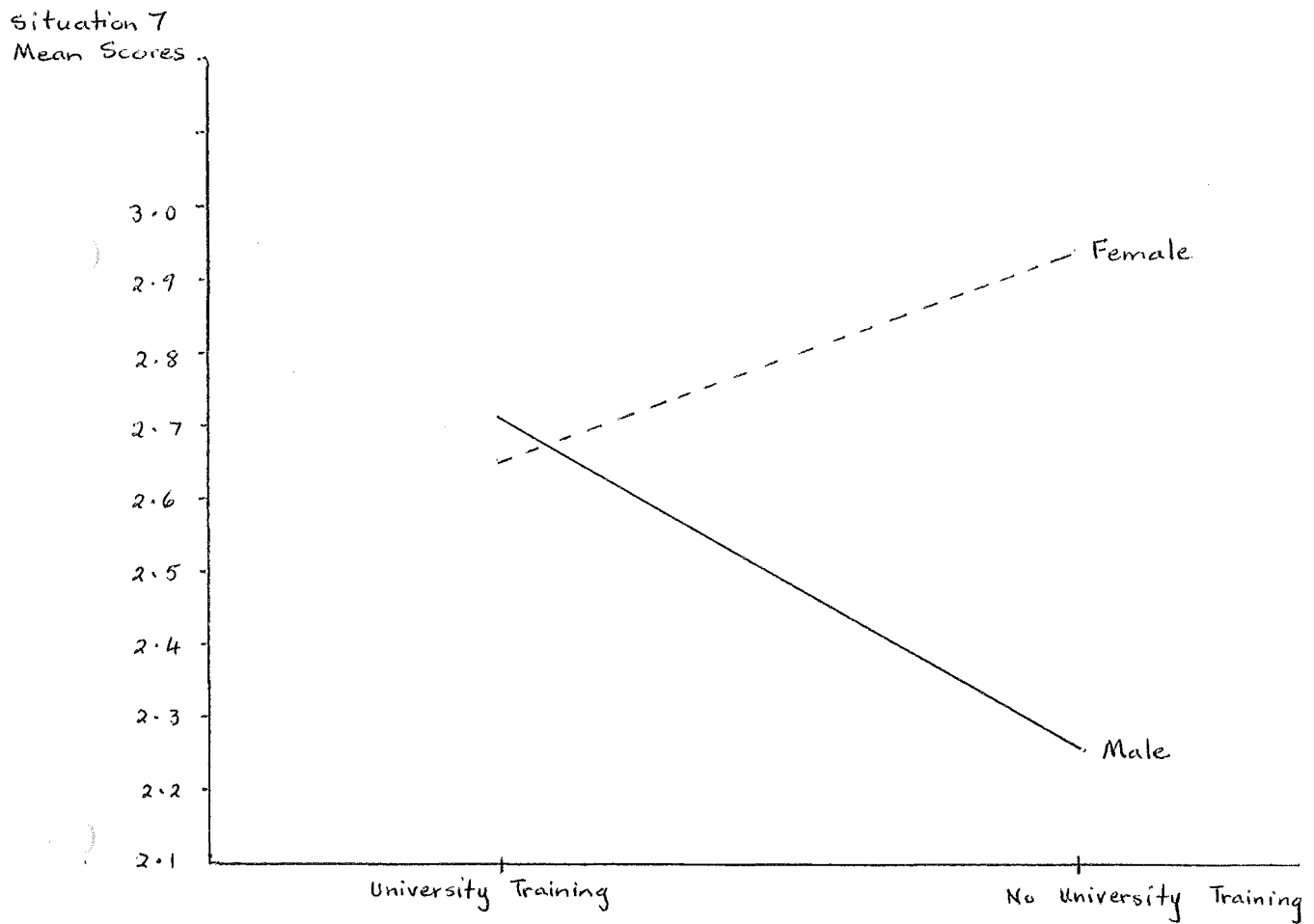
Figure 4.9

Graph showing the Interaction between Sex and University

Training on Situation 10 from XTU

Situation 10
Mean Scores

Female

Male

University Training

No University Training
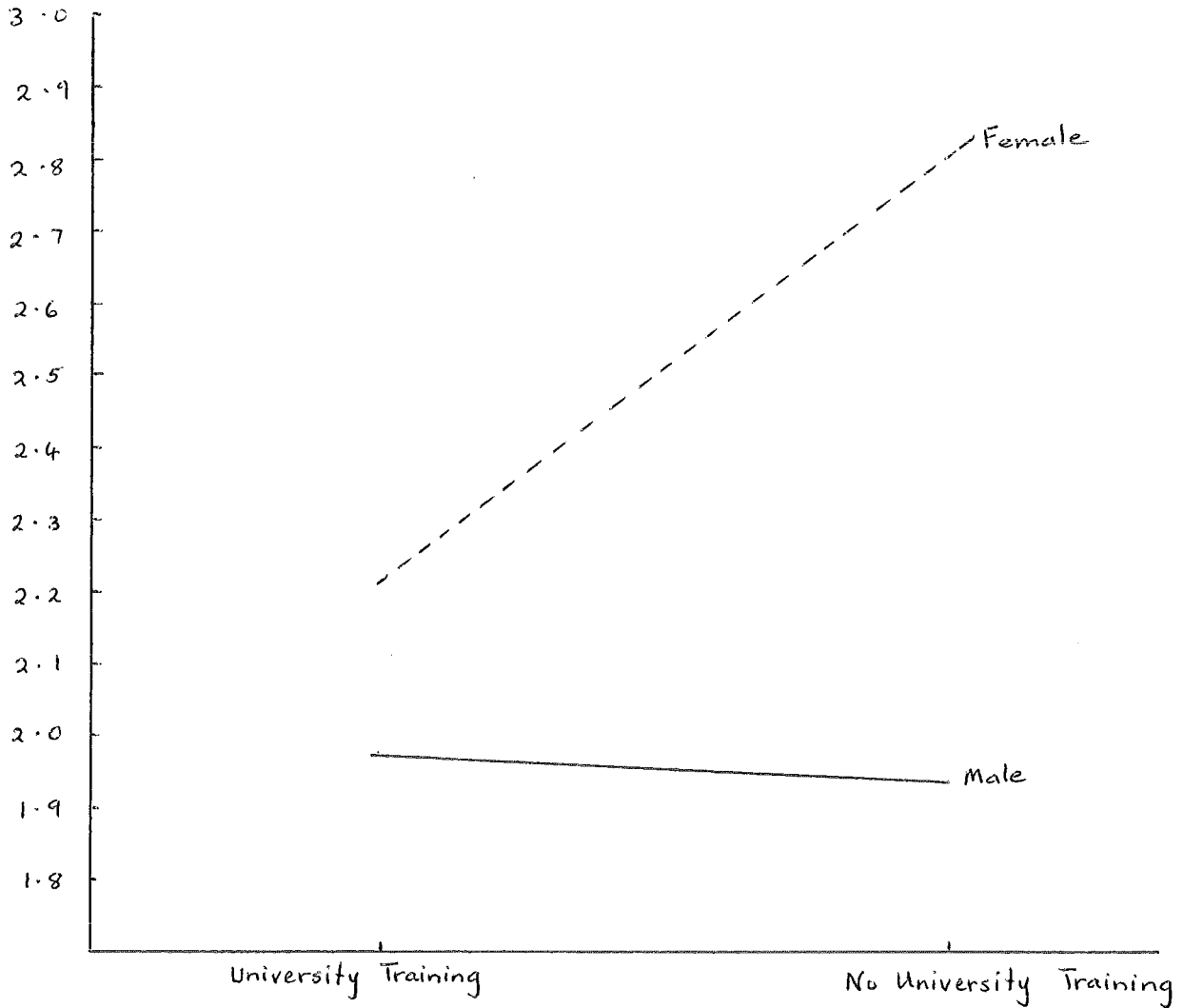
Figure   4.10

Graph showing the Interaction between Sex and University

Training on Situation 8 from XTU

Situation 8
Mean Scores
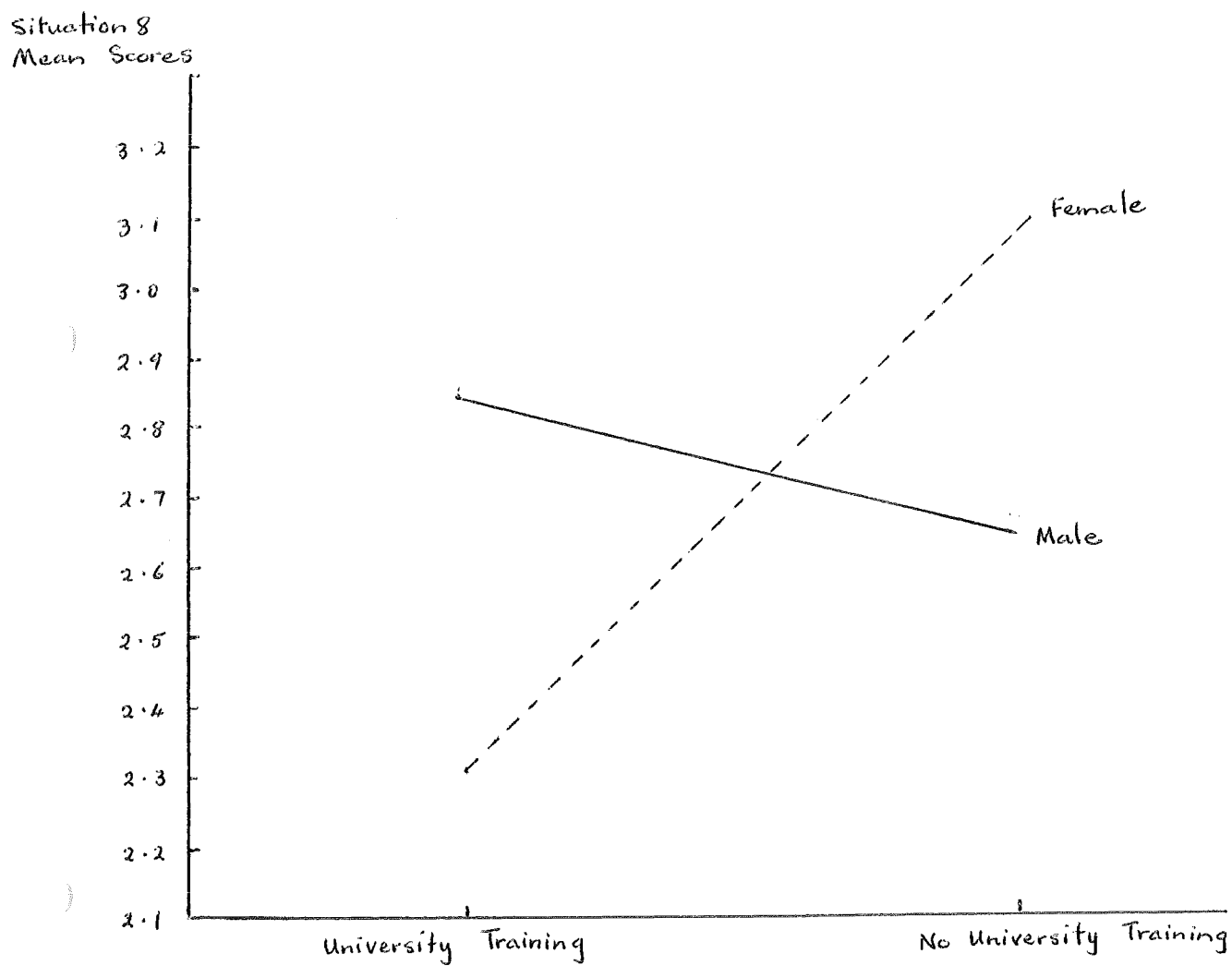
Figure 4.11

Graph showing the Interaction between Length of Counselling

Service and University Training on Situation 8 from XCU
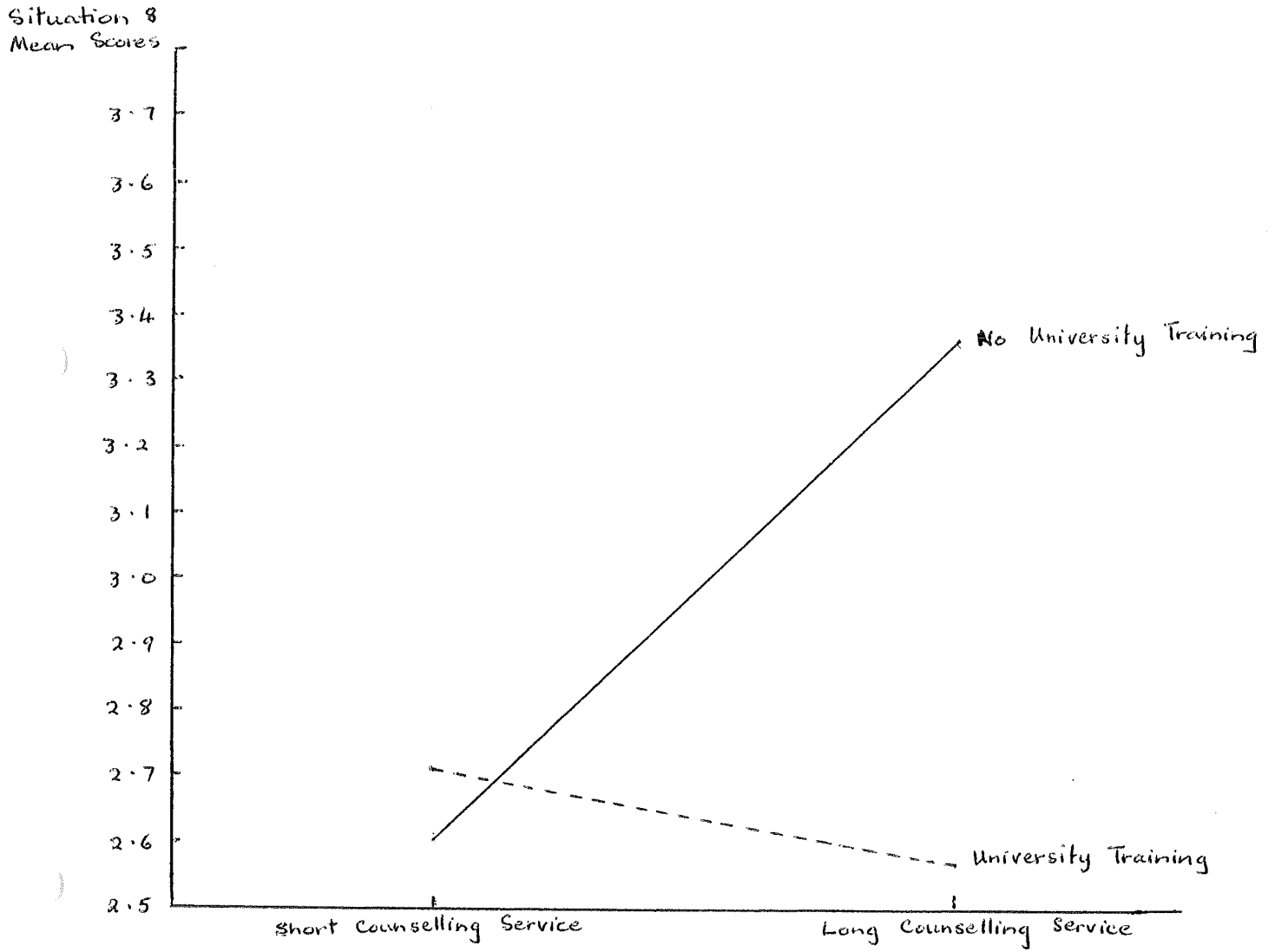
(p < .05) although both groups still incline towards the open end of the scale.

The interaction between Length of Counselling Service and University Training (from XCU) on Situation 8 (See Figure 4.11) is much more tenuous. It may be due to chance as the huge mean ($\bar{X}$ = 3.36) and small number of subjects (N=14) may indicate.

Figure 4.12 sets out the three-way interaction between sex, length of counselling service and university training on Situation 5. In the case of females with no university training there is virtually no significant difference in openness according to length of counselling service. However in the case of females with university training, those with short counselling service are more open than those with long counselling service.

It would be unwise to be anything but tentative about this result. Cell numbers are very small (19 for females with short counselling service and university training, 9 for females with long counselling service and university training). The difference between the means is not great ($\bar{X}$=1.421) for those with short service and $\bar{X}$=2.00 for those with long service) and both means lie at the open end of the system-open continuum. Law hypotheses that, while training may produce an open orientation, once the counsellor has been back in the school for five or six years the system will have reasserted itself. Perhaps women, who are often thought of as being more conforming, are more susceptible to this pressure than men. However, it must be remembered that this finding pertains to only nine respondents.

On short counselling service there is little difference between males with university training ($\bar{X}$ = 1.892) and those without ($\bar{X}$ = 1.778). However males with long counselling service and university training are more open ($\bar{X}$ = 1.500) than males with long counselling service and no training ($\bar{X}$ = 2.556). In other words the effect of university training appears to be greater on males with long counselling service.

Figure   4.12

Situation 5 : Interaction   Sex, Length of Counselling Service and University Training
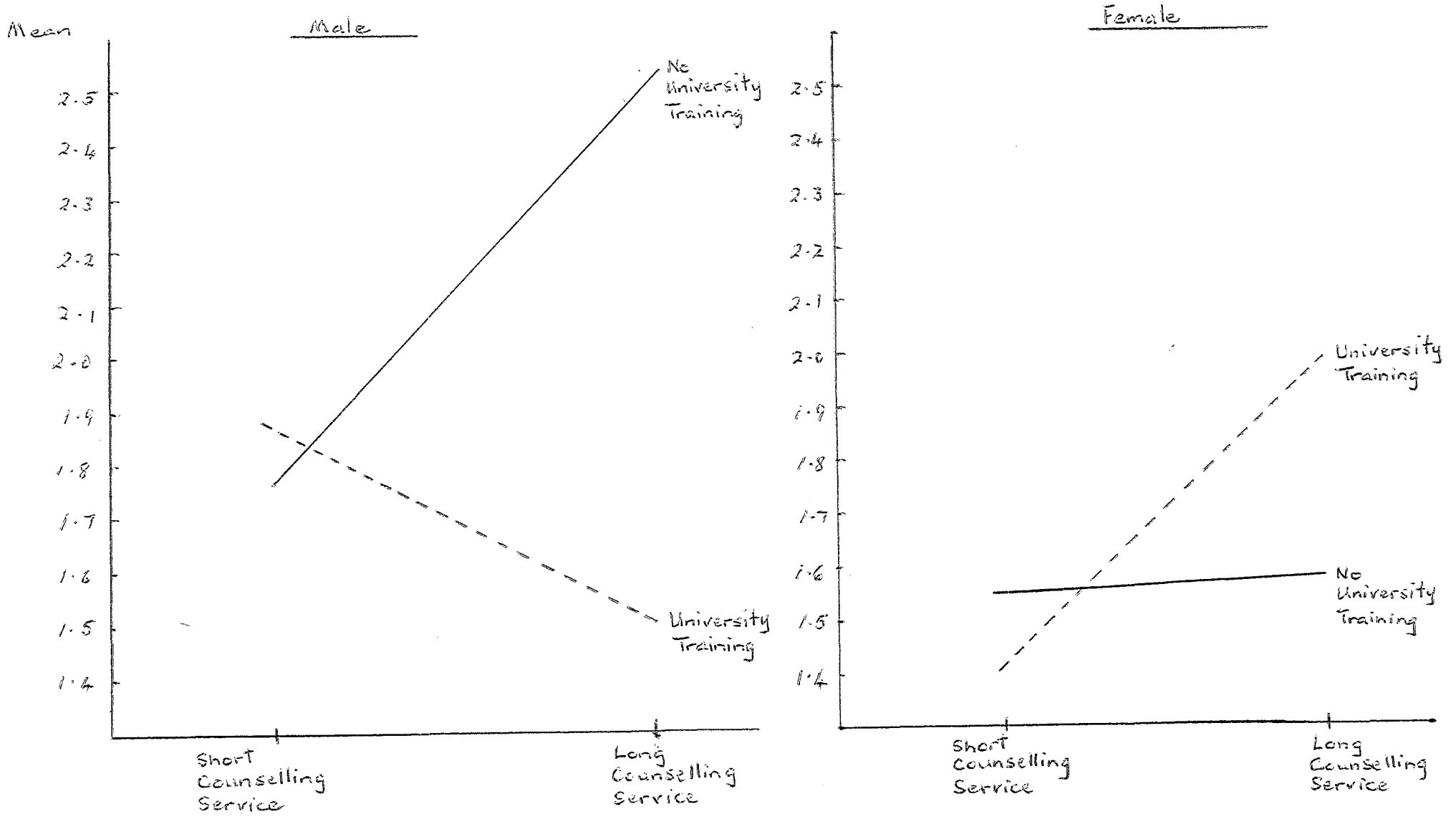
However their orientation on entry to training is not known. The two groups may have differed there. Also, the cell numbers are again small (18 for long service and university training, 9 for long service without training).

As this three-way interaction occurs only on Situation 5 it is impossible to attach too much significance to it.

In summary, it would appear, on the evidence of this study, that New Zealand guidance counsellors are a fairly homogeneous group, differing only slightly according to sex and whether or not they have university training. The import of these differences is weakened by the fact that they relate to so few of the situations and to none of the factors.

Counsellor Tasks : Preferences versus Practice
_____

One of the realities of the counsellor's life is that he is working

in a system that can allocate tasks to him which he sees as inappropriate

to his role. This is evident in Table 4.16 which shows, for example that

while only 17.3% of respondents considered playground duty to be an

appropriate task 47% were involved in it, despite the recommendation in

the 1969 Hewitson Document that it not be part of the counsellor's role.

(Department of Education, 1971, Appendix I p.vi). Almost twice as many

counsellors as want to are involved in formal teaching from a set

curriculum. The only area in which most counsellors having such a

responsibility actually want it is that of extra-curricula activities.

Thus counsellors are to some extent constrained by the demands of the

system as the McDiarmid (1979) study also found (e.g. 27% of counsellors

did do playground duty while 54% principals thought they should; 23%

enforced school rules and dress codes, 38% of principals thought that they

should). It is in relation to tasks such as playground duty in particular

that counsellors are regarded as teachers.

Table   4.16

Counsellor Tasks : Differences between the Ideal and the Reality

Task	Ideal % Wanting This	Reality % Having It
Supervision from a Guidance Counselling Specialist	21.2%	8%
Formal teaching from a set Curriculum	12.5%	22%
'Shepherding' pupils in a Custodial sense (e.g. playground duty)	17.3%	47%
'Extra-curricula' responsibilities	82.7%	84.2%

Computed from the number of 4's and 5's for each respondent

SUMMARY AND DISCUSSION

The present study sought to discover whether Law's System Orientation and Teacher Identification Inventories provide a valid measure of system orientation when used with New Zealand secondary school guidance counsellors. System orientation is defined as the tendency to support the school system. Its opposite, open orientation, is defined as a tendency to support the individual.

A second purpose was to establish where New Zealand counsellors lie on the system-open continuum and to compare them with their British counterparts. A third was to investigate the influence of sex, university training, length of teaching service, other experience, teaching subject and length of counselling service on orientation. Finally an attempt was made to discover any discrepancies between counsellor preferences and practices in relation to some common teacher tasks.

In November, 1979, a Questionnaire made up of the System Orientation and Teacher Identification Inventories, plus twelve situations presenting counsellors with a dilemma, was mailed to the two hundred guidance counsellors known to be occupying positions in New Zealand secondary schools. Although only 63.5% of the Questionnaires were returned, the sample proved to be representative in that it closely approximated the characteristics of the most comprehensive survey previously undertaken, McDiarmid's 1979 thesis for which 93% responded.

Agreement with system items on the SOI and TII and system-oriented responses to the twelve situations earned high scores while agreement with the open items earned low scores.

A factor analysis of the matrix of inter-correlations among the SOI and TII items was conducted. Six major factors were extracted:

I   System-Open Orientation (accounting for 13.2% of the variance)

II   Interventionist Orientation (9.1% of the variance)

III Ingressive Orientation (7.2% of the variance)

IV   Teacher Identification (5.9% of the variance)

V   Counselling Distinctiveness (4.7% of the variance)

VI   Social Education (3.8% of the variance)

System Orientation, the tendency to legitimate the purposes and values of the school, was an important factor on both the New Zealand and the British samples, although in New Zealand it loaded as one dimension of a system-open continuum whereas in Britain, a separate factor, Person Focus, representing the open end of the continuum was extracted. An Interventionist factor was extracted from both samples, the difference being that in New Zealand intervention was desired on behalf of the system only, whereas in Britain, Law found two other categories of intervention.

The Ingressive Orientation factor, a measure of the extent to which counselling is seen as an ingression into traditional teaching practices was present on both samples, although Law subsumed it under the heading Teacher Identification as one facet of a teaching-non-teaching orientation. Teacher Identification as a separate factor appeared in both New Zealand and Britain, but with fewer items loading on it in the former.

Two factors, Counselling Distinctiveness, and Social Education, were difficult to relate to the British results. The former correlates modestly with System-Open Orientation on the New Zealand sample and could be seen to measure a dimension of Law's System Orientation in that it represents one extreme, the provision of a separate pupil service. Social Education was a factor difficult to interpret, and one unique to New Zealand.

Overall it was possible to conclude that, as in Britain, the System Orientation and Teacher Identification Inventories do provide a valid measure of system orientation. The twelve situations intercorrelated but

modestly and did not appear to measure a unitary construct. However a significant number of respondents voluntarily attested to their reality in their own counselling experience.

From the information available it was not possible to state accurately the orientation of British counsellors, although a slight trend towards system orientation could be proposed. In New Zealand a trend towards openness was evident from the means for the factor scores and from the frequency distributions. Such a trend was also evident for the Twelve Situations. However on the Twelve Situations the constriction in the range of responses in the middle rather than at the extremes may indicate that counsellors have to operate from a middle position, balancing any conflicting demands between the individual and the institution, while still inclined to support the individual. A number of respondents commented to this effect.

Any differences in orientation between New Zealand and British school counsellors could be explained by the difference in samples. It is logical to expect that those in full-time counselling work should be more open than those who combine counselling with teaching. All but seven of the New Zealand respondents were full-time counsellors whereas only 45% of the British respondents were engaged in counselling from half to full-time.

One possible explanation for the open trend of the New Zealand counsellors may lie in training. The orientation of the university-trainers tends to be open. A greater degree of system orientation might be evident if Teachers' Colleges ran the training courses. Also it could be assumed that the thirty-six respondents who had had previous experience in client-centred occupations like vocational guidance, social work or psychology and the twenty-seven who had taught in special education programmes would tend to be open. In addition one of the common motivations for entering counselling is concern for the individual.

The study yielded few possible explanations of the differences among counsellor attitudes or their proposed actions. From the six factors which emerged no significant main effects or inter-actions could be attributed to any of the six independent variables. The twelve situations yielded a significant main effect due to sex in five situations, suggesting a tendency for females to be open, but less so than males. However this conclusion must be viewed very cautiously.

Sex interacted with university training on three situations. When faced with these particular dilemmas women without university training were consistently less open than men without university training. However in one of these situations (7) there was no sex difference accompanying university training and in the other two situations women were more open than men if university trained.

Sex in interaction with revised length of teaching service was significant on five situations and length of counselling service with university training on Situation 8 only. The latter may be due to chance as the number of subjects is small and the mean large.

The only significant three-way interaction was sex by length of counselling service by university training on Situation 5. In the case of females university training was associated with openness where counselling service was short but there was no significant difference in openness associated with length of counselling service when the counsellors were untrained. Training made little difference to males with short counselling service but resulted in more openness in those with long service. The significance that can be attached to these results is again limited by the small numbers involved and the fact that they occur on only one situation.

It is important now to consider whether the small number of significant differences could be due to factors within the methodology of the investigation, or whether they reflect fairly accurately the attitudes and preferences of secondary school guidance counsellors.

It is possible that the proportion responding (63.5%) might have been a factor in producing homogeneity. If the non-respondents differed significantly from the respondents on important variables, this could have been responsible for bias in the findings. However, as previously discussed, the sample appears to be representative on the usual criteria, and these criteria themselves seem to be unproductive of variance in the data. It is difficult to envisage what other variables or criteria might have yielded more variance.

Another possibility is that the subjective nature of the rating of scores for the twelve situations may have tended to obscure differences. There could be a tendency in respondents to choose the mid-point in the range of possible scores rather than the extremes on items that were unclear to them or for which they wished to make a qualified response.

Also it must be acknowledged that the twelve situations included as a measure of system orientation are of unknown validity. However they seem to be real. They have their origin in the work of Law, they correlate modestly (r = 0.313) with Factor I, System/Open Orientation, and comments from respondents attest to their validity.

On the other hand a middle position may reflect the reality of the school situation. New Zealand counsellors may in reality be a homogeneous group. This is a small country with a national education system. All but seven of the guidance counsellors in the sample had been teachers at some time. Therefore they had been through a selection procedure for teaching based on national criteria and another selection procedure for counselling controlled by the same educational authorities.

A second factor which could contribute towards homogeneity is the training courses, particularly at Canterbury and Massey which have trained the largest number since 1973. These courses may have a unifying effect. They tend to be open in orientation. The Education Department probably also exercises a role which tends towards uniformity. It has to approve all appointments and it monitors training programmes through an annual meeting of trainers.

The professional organisations, P.P.T.A. and N.Z.C.G.A. may also encourage homogeneity. P.P.T.A. defines counsellors as teachers and resists the prospect of their belonging to a separate professional organisation. Its Code of Ethics is a form of control. The N.Z.C.G.A. circulates a newsletter to all guidance counsellors whether or not they are Association members (50% were in April 1979) and its Annual Conference may have a unifying effect. Most counsellors know personally or know about each other and meet at N.Z.C.G.A. Annual Conference or at regular regional meetings and in-service training days.

New Zealand secondary school guidance counsellors therefore appear to be a relatively homogeneous group somewhat open in orientation. Even though they may be client-centred the power of the institution is such that counsellors must at times compromise. For some this means accepting tasks such as playground duty that they do not regard as properly belonging to their role.

In New Zealand, guidance counsellors are classified as teachers. They are but one part of a guidance network. Perhaps as Law suggests "the problems connected with reconciling teaching and counselling are much more critically attached to teaching approaches than to teaching tasks." (Law, 1978(a),p.69). The child-centred teacher and the open-oriented counsellor may well share a common concern, the fullest possible development of each unique individual.

ACKNOWLEDGEMENTS

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UNIVERSITY OF CANTERBURY   EDUCATION DEPARTMENT
Private Bag,
CHRISTCHURCH. 1

QUESTIONNAIRE - COUNSELLORS and GUIDANCE TEACHERS

As part of a research project, we wish to survey some of the work preferences of counsellors.   Information from this project will be helpful in our training course for guidance counsellors.   We would be grateful if you would rate each item on this scale and return it to the above address by Monday 19 November 1979. The results will, of course, be confidential: names of schools and persons will not be used.   We would be glad to answer enquiries about this survey.

                                        John Small
October 1979   Anne Munro

Title (circle one): ·Guidance Teacher; Counsellor.

Sex (circle one):   Male / Female

Length of teaching service before beginning counselling: _____ years

Length of other service (specify, e.g., Vocational Guidance) _____

                                        _____ years

Main teaching subject: _____

Length of counselling service: _____

How many hours per week do you teach examinable subjects?

How many hours per week do you teach class size groups in social education/careers?

Do you do regular playground duty?   YES / NO

In what extra-curricula activities are you involved? _____

Who, if anyone, supervises your work?(e.g., Principal, Psychologist)

Have you undergone university training in guidance counselling?   YES / NO

DIRECTIONS

For each item please circle one of the symbols on the right.   The meaning of the respective symbols is as follows:

Strongly Agree (SA); Agree (A); Undecided (U); Disagree (D); Strongly Disagree (SD)

Your reasons for marking "Undecided" could be important.   Please include them in the space provided on p.4.

1.   I want to be a useful source of information
     about the pupils to the school.   SA   A   U   D   SD

2.   I want to be seen to be loyal to the school.   SA   A   U   D   SD

3. I want to be able to bring about changes in the school on behalf of the pupils.   SA   A   U   D   SD

4. I want to be free to act as an advocate on behalf of the pupil.   SA   A   U   D   SD

5. I want to work in a school where I can share in its general educational and social philosophy.   SA   A   U   D   SD

6. I am ready to accept responsibility for maintaining discipline.   SA   A   U   D   SD

7. I want to work with pupils who are referred by my teaching colleagues.   SA   A   U   D   SD

8. I want to help bring about socially desirable changes in the pupils.   SA   A   U   D   SD

9. I want to mediate the needs and problems of the teachers to the pupil.   SA   A   U   D   SD

10. I want to be free to work out my own role in the school.   SA   A   U   D   SD

11. I want to employ behaviour modification techniques.   SA   A   U   D   SD

12. Where the interests of the school and the pupil clash I want to put the interests of the school first.   SA   A   U   D   SD

13. I want to be free to acknowledge to certain pupils that they are right to oppose the demands of the school.   SA   A   U   D   SD

14. I want to contact and work through the pupils' informal social systems.   SA   A   U   D   SD

15. I want to protect the school against potentially harmful pupils.   SA   A   U   D   SD

16. I want to achieve a position of decision-making responsibility in the school.   SA   A   U   D   SD

17. I want to employ client-centred techniques.   SA   A   U   D   SD

18. I want to put the needs of the individual before the needs of the group.   SA   A   U   D   SD

19. I want to help the teachers by showing them how they can best get the cooperation of pupils.   SA   A   U   D   SD

20. I want to provide a service for pupils which is not being provided by any other part of the school system.   SA   A   U   D   SD

21. I want to work alongside, but separately from, the other services provided by the school rather than integrally with them.   SA   A   U   D   SD

22. I want my work to be assigned to me by the school in which I work.   SA   A   U   D   SD

23. I want to be involved in the administrative work of helping to plan and run the school.   SA   A   U   D   SD

24. I want to help the pupil change the school rather than helping the school to change the pupil.   SA   A   U   D   SD

25. I want to help pupils comply with the requirements of the school.   SA   A   U   D   SD

26. I want to engage in liaison, communication and consultation work in the school.   SA   A   U   D   SD

27. I want to work with pupils having primarily 'personal' difficulties (as opposed to educational or vocational difficulties).   SA   A   U   D   SD

28. I want to be able to work from the pupil's point of view in a disagreement rather than from the school's point of view.   SA   A   U   D   SD

29. I want to work with parents to show them how they can best help their children meet the requirements of the school.   SA   A   U   D   SD

30. I want to communicate the values of the school to the pupil.   SA   A   U   D   SD

31. The professional ethic I want to work to is different from the professional ethic of the teaching profession.   SA   A   U   D   SD

32. I want to combine my role with a teaching role where I am also communicating to the pupil the disciplines and values of society.   SA   A   U   D   SD

33. I want to do work which is more like that of a school psychologist than that of a teacher.   SA   A   U   D   SD

34. I want to have a teaching programme so that I can demonstrate to my colleagues my effectiveness as a teacher.   SA   A   U   D   SD

35. The work I want to do is more like that of a psychiatrist than it is like that of a teacher.   SA   A   U   D   SD

36. I want my counselling and interviewing work to be supervised by a specialist in guidance and counselling rather than by the headteacher or a senior teaching colleague.   SA   A   U   D   SD

37. I want my counselling and interviewing work to be combined with a timetabled teaching programme so that I can understand what is happening in the daily life of the school.   SA   A   U   D   SD

38. I want to combine my counselling and interviewing role with a role where I am doing formal teaching from a set curriculum.   SA   A   U   D   SD

39. I want to combine my counselling and interviewing role with a role where I am responsible for 'shepherding' or 'looking after' the pupils in a custodial sense.   SA   A   U   D   SD

40. I want my counselling and interviewing work to
    be seen by the pupils as something different
    from the work of the teachers.   SA   A   U   D   SD

41. I want to combine my counselling and interviewing
    role with a role where I am also working with
    timetabled groups in an informal way and where the   SA   A   U   D   SD
    pupils can choose the topics for study and discussion.

42. I want to combine my counselling and interviewing
    role with a teaching role where I can help pupils
    gain a sense of themselves as individual persons.   SA   A   U   D   SD

43. The skills I want to develop are different from the
    skills of most teachers.   SA   A   U   D   SD

44. The work I want to do is more like that of a social
    worker than it is like that of a teacher.   SA   A   U   D   SD

45. I want to have a timetabled teaching programme so
    that I can keep in touch with the day-to-day
    problems of the classroom.   SA   A   U   D   SD

46. I want to combine my counselling and interviewing
    role with a teaching role where I can help the
    pupil develop self-discipline and a sense of their
    own values.   SA   A   U   D   SD

47. The work I want to do is different even from the
    work of a pupil-centred teacher.   SA   A   U   D   SD

48. I want to combine my counselling and interviewing
    role with a role where I am also having 'extra-
    curricula' responsibilities in which I can engage
    with the pupils in an easy and relaxed manner.   SA   A   U   D   SD

Items which you marked U (Undecided)

Item No.	Reason

What would you as a school counsellor do in the following situations? (One sentence answers will suffice)

1. Andrew in Form 7 is offered a prefect's position which he wants to decline because he does not believe in being in a position of authority over his peers. He comes to you for advice.

    _____

    _____

2. Keith is a deeply distressed third form school refuser. The Principal asks you to get him back to school and expects quick results. You find deep-seated family problems.

    _____

    _____

3. Catherine, who is academically able and intends to go on to university, complains to you that she resents being pushed by teachers to sit scholarship.

    _____

    _____

4. David is referred to you because of his aggressive behaviour in class. He confides in you a lot about his circumstances. Later you are asked to write a detailed report for the Board of Governors supporting a recommendation for expulsion.

    _____

    _____

5. Eddie is referred because teachers consider he is an under-achiever. In the process of counselling you discover that he has deep emotional problems.

    _____

    _____

6. The Principal has asked you to take sex education with class groups during Liberal Studies time on Thursday afternoons. At that time you had arranged to run a small group for seniors suffering from severe anxiety. There is no other in-school time you can do this.

    _____

    _____

7. Jillian who is experiencing a serious personality clash with her form teacher asks to be transferred to another form. Such transfers are against school policy except in extreme situations.

    _____

    _____

8. Gordon admits that his teachers are right in describing him as "lazy".
    He asks you whether he should leave school to take a job which has been
    offered to him. He very much wants to take it but it has few prospects
    and will use few of his abilities.

    _____

    _____

9. Sione comes to you because the Principal has refused permission for him
    to be away for 10 days at a Samoan Church gathering in a distant centre.

    _____

    _____

10. Annette refers herself to you after making a suicidal gesture. She confides
    this to you but then refuses to accept further help from you unless you
    maintain absolute confidentiality.

    _____

    _____

11. You are in charge of testing in your school. At the beginning of March
    you arrange for the P.A.T. reading tests and an interest inventory to be
    administered to all third formers. June, an anxious, vulnerable 14 year-
    old, is upset by these tests. Her parents complain to the Principal and
    the Chairman of the Board of Governors that the use of such tests represents
    an unacceptable invasion of privacy.

    _____

    _____

12. Ferne refers herself to you saying she is being persecuted by younger girls.
    Peers and teachers see her as a moaner who needs to grow up, her parents
    see her as an innocent victim of "tough" girls, and a psychologist sees
    her as an unwanted child.

    _____

    _____

APPENDIX   B

RATER'S   GUIDE

Scoring

1 = Open

2 = Leaning towards open

3 = Half and half - compromise solution

4 = Leaning towards system

5 = System

Definitions

Open = -concerned with the emotional and personal concerns of individuals

-willing to act as an advocate for pupils and a change agent in the school system

-in a clash of interests inclined to put the interests of the individual first

-defines problems from point of view of the child

System -loyal to the school, furthering its interests

-in clashes between the individual and the group tends to put the interests of the group first

-works towards adjustment of pupils to fit the system

Sample Responses

Items

1
1. Support him in his decision.

2. Examine the implications of possible choices - encourage (let) him decide.

3. Examine the pros and cons.

4. Examine implications - advise to accept.

5. Tell him he should accept.

Items

2   1. Tell the Principal he can't have quick results. Work on
the family problems perhaps calling in other agencies
e.g. Psychological Service.

        2. Explain situation to Principal - work on family problems.

        3. Try to get Keith back to school and work on family problems.

        4. Concentrate on getting some form of schooling be it a transfer
or correspondence.

        5. Get him back to school as quickly as possible. e.g. by using
behavourist techniques.

3   1. Represent Catherine's case to the teachers.

        2. Examine the issues but support her in her decision.

        3. Examine the advantages and disadvantages of Scholarship.

        4. Stress the advantages of sitting Scholarship.

        5. Tell her she should sit.

4   1. Absolutely refuse to write the report or reveal confidential
information.

        2. Write or speak on David's behalf - to his advantage.

        3. Write a factual report (don't support expulsion or David).

        4. Write a report if expulsion seems justified because of the
effect of David's behaviour on his peers.

        5. Write as directed and support expulsion.

5.   1. Focus only on the deep emotional problems (may include referral
to psychologist etc).

        2. Work on the emotional problems - help teachers see how these
affect achievement.

        3. Work on both the under-achievement and the emotional problems.

        4. Work on the underachievement with some consideration of the
emotional problem.

        5. Treat the educational aspects only i.e. focus on the under-
achievement.

Items

6   1. Insist on taking the small group.

      2. Try to negotiate with Principal so he will allow the small group.

      3. Compromise arrangement - e.g. take both but on alternate weeks.

      4. Make an out of school time for the small group and take sex education as timetabled.

      5. Give in to the Principal and take the sex education only.

7   1. Transfer Jillian regardless of oppostion.

      2. Present her case as "extreme" and therefore justifying transfer.

      3. Try to get Jillian and the teachers together and transfer only if this doesn't work.

      4. Persuade Jillian to see the value of staying.

      5. Insist Jillian has no option but to stay in her present form.

8   1. Support Gordon in his desire to leave.

      2. Examine implications (goals, prospects etc) of his actions but let him make his own choice.

      3. Examine all the pros and cons.

      4. Examine the implications of possible choices but try to persuade him to stay (maybe provide work exploration to show him how "boring" the job is).

      5. Tell him he should stay at school and exhort him to work harder.

9   1. Go to the Principal on Sione's behalf or tell Sione to just go to the Church gathering regardless.

      2. Try to negotiate with the Principal or advise the parents of their options.

      3. Go through the implications of going and of staying.

      4. Go through the implications but advise Sione to stay at school.

      5. Tell Sione he must stay at school - that is the legal position.

Item

10 1. Accept Annette's demand for absolute confidentiality.

    2. Accept the demand with the proviso that you may have to break
        it later but will inform her first.

    3. Persuade her to let you divulge this to......

    4. Refuse to accept her demand.

    5. Refuse to accept and tell the Principal and/or her parents.

11 1. Get all parties together, explain testing, exempt June if she
        is still distressed.

    2. Get all together and explain.

    3. Accept their fears but continue testing.

    4. Test but explain the results.

    5. Tell parents the school has a right to test and will continue
        to do so.

12 1. Work with her to build her self-esteem - on her terms.

    2. Work with her and involve peers, parents etc.

    3. Work on self-esteem and facing reality (e.g. social skills
        assertiveness).

    4. Help her to grow up - e.g. use a behaviour contract.

    5. Tell her she needs to grow up.

APPENDIX C

Table C.1

Varimax Rotated Factor Matrix for the 48 SOI and TII Items (N=127)*

SOI and TII Items	Factor					
	1	2	3	4	5	6
1	12221	53907	03077	08972	05042	-05082
2	53359	25287	01079	09414	-06777	
3	53962	-26154	-04017	08599	09440	-05965
4	45657	-20091	00245	15053	23304	-15681
5	07513	36086	02148	-14266	06581	03203
6	27679	13754	00142	24336	21262	-10030
7	08165	48360	-00876	-05385	10432	05538
8	40253	51269	-05313	01357	-14560	-01096
9	-07592	54895	-08114	-01392	-06483	01728
10	28562	-16957	04955	10610	11856	14269
11	10013	25339	-25919	-04088	01832	04555
12	53678	15481	03836	-01378	-05857	-01281
13	50229	-05789	07048	04879	20553	-08345
14	31862	-28578	25396	07840	-18390	07618
15	19583	43140	04714	-04591	-21521	06925
16	-10852	31710	-12753	-02323	-00484	10743
17	15296	-32625	41436	26028	-04934	-17408
18	25774	-01207	05102	17455	31447	-06907
19	-03743	43276	08911	-08225	-28748	16032
20	12882	-16040	09793	02483	51058	00134
21	05290	03924	09442	-10904	49812	00234
22	41185	-18823	07456	26874	-03036	-02739
23	00279	30478	08522	00624	00172	-01834
24	63530	05873	-02542	-09995	10069	07554
25	58220	09142	01039	09678	-09512	01326
26	-07250	27318	-29273	-25594	01661	35371
27	26957	-04337	26763	-02028	22865	-11211
28	48957	08568	01737	03742	42197	-19291
29	35166	34863	11881	-06675	-15241	28463
30	39706	40444	08396	01745	-26102	09282
31	35517	14786	39492	05406	28749	-10267
32	20579	34864	18706	37096	-06593	37358
33	-01962	10033	74411	14225	12169	06512
34	-00731	05977	01335	66877	-02737	-05955
35	06412	08422	65844	-00426	05256	14077
36	29110	20119	42113	-00793	11998	-19712
37	18921	-15280	14952	78605	11544	17224
38	03349	-04439	15252	77850	08946	-02647
39	14737	-15617	22401	25681	-28614	-01436
40	08748	-12570	23166	14945	63454	09499
41	23131	-10069	01686	07520	12643	-52378
42	04225	-09368	05168	-04052	01945	71698
43	-09680	10428	56772	07285	41586	-04916
44	-00307	-03284	73154	21270	08024	-01846
45	10646	-08652	18643	77058	04770	18639
46	03468	06832	04869	24651	15206	61428
47	03200	05116	36581	18875	38809	12158
48	-10882	29477	15720	04497	-00047	12402
Eigenvalue	6.3279	4.3503	3.44468	2.82315	2.25364	1.82713
Cumulative % of Variance	13.2	22.2	29.4	35.3	40.0	43.8

*Decimals have been omitted

Table D.1

TEST OF TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.265	6.000	114.000	0.279	0.250

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	1.674	42.186	0.198	0.339
FACTOR2	0.116	1.905	0.734	0.270
FACTOR3	0.002	0.029	0.969	-0.437
FACTOR4	0.332	4.716	0.566	0.114
FACTOR5	5.197	36.521	0.024	0.947
FACTOR6	0.018	0.036	0.895	-0.318

Table D.2

TEST OF OU from TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.856	6.000	114.000	0.530	0.208

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	2.013	50.714	0.159	0.761
FACTOR2	0.215	3.520	0.644	0.204
FACTOR3	0.649	12.027	0.422	0.256
FACTOR4	0.084	1.191	0.773	-0.304
FACTOR5	0.518	3.643	0.473	0.250
FACTOR6	1.018	2.075	0.315	-0.644

Table D. 3

TEST OF TO from TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERIUN   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.852	6.000	114.000	0.532	0.207

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	0.004	0.090	0.953	-0.036
FACTOR2	0.361	5.921	0.549	0.338
FACTOR3	1.929	35.719	0.168	-0.844
FACTOR4	1.333	18.928	0.251	0.803
FACTOR5	0.248	1.744	0.619	-0.028
FACTOR6	0.012	0.025	0.911	-0.022

Table D.4

TEST OF TU from TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERIUN   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R	
1 THROUGH 1	2.101	6.000	114.000	0.058	0.316	

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	6.608	166.512	0.011	0.872
FACTOR2	0.513	8.411	0.475	0.137
FACTOR3	1.454	26.927	0.230	0.371
FACTOR4	1.285	18.249	0.259	-0.619
FACTOR5	0.406	2.853	0.525	0.023
FACTOR6	0.191	0.389	0.663	-0.285

Table D.5

TEST OF U from TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.775	6.000	114.000	0.591	0.198

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	3.522	88.739	0.063	0.775
FACTOR2	0.178	2.923	0.074	0.181
FACTOR3	1.643	30.426	0.202	0.389
FACTOR4	1.112	15.796	0.294	0.186
FACTOR5	0.490	3.446	0.485	0.004
FACTOR6	0.019	0.039	0.891	-0.175

Table D.6

TEST OF O from TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.620	6.000	114.000	0.148	0.280

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	0.267	6.719	0.607	-0.092
FACTOR2	1.176	19.294	0.280	0.227
FACTOR3	2.228	41.266	0.138	0.718
FACTOR4	0.274	3.387	0.602	0.166
FACTOR5	3.887	27.314	0.051	-0.826
FACTOR6	0.666	1.357	0.416	-0.126

Table D.7

TEST OF T from TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.732	6.000	114.000	0.625	0.193

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	0.266	6.693	0.607	0.112
FACTOR2	2.154	35.318	0.145	0.626
FACTOR3	0.160	2.969	0.690	0.246
FACTOR4	0.145	2.056	0.704	-0.311
FACTOR5	0.006	0.039	0.941	-0.055
FACTOR6	2.062	4.203	0.154	0.663

Table D.8

TEST OF XSC

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.947	6.000	114.000	0.079	0.305

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	2.861	76.025	0.093	-0.772
FACTOR2	0.092	1.449	0.762	0.250
FACTOR3	0.402	7.701	0.527	0.217
FACTOR4	1.355	18.712	0.247	-0.436
FACTOR5	3.034	21.747	0.084	0.805
FACTOR6	0.091	0.184	0.763	0.213

Table D.9

TEST OF SC from XSC

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.274	6.000	114.000	0.275	0.251

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	1.217	32.329	0.272	0.200
FACTOR2	4.649	73.071	0.033	0.840
FACTOR3	1.098	21.020	0.297	-0.185
FACTOR4	0.007	0.096	0.934	-0.132
FACTOR5	1.432	10.265	0.234	0.508
FACTOR6	0.000	0.000	0.990	-0.115

Table D.10.

TEST OF XC from XSC

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.433	6.000	114.000	0.208	0.265

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	0.827	21.989	0.365	-0.679
FACTOR2	0.797	12.531	0.374	0.510
FACTOR3	0.187	3.574	0.666	-0.378
FACTOR4	0.589	8.128	0.444	0.324
FACTOR5	1.949	13.968	0.165	0.782
FACTOR6	1.227	2.478	0.270	0.379

Table D.11

TEST OF XS from XSC

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.712	6.000	114.000	0.640	0.190

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	0.898	23.860	0.345	0.317
FACTOR2	1.052	16.537	0.307	0.483
FACTOR3	0.074	1.424	0.786	-0.358
FACTOR4	1.342	18.535	0.249	0.599
FACTOR5	0.016	0.112	0.901	-0.163
FACTOR6	1.391	2.809	0.241	0.427

Table D.12.

TEST OF C from XSC

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.864	6.000	114.000	0.093	0.299

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	0.281	7.454	0.597	-0.323
FACTOR2	1.203	18.909	0.275	0.325
FACTOR3	1.491	28.533	0.225	0.589
FACTOR4	3.637	50.227	0.059	-0.784
FACTOR5	0.266	1.910	0.607	0.238
FACTOR6	1.311	2.648	0.254	0.482

Table D.13

TEST OF S from XSC

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.243	6.000	114.000	0.290	0.248

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	0.731	19.421	0.394	-0.564
FACTOR2	1.341	21.083	0.249	0.571
FACTOR3	0.342	6.541	0.560	-0.227
FACTOR4	1.030	14.224	0.312	-0.364
FACTOR5	0.893	6.404	0.346	0.725
FACTOR6	1.044	2.108	0.309	0.449

Table D.14

TEST OF X from XSC

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.413	6.000	114.000	0.869	0.146

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	0.643	17.093	0.424	0.333
FACTOR2	0.934	14.684	0.336	0.654
FACTOR3	0.348	6.665	0.556	0.261
FACTOR4	0.110	1.520	0.741	-0.452
FACTOR5	0.603	4.324	0.439	0.513
FACTOR6	0.044	0.089	0.834	0.028

Table D.15

TEST OF TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.428	6.000	114.000	0.859	0.148

VARIABLE	UNIVARIATE F TESTS $F(1, 119)$	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	0.137	3.267	0.712	0.416
FACTOR2	0.004	0.071	0.947	0.061
FACTOR3	0.643	12.170	0.424	-0.709
FACTOR4	0.266	3.558	0.607	0.550
FACTOR5	0.155	1.096	0.694	-0.106
FACTOR6	0.727	1.464	0.396	-0.687

Table D.16

TEST OF OU from TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.840	6.000	114.000	0.097	0.297

VARIABLE	UNIVARIATE F TESTS $F(1, 119)$	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	8.514	203.734	0.004	0.706
FACTOR2	0.131	2.123	0.718	-0.098
FACTOR3	0.978	18.518	0.325	-0.029
FACTOR4	3.466	46.407	0.065	0.348
FACTOR5	3.834	27.067	0.053	0.338
FACTOR6	0.934	1.883	0.336	0.017

Table D. 17

TEST OF TU from TOU   ×

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	2.053	6.000	114.000	0.064	0.312

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	7.567	161.065	0.007	0.922
FACTOR2	0.542	8.785	0.463	0.134
FACTOR3	0.680	12.879	0.411	-0.245
FACTOR4	1.221	16.352	0.271	-0.525
FACTOR5	0.099	0.701	0.753	-0.067
FACTOR6	0.369	0.744	0.545	-0.311

Table D.18

TEST OF TO from TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.161	6.000	114.000	0.332	0.240

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	0.416	9.965	0.520	-0.034
FACTOR2	2.179	35.284	0.143	0.453
FACTOR3	0.431	8.159	0.513	-0.068
FACTOR4	1.461	19.568	0.229	-0.344
FACTOR5	4.949	34.944	0.028	-0.743
FACTOR6	0.050	0.101	0.823	0.082

Table D.19

TEST OF 0 from TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.827	6.000	114.000	0.552	0.204

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1	
FACTOR1	4.086	97.776	0.045	0.810	
FACTOR2	0.060	0.971	0.807	0.076	
FACTOR3	1.097	20.762	0.297	0.200	
FACTOR4	1.424	19.067	0.235	0.303	
FACTOR5	0.674	4.759	0.413	0.089	
FACTOR6	0.016	0.032	0.900	-0.191	

Table D.20

TEST OF 0 from TOU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.847	6.000	114.000	0.096	0.298

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1	
FACTOR1	0.432	10.332	0.512	-0.296	
FACTOR2	1.171	18.958	0.281	0.305	
FACTOR3	1.344	25.448	0.249	0.570	
FACTOR4	4.047	54.192	0.047	-0.786	
FACTOR5	0.418	2.950	0.519	0.181	
FACTOR6	1.210	2.438	0.274	0.470	

Table D.21

TEST OF T

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.772	6.000	114.000	0.594	0.198

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	0.280	6.693	0.598	0.085
FACTOR2	2.181	35.318	0.142	0.630
FACTOR3	0.157	2.969	0.693	0.268
FACTOR4	0.154	2.056	0.696	-0.346
FACTOR5	0.006	0.039	0.941	-0.049
FACTOR6	2.086	4.203	0.151	0.682

Table D.22

TEST OF XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	2.133	6.000	114.000	0.055	0.318

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	5.246	138.331	0.024	-0.850
FACTOR2	2.497	39.670	0.117	0.562
FACTOR3	0.043	0.835	0.835	-0.114
FACTOR4	1.704	24.063	0.194	0.639
FACTOR5	0.284	2.084	0.595	0.057
FACTOR6	0.013	0.026	0.911	0.067

Table D.23

TEST OF OS from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.414	6.000	114.000	0.868	0.146

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	0.505	13.309	0.479	0.517
FACTOR2	0.918	14.584	0.340	0.527
FACTOR3	0.458	8.764	0.500	0.400
FACTOR4	0.146	2.065	0.703	-0.405
FACTOR5	0.039	0.267	0.844	-0.069
FACTOR6	0.374	0.767	0.542	-0.489

Table D.24

TEST OF XS from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.755	6.000	114.000	0.607	0.196

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 119)	MEAN SQ	P LESS THAN	1
FACTOR1	0.955	25.196	0.330	0.267
FACTOR2	0.986	15.657	0.323	0.455
FACTOR3	0.038	0.724	0.846	-0.275
FACTOR4	1.663	23.489	0.200	0.641
FACTOR5	0.046	0.339	0.830	-0.241
FACTOR6	1.420	2.912	0.236	0.445

Table D.25

TEST OF XO from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.210	6.000	114.000	0.973	0.105

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	0.012	0.323	0.912	-0.035
FACTOR2	0.085	1.347	0.771	0.336
FACTOR3	0.269	5.173	0.605	-0.566
FACTOR4	0.491	6.940	0.485	-0.556
FACTOR5	0.170	1.249	0.681	0.774
FACTOR6	0.037	0.076	0.848	-0.219

Table D.26

TEST OF S from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.996	6.000	114.000	0.432	0.223

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	0.868	22.883	0.353	-0.571
FACTOR2	1.802	28.631	0.182	0.625
FACTOR3	0.137	2.639	0.711	-0.184
FACTOR4	0.890	12.567	0.347	-0.301
FACTOR5	0.447	3.284	0.505	0.571
FACTOR6	0.848	1.740	0.359	0.427

Table D.27

TEST OF O from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.620	6.000	114.000	0.148	0.280

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	0.197	5.190	0.658	-0.097
FACTOR2	1.512	24.023	0.221	0.283
FACTOR3	2.279	43.758	0.134	0.720
FACTOR4	0.238	3.362	0.627	0.187
FACTOR5	3.589	26.355	0.061	-0.810
FACTOR6	0.508	1.042	0.477	-0.114

Table D.28

TEST OF X from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.382	6.000	114.000	0.889	0.140

VARIABLE	UNIVARIATE F TESTS F(1, 119)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
FACTOR1	0.648	17.093	0.422	0.407
FACTOR2	0.924	14.654	0.338	0.601
FACTOR3	0.347	6.665	0.557	0.236
FACTOR4	0.108	1.520	0.743	-0.443
FACTOR5	0.589	4.324	0.444	0.469
FACTOR6	0.043	0.089	0.835	-0.011

Table D.29

TEST OF RX

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	0.520	12.000	232.000	0.901	0.180
2 THROUGH 2	0.474	5.000	116.500	0.795	0.141

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(2, 121)	MEAN SQ	P LESS THAN	1
FACTOR1	0.280	7.633	0.756	0.169
FACTOR2	0.975	15.573	0.380	0.329
FACTOR3	0.117	2.267	0.889	0.175
FACTOR4	0.311	4.255	0.734	-0.347
FACTOR5	1.482	10.753	0.231	-0.868
FACTOR6	0.197	0.399	0.822	0.273

Table D.30

TEST OF X from RX

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.371	6.000	116.000	0.896	0.137

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 121)	MEAN SQ	P LESS THAN	1
FACTOR1	0.588	16.011	0.445	0.418
FACTOR2	0.843	13.469	0.360	0.624
FACTOR3	0.338	6.535	0.562	0.246
FACTOR4	0.060	1.095	0.778	-0.428
FACTOR5	0.623	4.520	0.432	0.468
FACTOR6	0.036	0.074	0.849	-0.019

Table D. 31

TEST OF R from RX

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	1.302	12.000	232.000	0.218	0.312
2 THROUGH 2	0.659	5.000	116.500	0.656	0.166

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	$F(2, 121)$	MEAN SQ	P LESS THAN	1
FACTOR1	0.639	17.393	0.530	0.553
FACTOR2	1.617	25.826	0.203	0.317
FACTOR3	0.077	1.484	0.926	0.278
FACTOR4	3.186	43.651	0.045	-0.860
FACTOR5	0.523	3.793	0.594	-0.349
FACTOR6	1.054	2.139	0.352	0.136

MULTIVARIATE ANALYSES OF VARIANCE (MANOVAS) OF THE TWELVE SITUATIONS (ITEMS 1-12) CLASSIFIED ACCORDING TO SEX (X)
UNIVERSITY TRAINING (U) OTHER EXPERIENCE (O) LENGTH OF TEACHING SERVICE (T) LENGTH OF COUNSELLING SERVICE (C) TEACHING SUBJECT (S)
AND REVISED LENGTH OF COUNSELLING SERVICE (R) : RESULTS THAT ARE NOT SIGNIFICANT.

Table E.1

TEST OF TCU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.800	12.000	101.000	0.650	0.295

VARIABLE	UNIVARIATE F TESTS F(1, 112)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
ITEM1	0.897	0.606	0.346	0.214
ITEM2	0.431	0.316	0.513	0.218
ITEM3	0.968	0.603	0.327	0.206
ITEM4	0.368	0.310	0.546	0.365
ITEM5	2.516	1.686	0.115	-0.585
ITEM6	0.571	0.524	0.451	0.438
ITEM7	0.000	0.000	0.994	0.096
ITEM8	0.188	0.146	0.666	0.047
ITEM9	0.626	0.455	0.430	-0.382
ITEM10	1.951	2.247	0.165	-0.389
ITEM11	1.081	1.074	0.301	-0.344
ITEM12	0.015	0.011	0.904	-0.097

Table E.2

TEST OF TU from TCU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.678	12.000	101.000	0.083	0.408

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIEN
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	4.678	3.164	0.033	0.491
ITEM2	8.416	6.178	0.004	0.605
ITEM3	1.440	0.897	0.233	0.119
ITEM4	1.042	0.878	0.309	0.204
ITEM5	2.236	1.499	0.138	0.166
ITEM6	5.467	5.018	0.021	0.410
ITEM7	0.313	0.136	0.577	-0.121
ITEM8	0.181	0.140	0.671	-0.278
ITEM9	0.116	0.084	0.734	-0.273
ITEM10	0.206	0.237	0.651	0.037
ITEM11	0.002	0.002	0.961	-0.029
ITEM12	0.961	0.707	0.329	0.194

Table E.3

TEST OF TC from TCU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.619	12.000	101.000	0.821	0.262

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENT
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.101	0.068	0.751	-0.227
ITEM2	2.066	1.517	0.153	0.476
ITEM3	0.050	0.031	0.823	0.107
ITEM4	0.151	0.128	0.098	-0.057
ITEM5	0.256	0.172	0.614	-0.204
ITEM6	0.001	0.001	0.971	-0.023
ITEM7	0.797	0.346	0.374	0.476
ITEM8	0.819	0.635	0.367	-0.390
ITEM9	0.329	0.239	0.567	0.150
ITEM10	0.780	0.899	0.379	0.169
ITEM11	0.426	0.424	0.515	0.174
ITEM12	2.147	1.579	0.146	-0.573

Table E. 4

TEST OF U from TCU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.054	12.000	101.000	0.407	0.334

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.122	0.083	0.727	0.149
ITEM2	1.385	1.017	0.242	0.366
ITEM3	0.044	0.027	0.834	-0.133
ITEM4	0.161	0.135	0.689	-0.309
ITEM5	0.653	0.438	0.421	0.037
ITEM6	1.615	1.482	0.206	0.179
ITEM7	0.387	0.168	0.535	-0.565
ITEM8	1.938	1.504	0.167	0.477
ITEM9	0.115	0.084	0.735	0.034
ITEM10	3.213	3.701	0.076	0.598
ITEM11	0.143	0.143	0.706	-0.077
ITEM12	1.519	1.117	0.220	0.588

TEST OF C ~~from~~ TCU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.441	12.000	101.000	0.943	0.223

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.029	0.019	0.866	0.074
ITEM2	0.006	0.005	0.936	0.206
ITEM3	0.027	0.017	0.870	0.079
ITEM4	0.039	0.032	0.845	0.028
ITEM5	1.034	0.693	0.311	-0.442
ITEM6	0.686	0.629	0.409	-0.294
ITEM7	0.273	0.118	0.603	0.128
ITEM8	0.551	0.428	0.459	-0.277
ITEM9	0.478	0.348	0.491	-0.317
ITEM10	0.033	0.038	0.857	0.210
ITEM11	0.004	0.004	0.952	-0.043
ITEM12	2.507	1.844	0.116	0.730

Table E.6

TEST OF T from TCU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.073	12.000	101.000	0.391	0.336

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.187	0.127	0.666	0.224
ITEM2	1.750	1.284	0.189	0.462
ITEM3	0.857	0.534	0.357	0.235
ITEM4	0.076	0.064	0.783	-0.204
ITEM5	0.697	0.467	0.405	-0.301
ITEM6	0.080	0.074	0.777	-0.135
ITEM7	2.184	0.949	0.142	-0.699
ITEM8	1.223	0.949	0.271	0.413
ITEM9	0.575	0.418	0.450	-0.196
ITEM10	0.687	0.792	0.409	0.495
ITEM11	0.163	0.162	0.687	-0.089
ITEM12	0.653	0.480	0.421	0.521

Table E. 7

TEST OF XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.746	12.000	101.000	0.703	0.285

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1	
ITEM1	0.433	0.292	0.512	-0.443	
ITEM2	0.602	0.455	0.440	0.213	
ITEM3	2.520	1.559	0.115	0.527	
ITEM4	0.720	0.606	0.398	-0.219	
ITEM5	0.213	0.151	0.645	-0.238	
ITEM6	0.824	0.790	0.366	0.343	
ITEM7	0.562	0.246	0.455	0.433	
ITEM8	0.046	0.038	0.830	0.088	
ITEM9	1.286	0.874	0.259	-0.646	
ITEM10	0.016	0.018	0.901	0.051	
ITEM11	0.425	0.423	0.516	0.309	
ITEM12	0.102	0.078	0.751	0.017	

TEST OF OS from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.573	12.000	101.000	0.859	0.252

VARIABLE	UNIVARIATE F TESTS F(1, 112)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
ITEM1	0.431	0.291	0.513	0.314
ITEM2	1.725	1.363	0.192	0.603
ITEM3	0.867	0.536	0.354	0.217
ITEM4	0.339	0.285	0.562	-0.402
ITEM5	0.213	0.150	0.645	-0.151
ITEM6	0.177	0.170	0.675	-0.257
ITEM7	0.150	0.065	0.700	-0.322
ITEM8	0.068	0.055	0.795	-0.093
ITEM9	0.842	0.572	0.361	-0.316
ITEM10	0.191	0.216	0.663	-0.066
ITEM11	0.111	0.110	0.740	0.212
ITEM12	1.221	0.939	0.271	0.553

Table E.9

TEST of XS from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.676	12.000	101.000	0.771	0.273

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.144	0.097	0.705	-0.069
ITEM2	1.376	1.040	0.243	0.591
ITEM3	0.080	0.050	0.777	-0.202
ITEM4	0.321	0.271	0.572	-0.310
ITEM5	0.582	0.411	0.447	-0.201
ITEM6	0.632	0.606	0.428	-0.277
ITEM7	0.180	0.079	0.672	-0.281
ITEM8	0.262	0.214	0.610	-0.345
ITEM9	1.035	0.703	0.311	0.694
ITEM10	1.708	1.934	0.194	-0.530
ITEM11	0.000	0.000	0.993	-0.016
ITEM12	0.063	0.048	0.803	0.087

Table E.10

TEST OF XO from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.855	12.000	101.000	0.594	0.304

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	3.074	2.075	0.082	0.400
ITEM2	2.730	2.063	0.101	0.359
ITEM3	0.144	0.089	0.705	-0.082
ITEM4	0.581	0.489	0.448	0.154
ITEM5	0.002	0.001	0.968	-0.218
ITEM6	2.153	2.063	0.145	0.305
ITEM7	1.001	0.438	0.319	0.098
ITEM8	1.218	0.996	0.272	0.253
ITEM9	1.626	1.105	0.205	0.099
ITEM10	3.305	3.743	0.072	0.522
ITEM11	0.130	0.129	0.719	-0.022
ITEM12	0.180	0.139	0.672	-0.214

Table E.11

TEST OF S from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.623	12.000	101.000	0.818	0.263

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.165	0.111	0.686	-0.205
ITEM2	3.953	2.987	0.049	0.717
ITEM3	0.152	0.094	0.697	0.062
ITEM4	0.013	0.011	0.909	-0.157
ITEM5	0.174	0.123	0.677	0.132
ITEM6	0.005	0.004	0.946	-0.087
ITEM7	0.148	0.065	0.701	-0.262
ITEM8	0.152	0.125	0.697	0.023
ITEM9	1.248	0.848	0.266	0.460
ITEM10	0.024	0.027	0.878	-0.182
ITEM11	0.696	0.693	0.406	0.309
ITEM12	1.110	0.853	0.294	-0.336

Table E.12

TEST OF O from XOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.774	12.000	101.000	0.676	0.290

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.106	0.072	0.745	0.125
ITEM2	0.002	0.002	0.964	0.008
ITEM3	0.147	0.091	0.702	-0.195
ITEM4	0.348	0.293	0.557	0.217
ITEM5	0.055	0.039	0.815	-0.010
ITEM6	1.202	1.152	0.275	0.240
ITEM7	0.097	0.042	0.757	-0.095
ITEM8	2.114	1.729	0.149	-0.689
ITEM9	3.011	2.045	0.085	0.780
ITEM10	0.674	0.763	0.414	0.091
ITEM11	0.290	0.289	0.591	-0.407
ITEM12	0.235	0.181	0.629	0.174

Table E. 13

TEST OF TOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.524	12.000	101.000	0.128	0.392

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICI
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	1.016	0.708	0.316	-0.278
ITEM2	0.249	0.192	0.619	0.103
ITEM3	0.666	0.416	0.416	0.162
ITEM4	0.277	0.235	0.600	0.117
ITEM5	0.536	0.379	0.466	0.184
ITEM6	0.466	0.459	0.496	0.353
ITEM7	1.376	0.600	0.243	-0.268
ITEM8	0.002	0.002	0.965	0.018
ITEM9	1.277	0.896	0.261	-0.414
ITEM10	1.694	2.036	0.196	-0.396
ITEM11	7.032	6.537	0.009	0.853
ITEM12	0.104	0.081	0.747	-0.132

TEST OF DS from TOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.649	12.000	101.000	0.796	0.268

VARIABLE	UNIVARIATE F TESTS F(1, 112)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
ITEM1	0.034	0.024	0.853	0.175
ITEM2	1.478	1.142	0.227	0.562
ITEM3	0.645	0.403	0.424	0.224
ITEM4	0.594	0.504	0.442	-0.413
ITEM5	0.000	0.000	0.986	0.056
ITEM6	0.128	0.126	0.722	-0.204
ITEM7	0.158	0.069	0.692	-0.284
ITEM8	0.593	0.483	0.443	-0.226
ITEM9	1.650	1.158	0.202	-0.452
ITEM10	0.184	0.222	0.668	-0.062
ITEM11	0.252	0.234	0.617	0.333
ITEM12	1.181	0.922	0.280	0.535

Table E.15

TEST OF TS from Tcs

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.548	12.000	101.000	0.878	0.247

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	1.026	0.715	0.313	-0.326
ITEM2	0.432	0.333	0.513	0.241
ITEM3	0.042	0.026	0.838	0.040
ITEM4	0.225	0.191	0.636	-0.135
ITEM5	2.212	1.566	0.140	0.533
ITEM6	0.504	0.496	0.479	0.222
ITEM7	0.022	0.010	0.881	0.059
ITEM8	1.335	1.089	0.250	-0.343
ITEM9	1.044	0.733	0.309	-0.444
ITEM10	0.925	1.112	0.338	0.224
ITEM11	0.185	0.172	0.668	0.348
ITEM12	0.000	0.000	0.983	0.008

Table E.16

TEST OF TO from TCS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.363	12.000	191.000	0.973	0.203

VARIABLE	UNIVARIATE F TESTS F(1, 112)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
ITEM1	0.057	0.040	0.811	0.158
ITEM2	0.410	0.317	0.523	0.304
ITEM3	1.547	0.967	0.216	-0.674
ITEM4	0.001	0.001	0.970	0.034
ITEM5	0.000	0.000	0.985	-0.171
ITEM6	0.184	0.181	0.668	0.166
ITEM7	0.241	0.105	0.624	0.310
ITEM8	0.010	0.008	0.920	0.017
ITEM9	0.048	0.033	0.828	0.176
ITEM10	0.174	0.209	0.677	0.125
ITEM11	1.532	1.424	0.218	-0.658
ITEM12	0.003	0.002	0.959	0.022

Table E.17

TEST OF S from TOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.679	12.000	101.000	0.768	0.273

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.295	0.205	0.588	-0.258
ITEM2	3.871	2.990	0.052	0.656
ITEM3	0.206	0.129	0.651	0.118
ITEM4	0.006	0.005	0.937	-0.117
ITEM5	0.355	0.251	0.552	0.204
ITEM6	0.000	0.000	0.991	-0.053
ITEM7	0.201	0.088	0.655	-0.262
ITEM8	0.193	0.157	0.662	0.027
ITEM9	0.926	0.650	0.338	0.362
ITEM10	0.152	0.183	0.697	-0.243
ITEM11	0.893	0.830	0.347	0.377
ITEM12	1.484	1.160	0.226	-0.380

TEST OF 0 from TOS

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.669	12.000	101.000	0.778	0.271

VARIABLE	UNIVARIATE F TESTS F(1, 112)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
ITEM1	0.116	0.081	0.734	0.108
ITEM2	0.032	0.025	0.857	0.043
ITEM3	0.076	0.047	0.784	-0.132
ITEM4	0.323	0.274	0.571	0.224
ITEM5	0.034	0.024	0.855	0.013
ITEM6	1.101	1.083	0.296	0.223
ITEM7	0.022	0.010	0.883	-0.133
ITEM8	1.804	1.471	0.182	-0.661
ITEM9	2.598	1.824	0.110	0.763
ITEM10	0.709	0.852	0.402	-0.101
ITEM11	0.347	0.323	0.557	-0.439
ITEM12	0.284	0.222	0.595	0.179

Table E.19.

TEST OF T from Tos

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.994	12.000	101.000	0.460	0.325

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.182	0.127	0.671	0.211
ITEM2	1.663	1.284	0.200	0.442
ITEM3	0.854	0.534	0.357	0.246
ITEM4	0.075	0.064	0.784	-0.232
ITEM5	0.660	0.467	0.418	-0.294
ITEM6	0.075	0.074	0.785	-0.215
ITEM7	2.176	0.949	0.143	-0.657
ITEM8	1.164	0.949	0.283	0.444
ITEM9	0.595	0.418	0.442	-0.220
ITEM10	0.659	0.792	0.419	0.461
ITEM11	0.174	0.162	0.677	-0.065
ITEM12	0.615	0.480	0.435	0.470

Table E.20

TEST OF XTU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.233	12.000	101.000	0.271	0.357

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	1.201	0.782	0.275	0.434
ITEM2	0.547	0.404	0.461	0.201
ITEM3	0.404	0.246	0.526	-0.255
ITEM4	3.895	3.170	0.051	0.457
ITEM5	1.380	0.923	0.243	0.368
ITEM6	0.011	0.010	0.916	-0.009
ITEM7	2.161	0.851	0.144	-0.676
ITEM8	0.753	0.563	0.387	-0.048
ITEM9	0.363	0.262	0.548	0.274
ITEM10	2.391	2.562	0.125	-0.504
ITEM11	0.002	0.002	0.967	0.002
ITEM12	0.023	0.018	0.880	0.034

Table E.21

TEST OF TU from xTU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.716	12.000	101.000	0.074	0.411

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	6.029	3.922	0.016	0.479
ITEM2	8.693	6.417	0.004	0.592
ITEM3	2.740	1.670	0.101	0.145
ITEM4	1.643	1.337	0.203	0.253
ITEM5	0.348	0.233	0.556	-0.026
ITEM6	6.986	6.472	0.009	0.490
ITEM7	0.547	0.215	0.461	-0.108
ITEM8	0.000	0.000	0.985	-0.139
ITEM9	0.045	0.032	0.833	-0.177
ITEM10	0.166	0.178	0.684	0.027
ITEM11	0.019	0.018	0.891	-0.036
ITEM12	0.801	0.613	0.373	0.146

TEST OF XT from XTU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.699	12.000	101.000	0.749	0.277

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.112	0.073	0.739	0.274
ITEM2	0.463	0.342	0.497	0.227
ITEM3	1.165	0.710	0.283	-0.352
ITEM4	0.428	0.348	0.514	-0.255
ITEM5	2.196	1.469	0.141	0.485
ITEM6	0.096	0.089	0.758	-0.097
ITEM7	0.707	0.278	0.402	0.218
ITEM8	2.194	1.640	0.141	-0.530
ITEM9	0.001	0.001	0.978	0.025
ITEM10	2.472	2.649	0.119	0.337
ITEM11	0.003	0.003	0.959	-0.031
ITEM12	0.064	0.049	0.800	-0.071

Table E. 23

TEST OF U from XCU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.768	12.000	101.000	0.682	0.289

VARIABLE	UNIVARIATE F TESTS F(1, 112)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
ITEM1	0.003	0.002	0.958	0.018
ITEM2	1.233	0.977	0.269	0.343
ITEM3	0.014	0.009	0.907	-0.135
ITEM4	0.104	0.086	0.748	-0.266
ITEM5	1.549	0.983	0.216	0.138
ITEM6	1.344	1.302	0.249	0.226
ITEM7	0.519	0.209	0.473	-0.456
ITEM8	2.297	1.625	0.132	0.586
ITEM9	0.018	0.012	0.894	-0.027
ITEM10	1.766	1.963	0.187	0.511
ITEM11	0.047	0.045	0.829	-0.012
ITEM12	0.729	0.548	0.395	0.449

Table E.24

TEST OF U from XTU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.993	12.000	101.000	0.461	0.325

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	$F(1, 112)$	MEAN SQ	P LESS THAN	1
ITEM1	0.010	0.006	0.921	0.098
ITEM2	1.663	1.228	0.200	0.387
ITEM3	0.001	0.001	0.972	-0.081
ITEM4	0.138	0.112	0.711	-0.288
ITEM5	1.395	0.933	0.240	0.115
ITEM6	1.478	1.370	0.227	0.194
ITEM7	0.863	0.340	0.355	-0.522
ITEM8	2.709	2.025	0.103	0.609
ITEM9	0.011	0.008	0.918	-0.052
ITEM10	2.114	2.264	0.149	0.522
ITEM11	0.072	0.071	0.790	-0.006
ITEM12	0.712	0.545	0.400	0.475

Table E 25

TEST OF T from XTU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.080	12.000	101.000	0.385	0.337

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
	F(1, 112)	MEAN SQ	P LESS THAN	1
ITEM1	0.206	0.134	0.651	0.222
ITEM2	1.725	1.273	0.192	0.451
ITEM3	0.857	0.522	0.356	0.220
ITEM4	0.080	0.065	0.778	-0.214
ITEM5	0.725	0.485	0.396	-0.319
ITEM6	0.076	0.071	0.783	-0.136
ITEM7	2.372	0.934	0.126	-0.612
ITEM8	1.250	0.935	0.266	0.490
ITEM9	0.557	0.401	0.457	-0.208
ITEM10	0.776	0.832	0.380	0.504
ITEM11	0.170	0.167	0.681	-0.072
ITEM12	0.651	0.498	0.422	0.500

Table E.26

TEST OF RX

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	0.674	24.000	220.000	0.874	0.285
2 THROUGH 2	0.590	11.000	110.500	0.833	0.236

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS
VARIABLE	$F(2, 121)$	MEAN SQ	P LESS THAN	1
ITEM1	1.419	1.191	0.246	0.413
ITEM2	0.285	0.276	0.752	0.018
ITEM3	2.196	1.843	0.116	0.028
ITEM4	0.222	0.226	0.801	-0.132
ITEM5	1.715	1.393	0.184	0.620
ITEM6	1.281	1.523	0.282	0.076
ITEM7	1.060	0.782	0.350	0.540
ITEM8	0.753	0.835	0.473	-0.830
ITEM9	0.063	0.059	0.939	-0.174
ITEM10	0.851	1.095	0.430	0.102
ITEM11	0.533	0.629	0.588	0.124
ITEM12	0.364	0.352	0.696	-0.192

Table E-27

TEST OF XC from XCU

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION   AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.082	12.000	101.000	0.383	0.337

VARIABLE	UNIVARIATE F TESTS F(1, 112)	MEAN SQ	P LESS THAN	STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS 1
ITEM1	2.090	1.915	0.092	-0.499
ITEM2	0.474	0.376	0.492	0.185
ITEM3	0.204	0.129	0.652	-0.015
ITEM4	0.114	0.094	0.736	0.097
ITEM5	1.841	1.169	0.178	0.346
ITEM6	0.107	0.104	0.744	-0.062
ITEM7	0.319	0.129	0.273	0.428
ITEM8	0.199	0.141	0.656	0.075
ITEM9	3.778	2.603	0.054	-0.781
ITEM10	0.542	0.002	0.463	0.166
ITEM11	1.009	0.979	0.317	0.425
ITEM12	0.288	0.216	0.593	0.048