

"ACCOUNTANTS-ELECTRONIC DATA PROCESSING AND MANAGEMENT  
SCIENCE/OPERATIONAL RESEARCH SPECIALISTS' RELATIONSHIPS:  
AN EMPIRICAL INVESTIGATION WITH SPECIAL REFERENCE TO  
BRITISH INDUSTRY"

by

Anas El-Sayed El-Sayed NOOR

A thesis submitted to the  
University of Sheffield  
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Accounting and Financial Management  
Division of Economic Studies

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Ph.D. Thesis Summary

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This research project was inspired by the researcher's perception of the discrepancy between earlier expectations and the present state of the art with regard to the scope, quality, and features of the collaborative efforts of accountants on the one hand, and Electronic Data Processing (EDP) and Management Science/Operational Research (MS/OR) specialists on the other. Such collaborative efforts are the basis for building decision making and problem solving support systems for their managements. Many unsupported assertions have been made about accountants' actual use of MS/OR models and approaches in their field of specialisation, and about the effects of computers on accountants and accounting, and this research project provided an opportunity for exploring and validating these assertions.

Based on the findings of the study it is concluded that, among other things, accountants' interaction with their EDP and MS/OR counterparts is based on limited and insufficient mutual understanding. Accountants' use and application of model-building approaches and computer-based systems have been very narrowly restricted to the structured, deterministic, and functionally constrained types of activities. Amongst the central causes that impede the desired level of greater mutual understanding are (1) the lack of necessary background orientation (of the three specialist groups - EDP, MS/OR, and accounting) of each other's basic practices and principles and the wider implications of their respective systems, (2) the insufficient appreciation of the wider implications of the synergistic effects of their interdisciplinary contributions, and (3) the apparent incompatibilities amongst respective functional procedures, conventions, practices, and time horizons. Finally, directions for further research have been outlined.



# Volume Two

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APPENDIX A

APPENDIX TO PART II: AN EXTENSIVE EMPIRICAL SEARCH INTO  
ACCOUNTANTS-D.P. AND MS/OR SPECIALISTS' INTERACTION

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- A, # 1. The survey population.
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APPENDIX A. 1.

THE SURVEY POPULATION



APPENDIX A, # 1. THE SURVEY POPULATION

Due to the fact that this research project is about communication patterns and working relationships between accountants on the one hand, and E.D.P. and MS/OR specialists on the other in British industrial organizations, it is evident that the survey population embraces all those accounting, E.D.P., and MS/OR specialists who would be the subject of the sought interaction.

Operationalization of this conceptual definition of the survey population necessitated taking into account certain practical considerations, the chief amongst them being:

First: limiting the size of organizations that were to participate in the survey to the larger-sized organizations. These organizations were thought by the researcher to be able to afford the resources needed to acquire manpower and machine E.D.P. capabilities. Larger organizations are more likely to be willing to invest in such capabilities than the medium - or smaller - sized ones.

Such belief was thought by the researcher to be even more true in the case of MS/OR applications in the sense that larger organizations would probably be more inclined to use MS/OR concepts and methodology.

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\* It is worth emphasizing that the researcher has frequently used the generic term "specialists" to contain accounting, E.D.P., and MS/OR people. This is based on the assumption that each of these groups specializes in its own area of functional responsibility within their organizations. In the course of composing the text of this thesis the researcher has frequently used the phrase "E.D.P. and MS/OR specialists". This is merely a reflection of a language frequently used amongst several interviewees.



This is not to imply, of course, that the medium - and smaller - sized organizations do not - or cannot afford to - use the E.D.P. and MS/OR resources. Computer services bureaux are offering various E.D.P. services such as data preparation, programming and systems analysis. Computer time is being offered on "time-sharing" basis. Also, management consultants offer a wide range of MS/OR services.

The point being made here is that the study is more concerned with the interface of accountants, E.D.P. specialists and MS/OR specialists in an organizational context. That is, the working relationships and communication patterns between the three functional groups within the same organization are the main objects of study in the present investigation.

**Second:** The "Times 1000", the annual ranking of British industrial organizations published by the Times Newspapers Limited, was used to specify the larger-sized organizations. The researcher used the 1972-73 issue to specify approximately the scope of the empirical investigation in British industry. As a "rule of thumb" the researcher has specified the target population as those organizations ranked amongst the top third of the leading U.K. industrial companies and the U.K. nationalized enterprises.

**Third:** focussing the study on business organizations and, consequently, excluding military and governmental departments and educational institutes such as universities, polytechnics, and schools further education. The dichotomy of "industrial" versus "non industrial", was one of the main criteria used by the researcher to specify the boundaries of the target population of this research.

The outline given above of the lower and upper bounds of the target population does not preclude the fact that the conclusions and implications of this survey might be of some relevance to the interaction of accountants, E.D.P. and MS/OR specialists in organizations outside these boundaries.

However, the detailed discussion of the nature, scope, sampling methodology adopted and other design considerations for each of these functional groups is presented in the following appendix (Appendix A, #2).

APPENDIX A, # 2.

THE SURVEY SAMPLES

APPENDIX A, 2.# THE SURVEY SAMPLES

The objective of this appendix is to present in some detail the nature, scope, considerations, and steps followed in sampling each of the functional groups. Who are the D.P. and MS/OR specialists surveyed? How did the researcher tackle the problems of surveying accountants and why did he focus on the I.C.M.A. category of accountants in this phase of the empirical investigation? Why did the researcher include management consultants in this exploratory stage of the project? These and other relevant questions are answered in this appendix. It is sub-divided into four appendices as follows:

- Appendix A, # 2.1. The D.P. specialists' sample.
- Appendix A, # 2.2. The MS/OR specialists' sample.
- Appendix A, # 2.3. The I.C.M.A. sample.
- Appendix A, # 2.4. The Management Consultants' sample.



APPENDIX A, # 2.1. THE D.P. SPECIALISTS' SAMPLE

Subjects of the survey were D.P. managers of computer installations in the relatively large British industrial organizations. The survey sample was compiled as the outcome of the intersection of D.P. managers' names listed in the 'Computer Users Yearbook - 1972'<sup>\*</sup> and "The Times 1000".

Selection was made on the basis of the type of computer applications and the presence of a 'name' to be contacted. D.P. service bureaux and computers for scientific exploration or technical experimentation were excluded. The final number of respondents was 230 D.P. managers.

An absolute response rate of 44% was achieved. If those persons who did not participate in the study due to reasons that have nothing to do with the study or the mailed-questionnaire, are excluded, the response rate rises to 49%. Either of these two rates indicates a satisfactory response from D.P. managers.

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\* Obtaining a list of members of the British Computer Society (B.C.S.) proved to be difficult since there is a Council ruling that the B.C.S. list of members may not be made available to any outside body. In view of this, the approach adopted by the researcher was found to be a possible alternative. It was thought that D.P. managers would have an overall view about their installations from the following viewpoints: the types of computer applications being carried out; communication patterns and working relationships between accountants and E.D.P. specialists in their organizations; the extent of accountants' involvement in the E.D.P. field; and other related aspects that were of particular interest to the researcher at this early stage of carrying out the research project.

Amongst the reasons given for not completing the form were:

(a typical reply was) " ... we receive a large number of requests and we have found that a great deal of time has been devoted by our staff to answering the questions raised. It has now reached a point where it is necessary for us to discontinue responding to such requests and we must, therefore, decline your invitation."

The questionnaire was sent at a time which some respondents considered to be inconvenient to them due to: end-of-financial-year work overload; introduction of V.A.T.; conversion to a new machine, acquisition of new equipment; changes in personnel; the person contacted did not believe that "university research" would help him in his job; that the exercise was for the benefit of the researcher, but not for him.

Other reasons were: the length of time needed by the respondent to complete the questionnaire exceeded the researcher's expectations; the confidentiality of the methods applied; the inclusion of the word 'qualification' in the section containing background information about the respondent.

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On the other hand, the expectations with regard to the response rate was not encouraging due to the fact that most computer managers were (and have been) overloaded by a wide variety of data collection approaches. There were (and have been) indications that E.D.P. specialists would not reply to questionnaires. The Pilot study contributed to the improvement of the instrument used (Appendix A, 4.1.) and to the clarification of the factors that affect E.D.P. managers' decision to participate in the survey. Several revisions of the draft document used reduced its size from about fifty pages to a fourteen-page questionnaire.



THE MS/OR SPECIALISTS' SAMPLEA. # 2.2.1. Subjects

Subjects of this part of the study were MS/OR specialists engaged in the relatively large British industrial organizations. They were selected from the 'Operational Research Society List of Membership'. Selection was restricted to relatively large British industrial enterprises and was guided by the following criteria: (i) preference was given to members whose job titles explicitly define their work as MS/OR (though this was no guarantee that the person would be doing MS/OR type of work) and members holding more senior jobs (MS/OR managers, project managers, project leaders, and so on); (ii) the size of MS/OR function and/or groups was an important determining factor of the number of subjects to be contacted. Also, an arbitrary rule was laid down that no more than three subjects were to be contacted from one location. The final number was 251 MS/OR specialists. The study had drawn a 'surprisingly good' rate of response of 70 per cent.

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\* 'Undelivered' questionnaires are excluded from this final figure. Subsequently all computations to follow are not based on any reference to such undelivered correspondence.

\*\* An arbitrary classification of this sample might take the following distribution

(a) those who 'positively' responded to the investigation to take part in this study - positive in the sense that they 'considered' the document and described their position in relation to and scope of interaction with accounting functions in their organizations. They are as follows:

8 respondents indicated that they had no MS/OR function or group (either because their companies had no such function or the company had 'disbanded' their MS/OR functions. Since this study is not so much concerned with the pros and cons for using MS/OR approach, these cases were not pursued any further.

indicated

39 respondents/ that they had not enough experience to enable them to discuss working relationships and communication patterns with accountants, either because of their (MS/OR) recent employment or joining their MS/OR group or engagement in non-MS/OR type of work or their little - if any - contact with accountants in their organisations.

137 respondents completely examined their attitude and working relationships with accountants in their organizations.

Bourton and Rivett (1972, pp. 117-123) warned that surveys

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(b) those who 'passively' or 'negatively' reacted to the document. Although the vast majority of this category did not reply at all - that is 'passively' reacted to the questionnaire, an extremely small minority reacted 'negatively' - that is did not reply in a constructive way. The total number in this category is 67 respondents. Some of the reasons that might have accounted for this rate of non-response are:

(i) Some respondents had considered their particular organizations as the 'unit of the analysis' of the study. Consequently, the manager had answered the document on behalf of their organizations. A typical example in this respect is described in the following quotation.

"You recently reminded several people in ....  
(this organization) about completing the questionnaire on MS/OR and Accounting. I replied on behalf of our organization, as it seemed pointless giving you the same information several times".

Most of the questions contained in the document were of the attitudinal type which were based on the explicit assumption of different opinions for different people, unless of course, the particular MS/OR function has unified view regarding all the issues raised in the questionnaire.

- (ii) It is probable that some of those contacted were not engaged in carrying out MS/OR type of work. This likelihood increases in view of the fact that 44 respondents (about a third of those who did not participate) had no explicit job titled designations indicating their engagement in MS/OR.
- (iii) One respondent felt strongly about the length of the document and the fact that it was sent to him on his business address which, understandably, was not the most convenient way of contacting him.
- (iv) Some respondents explicitly indicated that they had no wish to participate for varied reasons, examples of which are:

"I have had a look at the questionnaire and feel that it is more applicable to a single installation";

"Although we sympathise with the objective of your research project we have found that such surveys are an increasing demand on our time and do not wish to be involved in any more at present".

(v) For various reasons it was the policy of some companies not to take part in any such studies. A few companies were unsure about the confidentiality of the research.



based on the membership of the OR Society may be misleading as the majority of OR scientists do not belong to the Society. Nevertheless, the researcher does not think that this would jeopardise findings of the present study for two reasons:

- (i) the study is more concerned with MS/OR specialists' <sup>\*\*\*</sup> working relationships with accountants than drawing a profile of characteristics of MS/OR specialists;
- (ii) there is no indication that the pattern of MS/OR specialists' interaction with their accounting counterparts and factors contributing to 'mutual understanding' and other related aspects of the relationships are dependent on whether or not MS/OR specialists are members of the Operational Research Society.

Evidently, inclusion of more MS/OR specialists would increase the number of participants which might have added more viewpoints and varied experiences. But, since there was no convenient way of approaching the MS/OR specialists who did not belong to the Operational Research Society, it was felt that this would not materially affect the findings of the research.

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\*\*\* This is not to say that MS/OR specialists' characteristics are irrelevant to the present analysis. In fact, such characteristics are discussed in various places in the context of the research, but only in so far as the researcher visualises their relevance to the subject matter under discussion.

A, # 2.2.2. Type of industrial classification

Due to the fact that this phase of carrying out the present survey was intended to explore individuals' opinions, views and attitudes toward accountants and accounting functions in a sample of British industrial organizations, the need to restrict organizations to one representative each did not arise. The design of this phase allowed each organization (except in special circumstances) to have between one and three replies within the selected sample. Consequently, the distribution of respondents' organizational industrial classification does not resemble the organizational representativeness of the participating organizations. In other words, some industries may be under-represented. This was not, in fact, a short-coming in the initial design of the sampling procedure, but it was imposed upon the study due to uncontrollable factors (such as organizational policies regarding participation in research projects and change of employment or going on assignments abroad).

However, the effect of the above-mentioned constraint is minimized in view of the following observations:

- (i) the rate of response this phase of the study was able to achieve was extremely high - less than one-third of subjects contacted did not participate.
- (ii) very few organizations declined the invitation to take part in this exercise.
- (iii) design of the sample and selection - and exclusion - of specific types of industries was guided in part by the available empirical evidence.\*

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\* Mercer (1968, pp.371-376) analysed the membership of the Operational Research Society at the end of 1967, and indicated that:

- (i) the most significant general conclusion is that a large proportion of those organizations which use operational research only employ a small number of members. It is not surprising to find that very many organizations do not appear to be strongly committed to operational research (p.376).



(ii) it could be said that operational research has only penetrated 241 organizations and the two outstanding industries - committed to operational research - are metal and chemical manufacturers (p.373).

Four other categories in which operational research appears to have made an impact are mining and quarrying; food, drink and tobacco; paper, printing and publishing; transport and communication. Also, operational research appears to have made little permanent contribution in agriculture, forestry, fishing, leather, leather goods, fur, clothing and footwear, timber and furniture, and shipbuilding. Insurance, banking and finance do not appear to take operational research seriously (p.373-374).

The non-academic organisations employing more than 30 members of the OR Society in Britain at the end of 1967 were Imperial Chemical Industries, the National Coal Board, United Steel (now British Steel Corporation), English Electric, British Iron and Steel Research Association, Central Electricity Generating Board, Metra, Unilever, and Inbucon (pp. 375-376).

Naturally, the increasing complexity of problems facing organizations in the seventies may have affected the size and distribution of the membership of Operational Research Society as well as the characteristics of demand and supply of OR type expertise.

APPENDIX A, # 2.3. THE ICMA SAMPLE

The design of the sample of accountants was a difficult task. The main reason for this is the fact that there is no clear definition of the accounting community in the U.K. that would be suitable for the purposes of the present research. Records of the professional bodies do not contain readily available information that could be used for random sampling. For example, the records of the Institute of Chartered Accountants in England and Wales do not include any description of, or background information about, its membership (job titles of those members working in industrial organizations is an obvious example in this case). There were no clear indications about the size of the accounting target population that were directly relevant to the area of research.

Besides, even if the resources were available to the research, the researcher excluded the possibility of contacting some members of the accountancy profession at their home addresses in the hope that they might have some views on communication patterns and working relationships with E.D.P. and MS/OR specialists.

On top of that, at the time of finalizing the decision on the accountants' sample, the Institute of Chartered Accountants in England and Wales had sent the Long Range Enquiry questionnaire before Christmas 1972 to 4,000 members. This had to be taken into consideration in selecting an appropriate sample to survey accountants.

In view of the above circumstances, the researcher concentrated on the 1969-70 ICMA list of membership available at the time, although it was obvious that it was considerably out of date.

Pilot studies indicated the possible usefulness of such a strategy, particularly:

the majority of the ICMA members are more likely to be involved in one way or the other in areas related to MS/OR and E.D.P;



some ICMA members are holding membership of other professional accountancy bodies;  
the ICMA list of membership contained - in most cases - job titles of members and their business addresses which was a convenient way of drawing a random sample.

Accordingly, the researcher listed all ICMA members working in organizations falling within the top third of British industry. This was carried out subject to a number of constraints. Chief amongst them are:

- (a) not more than three members should be selected from any one organization;
- (b) excluding those members who are not directly involved in areas thought by the researcher to be relevant, e.g. personnel officers.

APPENDIX A, # 2.4. THE MANAGEMENT CONSULTANTS' SAMPLE

The main reason for the inclusion of management consultants in the sampling strategy of the study was the researcher's belief that due to their position in industry, some management consultants might have opinions, impressions, or experiences with regard to accountants' involvement in the MS/OR and E.D.P. areas and the subsequent impact of such recent developments on their way of carrying out their responsibilities.

Contact was made with top managements of firms operating<sup>in</sup> the U.K. and employing 26-50, 50-100, or 100+ active consultants (as indicated in the 'Register of Management Consultants'). Consultants participated in the study were - in the majority of cases - at the "senior" level in their firms. The majority of interviewees were from the largest (national and international) consultancy firms engaged in U.K. operations. They were in most cases from firms that employ 100+ active consultants. Many of the smaller-sized firms declined the invitation to take part in the survey due to a variety of reasons (such as: accountancy occupies a relatively minor position in their activities; the high degree of specialization in a specific field indirectly relevant to the area of the researcher; and the smaller scale of D.P. and/or MS/OR type of offered services).

The interview tables used consisted of a set of open questions designed to explore the various dimensions of the interface of accountants and E.D.P. and MS/OR specialists.\* The document was divided into two

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\* Amongst the issues raised in relation to accountants E.D.P. specialists' interaction in the client organizations were the following:

- accountants' involvement in E.D.P. areas;
- control of E.D.P. resources in organizations;
- present and future accounting - E.D.P. relationships;
- problem areas and points of strength in relation to the development and implementation of computer-based information systems.

Also, the following were amongst the issues raised in relation to the client organization's accountants - MS/OR specialists' relationships:

- accountants' involvement in MS/OR areas;

main parts - to be discussed according to the interviewee's area of interest - MS/OR or E.D.P. This proved to be useful in limiting the discussion to the specific area of the interviewee's experiences.

The length of time for each interviewee to complete each part varied from 35 minutes to considerably more than that in several cases.

The outcome of this experience is reflected in excerpts from the interviewees' opinions and views. They were found by the researcher to be useful evidence in supporting the discussions contained in various chapters in part II of this thesis.

- 
- accountants' interest, willingness, enthusiasm, and ability in defining potential MS/OR applications;
  - characteristics of MS/OR groups or functions;
  - present and potential accounting - MS/OR relationships;
  - problem areas and points of strength in relation to the development of organizationally effective accounting - MS/OR relationships.

APPENDIX A, # 3.

SUMMARY STATISTICS AND RAW DATA

APPENDIX A, # 3.1.

SUMMARY STATISTICS AND RAW DATA OF THE  
E.D.P. SPECIALISTS' SAMPLE



Table 1

Variable: Title of Job

Title <sup>+</sup>	Absolute Frequency	Relative Frequency %
Data Processing Manager	37	36.6
Assistant D.P. Manager	3	3.0
Management Services Manager	4	4.0
Management Information Executive	1	1.0
Computer Services Manager	11	10.9
Computer Controller	11	10.9
Computer & Systems Director	5	5.0
Computing & Accounting Manager	1	1.0
Computer & Systems Application Manager	3	3.0
Computer Projects Coordinator	1	1.0
Computer Operations Manager	3	3.0
Systems & Programming Manager	5	5.0
D.P. Dev. Group Leader	5	5.0
Chief Executive	2	2.0
Financial Controller	1	1.0
Chief Accountant	4	4.0
Other titles		

+In compiling this list, titles which appeared similar to each other are represented by choosing only one of them. In some situations, a very minor generality is added to the title in order not to make it identifiable.

Table 2

Variable: Age

Code	Category Label	Absolute Frequency	Relative Frequency %
1	Under 25 years	2	2.0
2	26-30 years	7	6.9
3	31-35 years	17	16.8
4	36-40 years	21	20.8
5	41-45 years	19	18.8
6	46-50 years	17	16.8
7	Over 50 years	18	17.8
	TOTAL	101	100.0

Valid cases = 101

Missing cases = 0



Table 3

Variable: Length of experience

Code	Category Label	Absolute Frequency	Relative Frequency %
1	Less than 3 years	2	2.0
2	4-7 years	16	15.8
3	8-11 years	33	32.7
4	12-15 years	21	20.8
5	Over 15 years	29	28.7
	TOTAL	101	100.0

Valid cases = 101

Missing cases = 0

Table 4

Variable: With or without accounting qualification and/or experience

	Absolute Frequency	Relative Frequency %
Without accounting qualification and/or experience	48	47.5
With accounting qualification and/or experience	53	52.5
	101	100.0

Table 5

Variable: Educational background

Code		Absolute Frequency	Relative Frequency %
1	Maths-Stats	13	12.9
2	Electrical Eng	5	5.0
3	Mechanical Eng	3	3.0
4	Other Engineering	5	5.0
5	Pure Science	6	5.9
6	Accounting	44	43.6
7	Economics	4	4.0
8	Business Studies	9	8.9
10	Business Administration	1	1.0
11	Arts (music, languages etc)	3	3.0
12	Production	1	1.0
13	Computer Manufacturing	1	1.0
14	Others	5	5.0
0	Missing	1	1.0
	TOTAL	101	100.0

Valid cases = 100

Missing cases = 1

Table 6

Variable: Type of Industrial Classification

Category Label	Absolute Frequency	Relative Frequency %
Coal, Gas, Electricity	12	11.9
Industrial - Miscellaneous	12	11.9
Engineering (Metal & Electrical, and radio)	29	28.7
Food Manufacturing	13	12.9
Oil	3	3.0
Steels	4	4.0
Machine Tools, Motors and Cycles and components	6	5.9
Transport and Communication	4	4.0
Beers, Wines, spirits and entertainment & catering	3	3.0
Chemicals, Plastics, etc.	4	4.0
Drapery and Stores, Textiles	5	5.0
Tobacco	2	2.0
Others (Shipping, Building, Timber & Roads; Newspapers Publishers, Paper printing and advertising, and not elsewhere specified)	4	4.0
TOTAL	101	100.0

Table 7

Variable: Kind of available equipment

Kind of Equipment Available	Absolute Frequency	Relative Frequency %
Own 'Installed-in-house' Computer and other E.D.P. facilities, and no use of computers in service bureaux.	69	68.3
Own 'Installed-in-house' Computer and other E.D.P. Facilities, and we make use of computers in service bureaux.	29	28.7
No 'Installed-in-house' Computer is available, and we depend mainly on the use of computers in service bureaux, with no intention of installing 'in-house' Computer in the following three years.	2	2.0
Use of Group Computer	1	1.0
	101	100.0

Table 8

Variable: Characteristics of the equipment's central processor

Category	Absolute Frequency	Adjusted Frequency %
Large-sized	33	33.7
Medium-sized	47	48.0
Mix of large and medium sized	4	4.1
Small-sized	13	13.3
Mix of all types	1	1.0
Inapplicable	3	Missing
	<u>101</u>	<u>100.0</u>

Valid cases = 98

Missing cases = 3

Table 9

Variable: Authority responsible for, and the actual location of E.D.P. activities

E.D.P. Activities are	Absolute Frequency	Adjusted Relative Frequency %
In the accounting department under the responsibility of the finance director, controller, or the chief accountant.	17	17.7
Separate from the accounting department, but under the responsibility of the finance director or the controller.	25	26.0
In an independent department under the responsibility of non-accounting executive, with organisational level:		
equal to the accounting department	27	28.1
higher than the accounting dept.	14	14.6
lower than the accounting dept.	-	-
Under the responsibility of the managing director of the firm (or one of the managing directors)	9	9.3
A separate group Company	2	2.1
Other forms of location such as: sub-committee, too many to specify, etc.	2	2.1
No answer: inapplicable or missing	5	Missing



Table 10

Variable: Percentage of Accountants in D.P. Management

Value	Value Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	0%	32	31.7	31.7	31.7
2	1 to 9.99%	1	1.0	1.0	32.7
3	10 to 19.99%	9	8.9	8.9	41.6
4	20 to 29.99%	6	5.9	5.9	47.5
5	30 to 39.99%	7	6.9	6.9	54.5
6	40 to 49.99%	5	5.0	5.0	59.4
7	50 to 59.99%	10	9.9	9.9	69.3
8	60 to 69.99%	5	5.0	5.0	74.3
9	70 to 79.99%	2	2.0	2.0	76.2
10	80 to 89.99%	2	2.0	2.0	78.2
11	90 to 100%	22	21.8	21.8	100.0
	TOTAL	101	100.0	100.0	100.0
<b>Statistics</b>					
Mean	5.347	Standard Error	0.387	Median	4.857
Mode	1.000	Standard Deviation	3.892		

Valid Observations - 101

Missing Observations - 0

Table 11

Variable: Percentage of Accountants in Systems Analysis

Value	Value Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	0%	39	38.6	38.6	38.6
2	1 to 9.99%	3	3.0	3.0	41.6
3	10 to 19.99%	11	10.9	10.9	52.5
4	20 to 29.99%	20	19.8	19.8	72.3
5	30 to 39.99%	7	6.9	6.9	79.2
6	40 to 49.99%	3	3.0	3.0	82.2
7	50 to 59.99%	8	7.9	7.9	90.1
8	60 to 69.99%	4	4.0	4.0	94.1
10	80 to 89.99%	1	1.0	1.0	95.0
11	90 to 100%	5	5.0	5.0	100.0
	TOTAL	101	100.0	100.0	100.0
<b>Statistics</b>					
Mean	3.604	Standard Error	0.280	Median	3.273
Mode	1.000	Standard Deviation	2.818		

Valid Observations - 101

Missing Observations - 0



Table 12

Variable: Percentage of Accountants in Programming

Value	Value Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	0%	69	68.3	68.3	68.3
2	1 to 9.99%	11	10.9	10.9	79.2
3	10 to 19.99%	6	5.9	5.9	85.1
4	20 to 29.99%	6	5.9	5.9	91.1
5	30 to 39.99%	5	5.0	5.0	96.0
6	40 to 49.99%	1	1.0	1.0	97.0
7	50 to 59.99%	1	1.0	1.0	98.0
8	60 to 69.99%	1	1.0	1.0	99.0
11	90 to 100%	1	1.0	1.0	100.0
TOTAL		101	100.0	100.0	100.0
Statistics					
Mean	1.881	Standard Error	0.173	Median	0.000
Mode	1.000	Standard Deviation	1.734	Variance	3.006

Valid Observations - 101

Missing Observations - 0

Table 13

Variable: Percentage of Accountants in Hardware Operations and Management

Value	Value Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	0%	78	77.2	77.2	77.2
2	1 to 9.99%	5	5.0	5.0	82.2
3	10 to 19.99%	10	9.9	9.9	92.1
4	20 to 29.99%	4	4.0	4.0	96.0
5	30 to 39.99%	2	2.0	2.0	98.0
7	50 to 59.99%	1	1.0	1.0	99.0
11	90 to 100%	1	1.0	1.0	100.0
TOTAL		101	100.0	100.0	100.0
Statistics					
Mean	1.604	Standard Error	0.145	Median	0.000
Mode	1.000	Standard Deviation	1.457		

Valid Observations - 101

Missing Observations - 0

Table 14

Variable: Percentage of Accountants in Others

Value	Value Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	0%	77	76.2	76.2	76.2
2	1 to 9.99%	12	11.9	11.9	88.1
3	10 to 19.99%	2	2.0	2.0	90.1
4	20 to 29.99%	6	5.9	5.9	96.0
5	30 to 39.99%	3	3.0	3.0	99.0
8	60 to 69.99%	1	1.0	1.0	100.0
TOTAL		101	100.0	100.0	100.0
Statistics					
Mean	1.525	Standard Error	0.119	Median	0.000
Mode	1.000	Standard Deviation	1.197		

Valid Observations - 101

Missing Observations - 0

Table 15

Variable: Percentage of Accountants in Total Staff Numbers

Value	Value Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	0%	30	29.7	29.7	29.7
2	1 to 9.99%	40	39.6	39.6	69.3
3	10 to 19.99%	17	16.8	16.8	86.1
4	20 to 29.99%	8	7.9	7.9	94.1
5	30 to 39.99%	2	2.0	2.0	96.0
6	40 to 49.99%	1	1.0	1.0	97.0
8	60 to 69.99%	1	1.0	1.0	98.0
9	70 to 79.99%	1	1.0	1.0	99.0
11	90 to 100%	1	1.0	1.0	100.0
TOTAL		101	100.0	100.0	100.0
Statistics					
Mean	2.347	Standard Error	0.163	Median	2.012
Mode	2.000	Standard Deviation	1.634		

Valid Observations - 101

Missing Observations - 0

Table 16

Variable: Organization's Experience in the Data Processing Field According to the Major Areas of Application: Commercial, Scientific, and Technical

Years of Experience	Type of Experience	Commercial		Scientific		Technical	
		Absolute Frequency	Relative Frequency %	Absolute Frequency	Relative Frequency %	Absolute Frequency	Relative Frequency %
Less than 3 years		4	4.0	7	6.9	7	6.9
4-7 years		28	27.7	12	11.9	21	20.8
8-11 years		26	25.7	8	7.9	7	6.9
12-15 years		20	19.8	9	8.9	6	5.9
Over 15 years		23	22.8	9	8.9	9	8.9
Inapplicable		-	-	56	55.4	51	50.5

Table 17

Variable: Past experience in communicating with accountants concerning computerization of accounting and non-accounting activities

Category	Absolute Frequency	Relative Frequency %
Yes	46	95.8
No	2	4.2

Table 18

Variable: Extent to which accountants are helpful in explaining the technical aspects of the accounting discipline

Code	Category Label	Absolute Frequency	Adjusted Frequency %
1	Not helpful at all	4	8.9
2	A little helpful	5	11.1
3	Fairly helpful	20	44.4
4	Helpful	13	28.9
5	Very helpful	3	6.7
0	Inapplicable	2	Missing
7	Missing	1	Missing
		48	100.0



Table 19  
Variable: Assisting accountants in computerization

Frequency* Category of problem	1. Never		2. Rarely		3. Occasionally		4. Often		Usually		Inapplicable	
	Absolute Frequency	Relative Frequency %	Absolute Frequency	Relative Frequency %	Absolute Frequency	Relative Frequency %	Absolute Frequency	Relative Frequency %	Absolute Frequency	Relative Frequency %	Absolute Frequency	Relative Frequency %
1. Preparing investment projects	20	41.7	5	10.4	13	27.1	4	8.3	1	2.1	5	10.4
2. Preparing and revising usual budgets	7	14.6	3	6.2	13	27.1	11	22.9	10	20.8	4	8.3
3. Feasibility studies	-	-	-	-	2	4.2	-	-	-	-	46	95.8
4. Forecasting, financial models, planning	-	-	-	-	2	4.2	2	4.2	1	2.1	43	89.6
5. Various accounting systems, design, etc.	-	-	-	-	1	2.1	-	-	2	4.2	45	93.8
6. Analysis of customer profitability	-	-	-	-	-	-	-	-	1	2.1	47	97.9
7. Other special studies	-	-	-	-	7	14.6	1	2.1	2	4.2	45	93.8
8. Preparing overhead rates	24	50.0	5	10.4	7	14.6	3	6.2	5	10.4	4	8.3
9. Special costs analysis reports	7	14.6	3	6.2	11	22.9	20	41.7	4	8.9	3	6.2
10. Analysing standard cost variances	20	41.7	3	6.2	2	4.2	12	25.0	8	16.7	3	6.2
11. Stock and work-in-progress evaluation	6	16.7	-	-	4	8.3	12	25.0	22	45.8	2	4.2
12. Stock control	12	25.0	1	2.1	4	8.3	11	22.9	17	35.4	3	6.2
13. Analysis and control of distribution costs	23	47.9	5	10.4	5	10.4	5	10.4	5	10.4	4	8.3
14. Pricing	18	37.5	4	8.3	3	6.2	6	12.5	9	18.7	3	6.2
15. Break-even analysis	24	50.0	7	14.6	7	14.6	1	2.1	3	6.2	6	12.5
16. Analysis of cash-in-flow and disbursements	21	43.7	1	2.1	10	20.8	5	10.4	7	14.6	4	8.3
17. Others	2	4.2	2	4.2	1	2.1	-	-	5	10.4	33	79.2

Items added by respondents to the original list provided in the original questionnaire  
 Assistance offered by the respondent or - as clearly stated in some cases - by one of his D.P. assistant, or colleagues  
 Include situations such as: the item is not directly related to accountants, the type of analysis is not considered for computerization

Table 20

Appendix A, # 3.1.

Variable: Pressure experienced from accountants (Pressure in terms of contesting and taking any opportunity to take over some of the D.P. specialists' job).

	Category	Absolute Frequency	Relative Frequency %	Adjusted Relative Frequency %
1.	No	9	18.7	20.9
2.	Yes	21	43.7	48.8
3.	Pressure to take as many mundane jobs on the computer as possible (i.e. the reverse of the given definition is true)	2	4.2	4.7
4.	Finance directors concerns over systems viability and reliability	1	2.1	2.3
5.	Pressure to make sure that the work is done correctly and on time	2	4.2	4.7
6.	To closely monitor areas of developments	1	2.1	2.3
7.	Desire to ensure that computer systems are designed and developed in accordance with the wishes of the business	1	2.1	2.3
8.	To do the job more economically on the computer	1	2.1	2.3
9.	Financial overseeing from finance director and budgetary matters	1	2.2	2.3
10.	Only at difficult times	1	2.2	2.3
11.	Meaningless in our context	2	4.2	4.7
12.	It is difficult to draw the lines	1	2.1	2.3
00.	Inapplicable	5	10.4	Missing
	Total	<u>48</u>		

\* One respondent found the terminology used (pressure, contesting, and taking over) vague.



Table 21

Variable: Amount and sources of Pressure (n = 48)

	Amount of Pressure												
	A great deal		A fair amount		Some		Little		None		Inapplicable		
	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	
Total responsibility of the whole work	The finance director	14	8.3	5	10.4	4	8.3	2	4.2	7	14.6	26	54.2
	The Chief Accountant	1	2.1	3	6.2	5	10.4	3	6.2	10	20.8	26	54.2
	Accounting Dept. Individuals	-	-	1	2.1	4	8.3	6	12.5	11	22.9	26	54.2
ALL Computer activities related to the accounting department	The finance director	5	10.4	5	10.4	3	6.2	3	6.2	6	12.5	26	54.2
	The chief accountant	3	6.2	3	6.2	2	4.2	4	8.3	10	20.8	26	54.2
	Accounting Dept. Individuals	-	-	2	4.2	6	12.5	4	8.3	10	20.8	26	54.2
SOME computer activities related to the accounting department	The finance director	5	10.4	6	12.5	2	4.2	3	6.2	6	12.5	26	54.2
	The chief accountant	3	6.2	3	6.2	3	6.2	6	12.5	7	14.6	26	54.2
	Accounting Dept. Individuals	-	-	4	8.3	6	12.5	6	12.5	6	12.5	26	54.2
Other activities	The finance director	4	8.3	-	-	-	-	-	-	4	8.3	40	83.3
	The chief accountant	-	-	1	2.1	1	2.1	-	-	6	12.5	40	83.3
	Accounting Dept. Individuals	-	-	-	-	1	2.1	2	4.2	5	10.4	40	83.3

Maximum amounts of pressure are recorded in this table, i.e. if a respondent indicated that he experiences pressure from the finance director on: 1. total responsibility of the whole work; 2. all computer activities related to the accounting department; and 3. on some computer activities related to the computer department. In this situation, only the first category which is 'on total responsibility of the whole work' - is recorded. Eventually, this category excludes the other lower categories.

Table 22

Variable: Causes of Pressure

Causes		Emphasised
1.	Contention for scarce resources	2
2.	Power game and personal motivations	5
3.	Management misunderstanding	2
4.	Lack of accountants understanding of nature of computing, the technical aspects and limitations of hardware	7
5.	Location in the finance department	4
6.	Lack of clarity of organisational roles	4
7.	Accountants narrow approach	3
8.	Others	6

Table 23

Variable: Effect of pressure on morale

Code	Category Label	Absolute Frequency	Adjusted Frequency %
1	Very bad effect	3	10.7
2	Bad effect	7	25.0
3	No effect at all	11	39.3
4	Good effect	7	25.0
0	Inapplicable	17	Missing
7	No particular effect	3	Missing
	TOTAL	48	100.0

Valid Cases = 28

Missing Cases = 20

Table 24

Variable: Reaction to pressure

Code	Category Label	Absolute Frequency	Adjusted Frequency %
1	Very much dislike it	4	13.8
2	Dislike it	9	31.0
3	Pay no attention to	4	13.8
4	Welcome it	10	34.5
5	Very much welcome it	2	6.9
0	Inapplicable	17	Missing
7	No particular reaction	2	Missing
	TOTAL	48	100.0

Valid Cases = 29

Missing Cases = 19



Table 25

Item: Accountants' willingness to provide any kind of help to D.P. personnel.

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly disagree	2	4.2	4.3	4.3
2	Disagree	6	12.5	13.0	17.4
3	Undecided	4	8.3	8.7	26.1
4	Agree	27	56.2	58.7	84.8
5	Strongly agree	7	14.6	15.2	100.0
0	Inapplicable	2	4.2	Missing	100.0
TOTAL		48	100.0	100.0	
Statistics					
Mean	3.674	Standard Error	0.151	Median	3.907
Mode	4.000	Standard Deviation	1.023		

Valid Cases = 46

Missing Cases = 2

Table 26

Item: Accountants are doing their best to learn more and more about D.P. related to their job

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
2	Disagree	16	33.3	34.8	34.8
3	Undecided	7	14.6	15.2	50.0
4	Agree	21	43.7	45.7	95.7
5	Strongly agree	2	4.2	4.3	100.0
0	Inapplicable	2	4.2	Missing	100.0
TOTAL		48	100.0	100.0	
Statistics					
Mean	3.196	Standard Error	0.143	Median	3.500
Mode	4.000	Standard Deviation	0.970		

Valid Cases = 46

Missing Cases = 2

Table 27

Item: Senior accounting executives are contesting for control over D.P.

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly agree	3	6.2	6.5	6.5
2	Agree	6	12.5	13.0	19.6
3	Undecided	4	8.3	8.7	28.3
4	Disagree	26	54.2	56.5	84.8
5	Strongly disagree	7	14.6	15.2	100.0
0	Inapplicable	2	4.2	Missing	
	TOTAL	48	100.0	100.0	
Statistics					
Mean	3.609	Standard Error	0.161	Median	3.885
Mode	4.000	Standard Deviation	1.093		

Valid Cases = 46

Missing Cases = 2

Table 28

Item: D.P. specialists' dislike working with accountants

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
2	Agree	4	8.3	8.7	8.7
3	Undecided	8	16.7	17.4	26.1
4	Disagree	23	47.9	50.0	76.1
5	Strongly disagree	11	22.9	23.9	100.0
0	Inapplicable	2	4.2	Missing	100.0
	TOTAL	48	100.0	100.0	
Statistics					
Mean	3.891	Standard Error	0.128	Median	3.978
Mode	4.000	Standard Deviation	0.865		

Valid Cases = 46

Missing Cases = 2

Table 29

Item: Accountants are chiefly concerned with manual-based rather than computer-based information systems

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly agree	3	6.2	6.5	6.5
2	Agree	9	18.7	19.6	26.1
3	Undecided	2	4.2	4.3	30.4
4	Disagree	25	52.1	54.3	84.8
5	Strongly disagree	7	14.6	15.2	100.0
0	Inapplicable	2	4.2	Missing	100.0
	TOTAL	48	100.0	100.0	
<b>Statistics</b>					
Mean	3.522	Standard Error	0.170	Median	3.860
Mode	4.000	Standard Deviation	1.156		

Valid Cases = 46  
Missing Cases = 2

Table 30

Item: Accountants do not believe anyone else can design a system which gives due weight to their requirements of control and internal checks

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly agree	5	10.4	10.9	10.9
2	Agree	12	25.0	26.1	37.0
3	Undecided	5	10.4	10.9	47.8
4	Disagree	18	37.5	39.1	87.0
5	Strongly disagree	6	12.5	13.0	100.0
0	Inapplicable	2	4.2	Missing	
	TOTAL	48	100.0	100.0	
<b>Statistics</b>					
Mean	3.174	Standard Error	0.185	Median	3.556
Mode	4.000	Standard Deviation	1.256		

Valid Cases = 46  
Missing Cases = 2



Table 31

Item: Accountants opposing the idea of establishing the computer outside their control

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly agree	2	4.2	4.3	4.3
2	Agree	13	27.1	28.3	32.6
3	Undecided	3	6.2	6.5	39.1
4	Disagree	22	45.8	47.8	87.0
5	Strongly disagree	6	12.5	13.0	100.0
0	Inapplicable	2	4.2	Missing	
TOTAL		48	100.0	100.0	
Statistics					
Mean	3.370	Standard Error	0.169	Median	3.727
Mode	4.000	Standard Deviation	1.149		

Valid Cases = 46  
Missing Cases = 2

Table 32

Item: Accountants do not accept any questioning of their systems and principles, particularly by D.P. specialists

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly agree	2	4.2	4.3	4.3
2	Agree	19	39.6	41.3	45.7
3	Undecided	3	6.2	6.5	52.2
4	Disagree	18	37.5	39.1	91.3
5	Strongly disagree	4	8.3	8.7	100.0
0	Inapplicable	2	4.2	Missing	100.0
TOTAL		48	100.0	100.0	
Statistics					
Mean	3.065	Standard Error	0.170	Median	3.167
Mode	2.000	Standard Deviation	1.150		

Valid Cases = 46  
Missing Cases = 2



Table 33

Item: Accountants are one of the greatest obstacles to the development and growth of computer-based information systems.

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly agree	3	6.2	6.5	6.5
2	Agree	2	4.2	4.3	10.9
3	Undecided	3	14.6	15.2	26.1
4	Disagree	21	43.7	45.7	71.7
5	Strongly disagree	13	27.1	28.3	100.0
0	Inapplicable	2	4.2	Missing	100.0
	TOTAL	48	100.0	100.0	
Statistics					
Mean	3.948	Standard Error	0.160	Median	4.024
Mode	4.000	Standard Deviation	1.083		

Valid Cases = 46  
Missing Cases = 2

Table 34

Item: Senior accounting executives are encouraging accountants to co-operate with D.P. specialists

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly disagree	1	2.1	2.2	2.2
2	Disagree	7	14.6	15.2	17.4
3	Undecided	6	12.5	13.0	30.4
4	Agree	23	47.9	50.0	80.4
5	Strongly agree	9	18.7	19.6	100.0
0	Inapplicable	2	4.2	Missing	100.0
	TOTAL	48	100.0	100.0	
Statistics					
Mean	3.696	Standard Error	0.150	Median	3.891
Mode	4.000	Standard Deviation	1.019		

Valid Cases = 46  
Missing Cases = 2

Table 35

Item: Accountants welcome questioning accounting systems and principles

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly disagree	5	10.4	10.9	10.9
2	Disagree	18	37.5	39.1	50.0
3	Undecided	14	29.2	30.4	80.4
4	Agree	9	18.7	19.6	100.0
0	Inapplicable	2	4.2	Missing	100.0
TOTAL		48	100.0	100.0	
Statistics					
Mean	2.587	Standard Error	0.136	Median	2.500
Mode	2.000	Standard Deviation	0.923		

Valid Cases = 46  
Missing Cases = 2

Table 36

Item: Accountants seek to establish computer facilities under their control

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly agree	1	2.1	2.2	2.2
2	Agree	7	14.6	15.2	17.4
3	Undecided	5	10.4	10.9	28.3
4	Disagree	24	50.0	52.2	80.4
5	Strongly disagree	9	18.7	19.6	100.0
0	Inapplicable	2	4.2	Missing	100.0
TOTAL		48	100.0	100.0	
Statistics					
Mean	3.717	Standard Error	0.150	Median	3.917
Mode	4.000	Standard Deviation	1.014		

Valid Cases = 46  
Missing Cases = 2

Table 37

Item: D.P. specialists feel at ease when working with accountants.

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly disagree	1	2.1	2.2	2.2
2	Disagree	5	10.4	10.9	13.0
3	Undecided	5	10.4	10.9	23.9
4	Agree	31	64.6	67.4	91.3
5	Strongly agree	4	8.3	8.7	100.0
0	Inapplicable	2	4.2	Missing	100.0
	TOTAL	48	100.0	100.0	
Statistics					
Mean	3.696	Standard Error	0.126	Median	3.887
Mode	4.000	Standard Deviation	0.856		

Valid Cases = 46

Missing Cases = 2

Table 38

Item: The idea of systematization of accounting activities by (non-accounting) D.P. specialists, is acceptable amongst accountants

Code	Category Label	Absolute Frequency	Relative Frequency %	Adjusted Frequency %	Cumulative Adj. Freq. %
1	Strongly disagree	4	8.3	8.9	8.9
2	Disagree	9	18.7	20.0	28.9
3	Undecided	8	16.7	17.8	46.7
4	Agree	22	45.8	48.9	95.6
5	Strongly agree	2	4.2	4.4	100.0
0	Inapplicable	3	6.2	Missing	100.0
	TOTAL	48	100.0	100.0	
Statistics					
Mean	3.200	Standard Error	0.162	Median	3.568
Mode	4.000	Standard Deviation	1.087		

Valid Cases = 45

Missing Cases = 3

Table 39

Variable: Have you attended training courses in E.D.P.?

Category	Absolute Frequency	Relative Frequency %
Yes, I have; (see Tables 40A, B & C)	49	92.5
Yes, I have, but too many to specify	3	5.7
No answer	1	1.9
TOTAL	53	100.0



Table 40 A

Appendix A, # 3.1.

Q: What courses have you attended in E.D.P.?

(1) (2) (3) (4) (5) (6) (7)

Course(s) Attended	AD ONE WEEK		AD 2-4 DAYS		AD ONE WEEK		AD 2-4 WEEKS		AD 5-8 WEEKS		AD MORE THAN 8 WEEKS		AD NO SPECIFIC CATIONS	
	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %
Computers in Management	2	3.8	1	1.9	2	3.8	7	13.2	1	1.9	-	-	3	5.7
Management information systems	-	-	2	3.8	4	7.5	3	5.7	-	-	-	-	4	7.5
Computer operations management and control	-	-	1	1.9	4	7.5	3	5.7	1	1.9	-	-	7	13.2
Other management courses	-	-	-	-	-	-	1	1.9	1	1.9	1	1.9	1	1.9
COBOL	-	-	-	-	1	1.9	6	11.3	-	-	-	-	2	3.8
FØRTRAN IV	-	-	-	-	-	-	-	-	-	-	-	-	1	1.9
ALGOL	-	-	-	-	-	-	-	-	-	-	-	-	1	1.9
PLAN	1	1.9	-	-	-	-	3	5.7	3	5.7	-	-	2	3.8
Other languages (Machine or assembly languages)	-	-	-	-	3	5.7	9	17.0	4	7.5	1	1.9	1	1.9
Linear programming	-	-	-	-	-	-	-	-	-	-	-	-	1	1.9
Network analysis	-	-	-	-	1	1.9	-	-	-	-	-	-	1	1.9
Inventory control	-	-	-	-	-	-	1	1.9	-	-	-	-	2	3.8
Simulation	-	-	-	-	-	-	-	-	-	-	-	1	1.9	3.8
Statistical analysis	-	-	-	-	1	1.9	-	-	-	-	-	-	2	3.8
Other application packages (such as model building, production control, file interrogation, operating systems)	-	-	-	-	-	-	-	-	-	-	-	-	-	-

N = 53

AD refers to advanced course

APR refers to appreciation course

INT refers to intermediate course

AF refers to absolute frequency

RF refers to relative frequency (Per cent)

Table 40B

Q: What courses have you attended in E.D.P?

Course(s) Attended	Categories and Duration	(8)		(9)		(10)		(11)		(12)		(13)		(14)	
		INT ONE WEEK		INT 2-4 DAYS		INT ONE WEEK		INT 2-4 WEEKS		INT 5-8 WEEKS		INT MORE THAN 8 WEEKS		INT NO SPECIF- ICATIONS	
		AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %
Computers in Management		-	-	1	1.9	1	1.9	5	9.4	-	-	-	-	2	3.8
Management informa- tion systems		1	1.9	2	3.8	6	11.3	2	3.8	-	-	-	-	-	-
Computer operations management and control		-	-	-	-	7	13.2	5	9.4	-	-	-	-	-	-
Other management courses		-	-	1	1.9	1	1.9	2	3.8	-	-	-	-	-	-
COBOL		-	-	-	-	2	3.8	8	15.1	-	-	-	-	4	7.5
FORTRAN IV		-	-	-	-	1	1.9	-	-	-	-	-	-	-	-
ALGOL		-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLAN		-	-	-	-	-	-	4	7.5	-	-	-	-	1	1.9
Other languages (Machine or assembly languages)		-	-	-	-	1	1.9	8	15.1	2	3.8	-	-	3	5.7
Linear programming		1	1.9	1	1.9	1	1.9	-	-	-	-	-	-	-	-
Network analysis		-	-	4	7.5	3	5.7	1	1.9	-	-	-	-	1	1.9
Inventory control		-	-	1	1.9	1	1.9	1	1.9	1	1.9	1	1.9	-	-
Simulation		1	1.9	1	1.9	1	1.9	1	1.9	-	-	-	-	1	1.9
Statistical analysis		-	-	1	1.9	2	3.8	1	1.9	-	-	-	-	-	-
Other application packages (such as: model building, production control, file interrogation, operating systems		-	-	-	-	3	5.7	-	-	-	-	-	-	-	-

N = 53

AD refers to advance course

AF refers to absolute frequency

APR refers to appreciation course

INT refers to intermediate course

RF refers to relative frequency (per cent)

Q: What courses have you attended in E.D.P? (15) (16) (17) (18) (19) (20) (21) (00)

Course(s) Attended	APR ONE WEEK (15)		APR 2-4 DAYS (16)		APR ONE WEEK (17)		APR 2-4 WEEKS (18)		APR 5-8 WEEKS (19)		APR MORE THAN 8 WEEKS (20)		APR NO SPECIFICATIONS (21)		INAPPLICABLE (00)	
	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %
Computers in Management	1	1.9	-	-	2	3.8	1	1.9	-	-	-	-	2	3.8	22	41.5
Management information systems	-	-	4	7.5	2	3.8	-	-	-	-	-	-	3	5.7	20	37.7
Computer operations management and control	-	-	1	1.9	2	3.8	-	-	-	-	-	-	-	-	22	41.5
Other management courses	-	-	-	-	-	-	2	3.8	-	-	-	-	-	-	43	81.1
COBOL	-	-	1	1.9	2	3.8	1	1.9	-	-	-	-	-	-	26	49.1
FORTRAN IV	-	-	2	3.8	-	-	-	-	-	-	-	-	-	-	49	92.5
ALGOL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	98.1
PLAN	-	-	-	-	1	1.9	-	-	-	-	-	-	-	-	35	71.7
Other languages (Machine or assembly languages)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	39.6
Linear programming	1	1.9	5	9.4	-	-	-	-	-	-	-	-	1	1.9	42	79.2
Network analysis	3	5.7	2	3.8	1	1.9	-	-	-	-	-	-	1	1.9	35	66.0
Inventory control	7	13.2	1	1.9	1	1.9	-	-	-	-	-	-	1	1.9	36	67.9
Simulation	2	3.8	3	5.7	1	1.9	-	-	-	-	-	-	1	1.9	38	71.7
Statistical analysis	2	3.8	-	-	1	1.9	-	-	-	-	-	-	1	1.9	44	83.0
Other application packages (such as: model building, production control, file interrogation, operating systems)	-	-	3	5.7	1	1.9	-	-	-	-	-	-	-	-	45	84.9

N = 53  
 AD refers to advance course  
 AF refers to absolute frequency  
 APR refers to appreciation course  
 INT refers to intermediate course  
 RF refers to relative frequency (per cent)



Type of computerized accounting activities	(1)			(2)			(3)			(4)			(5)			(6)		(7)	
	Not at all			Up to 25%			Up to 50%			Up to 75%			Up to 100%			AF	RP %	AF	RP %
	AF	RP %	AF	RP %	AF	RP %	AF	RP %	AF	RP %	AF	RP %	AF	RP %					
<u>Routine</u>																			
Order entry and analysis	40	39.6	10	9.9	7	6.9	6	5.9	28	27.7	10	9.9	-	-	-	-	-	-	-
Invoicing	30	29.7	11	10.9	10	9.9	7	6.9	33	32.7	10	9.9	-	-	-	-	-	-	-
Payroll	18	17.8	17	16.8	10	9.9	15	15.8	31	30.7	9	8.9	-	-	-	-	-	-	-
Accounts receivable	27	26.7	12	11.9	13	12.9	6	5.9	33	32.7	10	9.9	-	-	-	-	-	-	-
Accounts payable	17	16.6	16	15.8	15	14.9	6	5.9	38	37.6	9	8.9	-	-	-	-	-	-	-
Stock control	24	23.8	10	9.9	16	15.8	5	4.9	33	32.7	10	9.9	-	-	-	-	-	-	-
General ledger	30	29.7	15	15.8	5	5.0	10	9.9	29	28.7	10	9.9	-	-	-	-	-	-	-
Accounting statistics, sales, marketing statistics	-	-	1	1.0	-	-	2	2.0	3	3.0	11	10.9	-	-	-	-	84	83.2	-
Assets, plan register	-	-	1	1.0	1	1.0	-	-	3	3.0	11	10.9	-	-	-	-	85	84.2	-
Machine, vehicle utilization	-	-	-	-	-	-	-	-	1	1.0	11	10.9	-	-	-	-	89	88.1	-
reporting and analysis	-	-	-	-	-	-	-	-	-	-	11	10.9	-	-	-	-	63	67.3	-
Cost accounting: collection, allocation product costing, estimating and budgeting etc.	-	-	2	2.0	6	5.9	2	2.0	12	11.9	11	10.9	-	-	-	-	59	58.1	-
Integrated production and accounting systems	-	-	-	-	-	-	-	-	-	-	1	1.0	-	-	-	-	65	64.2	-
Standard costing	-	-	2	2.0	2	2.0	-	-	1	1.0	11	10.9	-	-	-	-	37	36.1	-
Consolidation of group accounts, departmental trading accounts and formal accounting systems	-	-	-	-	-	-	-	-	-	-	4	4.0	-	-	-	-	33	32.2	-
Budgetary Control	-	-	1	1.0	2	2.0	-	-	-	-	1	1.0	-	-	-	-	59	58.1	-
Plant depreciation	-	-	-	-	-	-	-	-	-	-	1	1.0	-	-	-	-	54	53.2	-
Project control, material forecasting, product analysis	-	-	-	-	3	3.0	1	1.0	2	2.0	11	10.9	-	-	-	-	59	58.1	-
Management reports	-	-	1	1.0	-	-	-	-	-	-	1	1.0	-	-	-	-	37	36.1	-
Revenue systems	-	-	1	1.0	-	-	-	-	-	-	1	1.0	-	-	-	-	53	53.1	-
Share registration	-	-	2	2.0	3	3.0	1	1.0	1	1.0	11	10.9	-	-	-	-	53	53.1	-
Others	-	-	2	2.0	3	3.0	1	1.0	4	4.0	11	10.9	-	-	-	-	50	49.2	-
<u>Non-routine</u>																			
D.C.F.	67	66.3	7	6.9	4	4.0	5	5.0	6	5.9	12	11.9	-	-	-	-	-	-	-
Cost forecasting	65	64.4	9	8.9	10	9.9	4	4.0	2	2.0	11	10.9	-	-	-	-	-	-	-
Cost effectiveness analysis	71	70.3	6	5.9	7	6.9	4	4.0	3	3.0	10	9.9	-	-	-	-	-	-	-
Break-even analysis	82	81.2	2	2.0	2	2.0	2	2.0	1	1.0	12	11.9	-	-	-	-	53	53.1	-
Network analysis	-	-	-	-	1	1.0	-	-	1	1.0	11	10.9	-	-	-	-	82	81.2	-
Financial models, decision trees	-	-	3	3.0	2	2.0	-	-	3	3.0	11	10.9	-	-	-	-	84	83.2	-
Budgetary control, standard costing (pilot schemes), reporting	-	-	-	-	1	1.0	-	-	-	-	1	1.0	-	-	-	-	57	56.1	-
Strategic planning, profit plans	-	-	-	-	1	1.0	-	-	2	2.0	11	10.9	-	-	-	-	59	58.1	-
Contract financing	-	-	-	-	1	1.0	1	1.0	-	-	13	12.9	-	-	-	-	56	55.1	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

AF = Absolute Frequency  
RP = Relative Frequency

Was not provided = These are the items added by respondents and was not provided in the mailed questionnaire.



Variable: Computerization of accounting activities

Type of computerized accounting activities	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	Not at all		Up to 25%		Up to 50%		Up to 75%		Up to 100%		Inapplicable or no answer		Was not provided	
	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %
<u>Routine</u>														
Order entry and analysis	40	39.6	10	9.9	7	6.9	6	5.9	28	27.7	10	9.9	-	-
Invoicing	30	29.7	11	10.9	10	9.9	7	6.9	33	32.7	10	9.9	-	-
Payroll	18	17.8	17	16.8	10	9.9	13	15.8	31	30.7	9	8.9	-	-
Accounts receivable	27	26.7	12	11.9	13	12.9	6	5.9	33	32.7	10	9.9	-	-
Accounts payable	17	16.8	16	15.8	15	14.9	6	5.9	38	37.6	9	8.9	-	-
Stock control	24	23.8	10	9.9	16	15.8	5	7.9	33	32.7	10	9.9	-	-
General ledger	30	29.7	15	15.8	5	5.0	10	9.9	29	28.7	10	9.9	-	-
Accounting statistics, sales, marketing statistics	-	-	1	1.0	-	-	2	2.0	3	3.0	11	10.9	84	83.2
Assets, plan register	-	-	1	1.0	1	1.0	-	-	3	3.0	11	10.9	85	84.2
Machine, vehicle utilization	-	-	-	-	-	-	-	-	1	1.0	11	10.9	89	88.1
reporting and analysis	-	-	2	2.0	6	5.9	2	2.0	12	11.9	11	10.9	68	67.3
Cost accounting: collection, allocation product costing, estimating and budgeting etc.	-	-	-	-	-	-	-	-	1	1.0	11	10.9	89	88.1
Integrated production and accounting systems	-	-	2	2.0	2	2.0	-	-	1	1.0	11	10.9	85	84.2
Standard costing	-	-	-	-	-	-	-	-	3	3.0	11	10.9	87	86.1
Consolidation of group accounts, departmental trading accounts and formal accounting systems	-	-	1	1.0	2	2.0	-	-	4	4.0	11	10.9	83	82.2
Budgetary Control	-	-	-	-	-	-	-	-	1	1.0	11	10.9	89	88.1
Plant depreciation	-	-	-	-	3	3.0	-	-	2	2.0	11	10.9	84	83.2
Project control, material forecasting, product analysis	-	-	-	-	-	-	-	-	1	1.0	11	10.9	89	88.1
Management reports	-	-	1	1.0	-	-	-	-	-	-	11	10.9	87	86.1
Revenue systems	-	-	-	-	1	1.0	-	-	1	1.0	11	10.9	88	87.1
Share registration	-	-	2	2.0	3	3.0	1	1.0	4	4.0	11	10.9	89	88.1
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Non-routine</u>														
D.C.F.	67	66.3	7	6.9	4	4.0	5	5.0	6	5.9	12	11.9	-	-
Cost forecasting	65	64.4	9	8.9	10	9.9	4	4.0	2	2.0	11	10.9	-	-
Cost effectiveness analysis	71	70.3	6	5.9	7	6.9	4	4.0	3	3.0	10	9.9	-	-
Break-even analysis	82	81.2	2	2.0	2	2.0	2	2.0	1	1.0	12	11.9	-	-
Network analysis	-	-	-	-	1	1.0	-	-	1	1.0	11	10.9	83	82.2
Financial models, decision trees	-	-	3	3.0	1	1.0	-	-	3	3.0	11	10.9	82	81.2
Budgetary control, standard costing (pilot schemes), reporting	-	-	-	-	1	1.0	2	2.0	3	3.0	11	10.9	84	83.2
Strategic planning, profit plans	-	-	-	-	1	1.0	-	-	2	2.0	11	10.9	87	86.1
Contract financing	-	-	-	-	1	1.0	1	1.0	-	-	11	10.9	89	88.1
Others	-	-	-	-	1	1.0	1	1.0	-	-	13	12.9	89	88.1

AF = Absolute Frequency

RF = Relative Frequency

Was not provided = These are the items added by respondents and was not provided in the mailed questionnaire.

Table 42

Factor analysis <sup>a</sup>

Appendix A, 3.1.

Descriptive interpretation of factors	Orthogonal (uncorrelated) solution <sup>b</sup>			Oblique (correlated) solution			Communality $h^2$
	Factor number	Variable numbers	Loadings	Factor number	Variable numbers	Loadings	
Policy, philosophy and structure of accounting function	I	14	0.87	I	14	0.93	0.81
		6	0.81		6	0.84	0.73
		1	0.70		1	0.69	0.76
		5	0.67		5	0.65	0.68
		11	0.64		11	0.60	0.65
Accountants' attitude towards D.P.	II	2	0.91	III	2	0.97	0.83
		8	0.67		8	0.60	0.78
		10	0.62		10	0.56	0.64
D.P. specialists' reaction to accountants' attitude	IV	13	0.86	II	13	0.88	0.77
		4	0.69		4	0.69	0.75
Accountants' concept of who should control D.P.	III	12	0.90	IV	12	0.92	0.83
		9	0.52		7	0.51	0.61
							0.74

a. Intercorrelations were factored through computing Pearson's product moment correlation coefficients.

Only those factors that have a minimum eigenvalue of unity were extracted and rotated.

b. Varimax method.



APPENDIX A, # 3.2.

SUMMARY STATISTICS AND RAW DATA OF THE  
MS/OR SPECIALISTS' SAMPLE

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Table 1

Variable: Age

Code	Category Label	Absolute Frequency	Adjusted Relative Frequency %
1	Under 25 years	14	10.4
2	26 - 30 years	44	32.6
3	31 - 35 years	35	25.9
4	36 - 40 years	13	9.6
5	41 - 45 years	14	10.4
6	46 - 50 years	11	8.1
7	Over 50 years	4	3.0
0	Missing	2	Missing
	TOTAL	137	100.0

## Statistics

Mean 3.133      Standard error 0.134      Median 2.771  
 Mode 2.000      Standard deviation 1.563

Table 2

Variable: Length of experience in the MS/OR field

Code	Category Label	Absolute Frequency	Adjusted Relative Frequency %
1	Less than 3 years	15	11.1
2	4 - 7 years	60	44.4
3	8 - 11 years	34	25.2
4	12 - 15 years	10	7.4
5	Over 15 years	16	11.9
0	Missing	2	Missing
	TOTAL	137	100.0

## Statistics

Mean 2.644      Standard error 0.099      Median 2.375  
 Mode 2.000      Standard deviation 1.145

Table 3

Variable: Subject of first degree

Code	Category Label	Absolute Frequency	Adjusted Relative Frequency %
1	Maths/Stats	64	48.9
2	Electrical Engineering	4	3.1
3	Mech. and Other Engineering	18	13.7
4	Pure Sciences	22	16.8
5	Economics	16	12.2
8	Arts	4	3.1
9	Others	3	2.3
0	Missing	6	Missing
	TOTAL	137	100.0

## Statistics

Mean 2.695    Standard error 0.178    Median 1.875  
 Mode 1.000    Standard deviation 2.034

Table 4

Variable: Year of the Award

Code	Category Label	Absolute Frequency	Adjusted Relative Frequency %
1	Before 1950	13	9.9
2	1950 - 1955	17	13.0
3	1956 - 1960	19	14.5
4	1961 - 1965	45	34.4
5	1966 - 1970	35	26.7
6	Since 1970	2	1.5
0	Missing	6	Missing
	TOTAL	137	100.0

## Statistics

Mean 3.595    Standard error 0.115    Median 3.867  
 Mode 4.000    Standard deviation 1.312



Table 5

Variable: Type of Industrial Classification

Code	Category Label	Absolute Frequency	Adjusted Relative Frequency %
1	Coal, Gas, Electricity	24	17.5
2	Industrial - Miscellaneous	18	13.1
3	Electrical and radio, Engineering of Metal	15	10.9
4	Food Manufacturing	11	8.0
5	Oil	10	7.3
6	Steels	9	6.6
7	Machine tools, Motors and Cycles and Components	8	5.8
8	Transport and Communication	8	5.8
9	Beers, Wines, Spirits, Entertainment and Catering	8	5.8
10	Chemicals, Plastics	7	5.1
11	Textiles, Drapery & Stores	6	4.4
12	Tobacco	5	3.6
13	Others	8	5.8
	TOTAL	137	100.0

\* This classification is based and guided - whenever possible - on the Financial Times Share Information Service contained in the 'Financial Times'. Such a classification was found more flexible, accurate and suitable for the objectives of the present research. It was preferred to the 'Standard Industrial Classification'.

Table 6

Variable: Relevance of education and/or training and information systems' topics

Code	Category Label	Absolute Frequency	Adjusted Relative Frequency %
1	Wholly relevant	71	53.4
2	Partly relevant	51	38.3
3	A little relevant	8	6.0
4	Not relevant at all	0	0.0
5	Undecided	3	2.3
0	Missing	4	Missing
	TOTAL	137	100.0

## Statistics

Mean 1.594 Standard error 0.069 Median 1.437  
 Mode 1.000 Standard deviation 0.795

Table 7

Appendix A, # 3.2.

Variable: Accounting and information systems' topics which respondents indicated that they have some idea about in accordance with the main source of acquiring that information.

Accounting and information systems topics	Main source of acquiring that information														Wasn't provided	
	Formal exam. courses		Formal training courses		Informal personal reading and/or training		Combination of formal and in-formal		Unspecified others		None		Inapplicable			
	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %		
Accounting theory and principles	21	15.3	21	15.3	27	19.7	45	32.8	3	2.2	2	1.5	18	13.1		
Cost classification and basic cost records	14	10.2	10	7.3	36	26.3	29	21.2	7	5.1	13	9.5	28	20.4		
Estimation of costs	13	9.5	10	7.3	33	24.1	31	22.6	8	5.8	13	9.5	29	21.2		
Cost allocation	15	10.9	11	8.0	34	24.8	32	23.4	5	3.6	12	8.8	28	20.4		
Budgetary control systems	13	9.5	14	10.2	32	23.4	42	30.7	2	1.5	11	8.0	23	16.8		
Standard cost systems	14	10.2	16	11.7	28	20.5	37	27.0	2	1.5	10	7.3	30	21.9		
Computer-based management information systems	7	5.1	21	15.3	27	19.7	52	38.0	9	6.6	3	2.2	18	13.1		
Information theory					1	0.7									136	99.3
Capital Investment assessment					2	1.5	3	2.2							132	96.4
Others (such as taxation and take-overs)	1	0.7	1	0.7	2	1.5	3	2.2							130	94.9

AF refers to 'Absolute Frequency'

RF refers to 'Relative Frequency' per cent

Added by respondents

Table 8

Variable: Frequency of respondents' feeling that they should know about accounting and information systems

Code		Absolute Frequency	Adjusted Relative Frequency %
1	Not at all	0	0.0
2	Occasionally	13	10.9
3	Sometimes	32	26.9
4	Quite Often	42	35.3
5	Very often	32	26.9
0	Inapplicable	14	Missing
8	Missing	4	Missing
	TOTAL	<u>137</u>	<u>100.0</u>

## Statistics

Mean 3.782 Standard error 0.088 Median 3.845  
 Mode 4.000 Standard deviation 0.963



Table 9

Appendix A, # 3.2.

Variable: Extent to which respondents felt that they were willing to attend training and/or educational courses in accounting and information systems

Accounting and information systems topics	Extent to which respondents felt willing to attend												Wasn't provided AF RF %			
	To a very great extent		To a considerable extent		To some extent		To a very little extent		Not at present		Not at all			Inapplicable		
	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %		AF	RF %	
Accounting theory and principles	17	12.4	30	21.9	44	32.1	15	10.9	4	2.9	6	4.4	21	15.3		
Cost classification and basic cost records	4	2.9	17	12.4	45	32.8	21	15.3	4	2.9	19	13.9	27	19.7		
Estimation of costs	8	5.8	21	15.3	44	32.1	22	16.1	4	2.9	13	9.5	25	18.2		
Cost allocation	7	5.1	25	18.2	40	29.2	22	16.1	3	2.2	13	9.5	27	19.7		
Budgetary control systems	7	5.1	30	21.9	45	33.6	15	10.9	3	2.2	10	7.3	26	19.0		
Standard cost systems	8	5.8	25	18.2	44	32.1	18	13.1	4	2.9	12	8.8	26	19.0		
Computer-based management information systems	18	13.1	39	28.5	39	28.5	5	3.6	3	2.2	9	6.6	24	17.5		
Others (such as: taxation, takeovers)			3	2.2	2	1.5									132	96.3

AF refers to 'Absolute Frequency'

RF refers to 'Relative Frequency - Per cent'

Added by respondents

Table 10

Appendix A, # 3.2.

Variable: Organizational Location of MS/OR activities

Code	Which of the following forms of organization location is your function? Do you consider it to be the optimum location of your MS/OR group?	Yes, it is the actual location			No, it is not the actual location, but it is desired to be the optimum one		
		Total observations	Consider the actual to be the optimum location		AF	RF %	
		AF	RF %	AF	RF %	AF	RF %
1.	In an independent department under the responsibility of the Managing Director.	16	11.2	13	9.5	41	29.9
2	In an independent department under the responsibility of Planning & Corporate Strategy Director.	10	7.3	4	2.9	2	1.5
3	In an independent department under the responsibility of the 'Production Director'.	5	3.6	2	1.5	-	-
4	In an independent department under the responsibility of another non-accounting director.	52	36.4	30	21.9	6	4.4
5	In management services unit under the responsibility of another non-accounting director (who directly reports to chairman, deputy chairman, managing director, or chief executive.	2	1.5	2	1.5	-	-
6	In management services dept. or div. under the responsibility of management services director.	11	8.0	9	6.6	-	-
7	In management services unit under the responsibility of the controller.	1	0.7	1	0.7	-	-
8	In the accounting dept. under the responsibility of the finance director - via systems director.	1	0.7	1	0.7	-	-
9	In the accounting department - no emphasis on day to day responsibilities.	2	1.5	-	-	-	-
10	Separate from the accounting department, but under the responsibility of the finance director or the controller.	34	24.8	13	9.5	1	0.7
11	Other forms of locations such as: no formal MS/OR group but a project-based management services unit; functional MS/OR units in most departments plus central coordinating MS/OR group; independent research organization.	3	2.2	-	-	-	-

AF refers to 'Absolute Frequency'

RF refers to 'Relative Frequency'



Table 11

Appendix A, ~~3.1~~ 3.2.

Variable: Approaches to get accountants acquainted with MS/OR in accordance with their extent of suitability.

Approaches	To very great extent		To a considerable extent		To some extent		To a small extent		To a very little extent		Inapplicable or missing		Wasn't provided	
	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %
Using the case study approach to train accountants to be familiar with MS/OR concepts and methodology	28	20.4 (23.1)	46	33.6 (38.0)	35	25.5 (28.9)	9	6.6 (7.4)	3	2.2 (2.5)	16	11.6		
Training accountants in standard MS/OR models (such as linear programming, inventory control, and queuing)	-	-	5	3.6 (4.4)	36	26.3 (31.6)	41	29.9 (36.0)	32	23.4 (28.1)	23	16.7		
Training accountants in basic mathematics and statistics	10	7.3 (8.8)	34	24.8 (30.1)	41	29.9 (36.3)	17	12.4 (15.0)	11	8.0 (9.7)	24	17.5		
Where applicable, close interaction on MS/OR projects	8	5.8	8	5.8							121	88.3		
'Selling' to accountants the benefits to be gained from MS/OR concepts; and detailed explanation of all areas that affect accountants	7	5.1	2	1.5							126	93.4		
Comparative studies of 'accounting V. MS/OR emphasizing concepts, limitations and complementary nature of the two sides			1	0.7	1	0.7	1	0.7			134	97.8		
Training accountants in 'model-building' thinking in general, and financial simulation models in particular.	3	2.2			1	0.7					133	97.1		

(Contd.)



Using the 'systems' approach to breaking down the 'rigid' interfunctional barriers	2	1.5					135	98.6
Instructors should have practised MS/OR in reality (as opposed to pure mathematics)	1	0.7					136	99.3
Training accountants in basic statistics only.	1	0.7					136	99.3
Others: training accountants in basic control theory, computing; modern management, management accounting, marginal costing	3	2.2	4	2.9	1	0.7	128	93.5

AF refers to Absolute Frequency  
RF refers to Relative Frequency (per cent)

'Wasn't provided' is a designation indicating that these items were added by respondents and were not included in the questionnaire sent to MS/OR specialists.

Bracketed percentages ( ...% ) are the 'Adjusted Relative Frequencies' - i.e. the 'Relative Frequencies' excluding the missing observations.

Table 12 Factor analysis<sup>a</sup>

Descriptive interpretation of factors	Orthogonal (uncorrelated-factors) solution		Oblique (correlated-factors) solution		Communality $h^2$		
	Factor number	Item numbers	Loadings <sup>b</sup>	Factor number		Item numbers	Loadings <sup>b</sup>
Accountants' orientation and attitude towards MS/OR	I	6	.91	I	6	-.99	.85
		2	.49		2	-.47	.36
		9	.49		9	-.42	.41
		11	.44		11	-.41	.28
Feelings regarding working with accountants	II	7	.83	III	7	-.91	.72
		4	.50		4	-.47	.40
		1	.40				.24
The conventional outlook of accounting function accountants	III	10	.76	IV	10	.79	.68
Beliefs regarding accountants' participation in MS/OR projects	IV	5	.74	II	5	.75	.56
		12	.50		12	.50	.26

a. Intercorrelations were factored through computing Pearson's product moment correlation coefficients and inserting squared multiple correlation into the main diagonal as estimates of the communality. Principal factoring with iterations were applied for the extraction of factors. Initial factoring stopped at eigen values less than 1. Four factors summarize 61% of the variance in the 12 items.

b. Only loadings greater than absolute value of 0.4 are shown.

Table 13

Appendix A, 3.2.

Variable: Means by which the accountant provided the data and information required for MS/OR projects

The Mean(s)	Frequency		Usually		Often		Occasionally		Rarely		Never		Inapplicable	
	AF	RF	AF	RF	AF	RF	AF	RF	AF	RF	AF	RF	AF	RF
(i) Accounting representative in MS/OR team discussion	6	4.4	15	10.9	36	26.3	27	19.7	23	16.8	30	21.9		
(ii) Giving detailed information about costing and financial matters	40	29.2	36	26.3	35	25.5	9	6.6	3	2.2	14	10.2		
(iii) Giving brief and approximate information about costing and financial matters	13	9.5	29	21.2	46	33.6	8	5.8	2	1.5	39	28.5		
(iv) Sending copy (or copies) of their financial and costing data	35	25.5	32	23.4	22	16.1	14	10.2	4	2.9	30	21.9		
(v) Accountants providing constructive comments. Giving detailed logic of methods (e.g. taxation and costs) *	4	2.9	1	0.7	1	0.7					131	95.6		
(vi) Producing raw data statistics/estimates *			2	1.5							135	98.5		
(vii) Access given to MS/OR function to study records. Provision of computer tapes. By a visit to finance records *	7	5.1	1	0.7	1	0.7					128	93.4		

AF refers to Absolute Frequency

RF refers to Relative Frequency in Per cent

\* refers to means added by respondents



Table 14

Appendix A, # 3.2.

Variable: Reputation of MS/OR groups

MS/OR specialists' perception of reputation of their groups as seen by the following	Very good		Good		I don't know		Poor		Very poor		Missing or Inapplicable	
	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %
The Managing Director	23	16.8	63	46.0	39	28.5	2	1.5	-	-	10	7.3
The consensus view of senior management	14	10.2	76	55.5	34	24.8	3	2.2	-	-	10	7.3
The finance director or the controller	15	10.9	35	25.5	64	46.7	10	7.3	1	0.7	12	8.8
The chief accountant	10	7.3	44	32.1	63	46.0	9	6.6	-	-	11	8.1
Yourself	17	12.4	94	68.6	7	5.1	9	6.6	-	-	10	7.3
Your OR group	13	9.5	95	69.3	8	5.8	9	6.6	-	-	12	8.8
Accounting department Individuals	6	4.4	54	39.4	60	43.8	8	5.8	-	-	9	6.6
Particular department(s) that has(have) used MS/OR services. a	3	2.2	10	7.3	-	-	1	0.7	-	-	123	89.1

AF refers to Absolute Frequency

RF refers to Relative Frequency in Percentage.

\* Three respondents refused to answer this question.

a This category was added by respondents.

APPENDIX A, # 3.3.

SUMMARY STATISTICS AND RAW DATA OF THE ICMA SAMPLE

Table 1

Variable: Age

Code	Category Label	Absolute Frequency	Relative Frequency %
1	Under 25 years	1	0.9
2	26 - 30 years	7	6.4
3	31 - 35 years	17	15.5
4	36 - 40 years	13	11.8
5	41 - 45 years	21	19.1
6	46 - 50 years	25	22.7
7	Over 50 years	26	23.6

## Statistics

Mean 5.045      Standard error .155      Median 5.310  
 Mode 7.000      Standard deviation 1.628

Valid cases 110  
 Missing cases 0

Table 2

Variable: Means of providing<sup>‡</sup> data and information required for MS/OR projects

The accounting function participates in providing MS/OR specialists with the required data and information by means of:	Frequency †		
	Usually	Often	Occasionally
(i) Accounting representative in the MS/OR team discussions	5	10	12
(ii) Giving detailed information about costing and financial matters	12	14	20
(iii) Giving brief and approximate information about costing and financial matters	5	6	21
(iv) Sending a copy (or copies) of costing and financial data	8	7	13
Others			
(v) Exchange of information on joint interactive projects	1	2	1
(vi) Access given to MS/OR specialists to study accounting files	1	-	-

‡ Total number of observations faced with this question was 54. Items included in others were added by respondents.

† In absolute numbers.



Table 3

Variable: Data and information\* (provided by accountants) to meet the different needs and requirements of MS/OR projects and studies. \*\*

Category of projects and standard techniques	Date †	Information ‡		
		Slightly modified	Partly modified	Completely modified
Linear programming	9	6	3	-
Inventory control	12	8	4	1
Simulation	4	4	3	1
Network analysis	9	4	6	1
Queueing (waiting Line) models	5	2	1	1
Dynamic, Quadratic, and integer programming	4	1	-	-
Regression analysis	5	3	2	1
Probabilistic analysis	9	1	1	-
Forecasting	17	10	9	1

\* Attention (of respondents) was directed towards the distinction between data and information: data is the accounting reports and statements as they are without change or modification to meet the different needs of MS/OR projects and studies; and information in this respect is the extraction of specific details to be presented to meet the requirements of MS/OR projects and studies.

\*\* Total number of respondents faced with this question was 54; four of them did not fill in the above table for varied reasons: one refused to answer the question because he did not accept the researcher's distinction between data and information; a second respondent indicated that he did not personally provide any of such data or information; a third respondent indicated that MS/OR function is a part of management services.

‡ In absolute numbers.

Table 4

Variable: Degree of satisfaction with the information provided - as an aid in building MS/OR models and tracing solutions - and the associated reasoning.

Degrees of satisfaction	Associated Reasoning	
Completely satisfied	Accounting systems are oriented towards the managerial functions.	18 observations
19 observations	MS/OR specialists usually illustrate for accountants their specific needs in an understandable way.	12 "
	There is co-operation between MS/OR specialists and accountants; in terms of continuous formal or informal discussions of the other's concepts and methods.	9 "
	Accountants are doing their best to learn more and more about MS/OR.	6 "
	The firm or the organization arranges internal or external courses for accountants to become acquainted with MS/OR.	5 "
Partly satisfied	Accountants have little knowledge of MS/OR.	17 "
31 observations	MS/OR specialists do not illustrate their specific needs for accountants.	13 "
	Accounting systems are more oriented towards the financial transactions (their recording, classification and legalistic issues rather than the managerial functions).	13 "
	The organization does not offer training <sup>for</sup> accountants in MS/OR.	10 "
	There is no co-operation between MS/OR specialists and accountants; in terms of continuous formal or informal discussions of the other's concepts and methodologies.	4 "
	Our joint MS/OR work is still in progress.	2 "
	There is limited co-operation <sup>^</sup> limited understanding due to differences.	1 "
Not satisfied at all	Accountants have no idea about MS/OR.	1 "
	MS/OR specialists have no idea about accounting systems.	1 "
3 observations	Accounting systems are completely oriented towards financial transactions (their recording, classification, and legalistic issues).	1 "
	Ultimate objectives may be different, MS/OR is oriented towards profit maximization and the accounting system is not geared to providing optimum solutions.	1 "
	The above statements are too extreme - or too strong - to be appropriate.	1 "



Table 5

Item: I think MS/OR - as a field of interest - is enjoyable and stimulating.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	0	0.0
2	Disagree	3	3.8
3	Undecided	23	29.5
4	Agree	43	55.1
5	Strongly agree	9	11.5
0	Inapplicable	31	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.744      Standard error 0.080      Median 3.802  
 Mode 4.000      Standard deviation 0.711

Table 6

Item: MS/OR concepts - as a subject of interest - is of great value for accountants.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	1	1.3
2	Disagree	7	8.9
3	Undecided	26	32.9
4	Agree	40	50.6
5	Strongly agree	5	6.3
0	Inapplicable	30	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.519      Standard error 0.090      Median 3.638  
 Mode 4.000      Standard deviation 0.798

Table 7

Item: MS/OR specialists do not accept criticism of their proposals and recommendations particularly by accountants.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	2	2.5
2	Agree	12	15.2
3	Undecided	28	35.4
4	Disagree	34	43.0
5	Strongly disagree	3	3.8
0	Inapplicable	30	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.304      Standard error 0.098      Median 3.411  
 Mode 4.000      Standard deviation 0.868



Table 8

Item: Accountants disliked working with MS/OR specialists.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	1	1.3
2	Agree	1	1.3
3	Undecided	12	15.6
4	Disagree	50	64.9
5	Strongly disagree	13	16.9
0	Inapplicable	32	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.948      Standard error 0.080      Median 3.990  
 Mode 4.000      Standard deviation 0.705

Table 9

Item: I think MS/OR projects and studies that are being conducted by MS/OR specialists in our firm or organization have a great deal of practical value.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	0	0.0
2	Disagree	3	3.9
3	Undecided	20	26.0
4	Agree	45	58.4
5	Strongly agree	9	11.7
0	Inapplicable	32	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.779      Standard error 0.080      Median 3.844  
 Mode 4.000      Standard deviation 0.700

Table 10

Item: MS/OR specialists are doing their best to learn about accounting concepts and systems.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	2	2.5
2	Disagree	5	6.3
3	Undecided	27	34.2
4	Agree	44	55.7
5	Strongly agree	1	1.3
0	Inapplicable	30	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.468      Standard error 0.084      Median 3.625  
 Mode 4.000      Standard deviation 0.748

Table 11

Item: Accountants' criticism of MS/OR proposals and recommendations are welcomed amongst MS/OR specialists.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	0	0.0
2	Disagree	9	11.4
3	Undecided	42	53.2
4	Agree	27	34.2
5	Strongly agree	1	1.3
0	Inapplicable	30	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.253      Standard error 0.075      Median 3.226  
 Mode 3.000      Standard deviation 0.669

Table 12

Item: I feel at ease in working with MS/OR specialists.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	0	0.0
2	Disagree	6	7.8
3	Undecided	18	23.4
4	Agree	48	62.3
5	Strongly agree	5	6.5
0	Inapplicable	32	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.675      Standard error 0.082      Median 3.802  
 Mode 4.000      Standard deviation 0.715

Table 13

Item: I think MS/OR specialists are concerned with theoretical work which has little practical value for our firm or organization.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	1	1.3
2	Agree	4	5.1
3	Undecided	18	22.8
4	Disagree	47	59.5
5	Strongly disagree	9	11.4
0	Inapplicable	30	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.747      Standard error 0.087      Median 3.851  
 Mode 4.000      Standard deviation 0.776

Table 14

Item: I feel that MS/OR specialists do not understand many things about accounting systems and practices.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	2	2.5
2	Agree	37	46.8
3	Undecided	22	27.8
4	Disagree	15	19.0
5	Strongly disagree	3	3.8
0	Inapplicable	30	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 2.747      Standard error 0.014      Median 2.523  
 Mode 2.000      Standard deviation 0.926

Table 15

Item: To me MS/OR concepts and techniques are uninteresting.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	1	1.3
2	Agree	2	2.5
3	Undecided	9	11.4
4	Disagree	52	65.8
5	Strongly disagree	15	19.0
0	Inapplicable	30	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.987      Standard error 0.082      Median 4.029  
 Mode 4.000      Standard deviation 0.725

Table 16

Item: I think MS/OR concepts and techniques - as a subject of interest - has no practical value for accountants.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	2	2.5
2	Agree	3	3.8
3	Undecided	11	13.9
4	Disagree	48	60.8
5	Strongly disagree	15	19.0
0	Inapplicable	30	Missing
8	Refused to answer	0	Missing
9	Don't know	<u>1</u>	<u>Missing</u>
	TOTAL	110	100.0

## Statistics

Mean 3.899      Standard error 0.095      Median 3.990  
 Mode 4.000      Standard deviation 0.841



Table 17

Variable: Accountants' perception of reputation of MS/OR groups. \*

Accountants' perception of reputation of MS/OR groups as seen by the following = †	Very good		Good		I don't know		Poor		Very poor		Inapplicable	
	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %	AF	RF %
The Managing Director	8	7.3	17	15.5	43	39.1	5	4.5	-	-	31	28.2
The consensus view of Senior Management	4	3.6	25	22.7	29	26.4	16	14.5	-	-	30	27.3
The Finance Director	4	3.6	26	33.6	29	26.4	8	7.3	1	0.9	36	32.7
The Chief Accountant	5	4.5	30	27.3	25	22.7	13	11.8	-	-	31	28.2
Accounting Department Individuals	1	0.9	26	23.6	24	21.8	23	20.9	-	-	30	27.3
MS/OR workers themselves	9	8.2	27	24.5	35	31.9	1	0.9	-	-	32	29.1

AF refers to 'Absolute Frequency'

RF refers to 'Relative Frequency' in percentage.

Circled frequencies represent the modal class.

\* Six observations refused to answer this question.

† Contents of this table do not give indication that respondents did not take the issue involved seriously.

Table 18

Item: Accountants are mostly co-operative and are willing to provide any kind of help to D.P. personnel.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	0	0.0
2	Disagree	2	2.0
3	Undecided	7	6.9
4	Agree	76	75.2
5	Strongly agree	16	15.8
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 4.050      Standard error 0.055      Median 4.046  
 Mode 4.000      Standard deviation 0.555

Table 19

Item: Accountants are usually doing their best to learn more about computer and information technology concepts and systems related to their work.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	0	0.0
2	Disagree	10	9.9
3	Undecided	21	20.8
4	Agree	57	56.4
5	Strongly agree	13	12.9
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 3.723      Standard error 0.081      Median 3.842  
 Mode 4.000      Standard deviation 0.814

Table 20

Item: Senior accounting executives are always contesting for control over D.P. and information technology group.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	2	2.0
2	Agree	25	24.8
3	Undecided	17	16.8
4	Disagree	53	52.5
5	Strongly disagree	4	4.0
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 3.317      Standard error 0.095      Median 3.623  
 Mode 4.000      Standard deviation 0.958



Table 21

Item: I do not like working with computer specialists.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	1	1.0
2	Agree	6	6.0
3	Undecided	14	14.0
4	Disagree	54	54.0
5	Strongly disagree	25	25.0
0	Inapplicable	10	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 3.960      Standard error 0.085      Median 4.037  
 Mode 4.000      Standard deviation 0.852

Table 22

Item: Accountants are chiefly concerned with manual-based - rather than computer-based - information systems.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	2	2.0
2	Agree	14	13.9
3	Undecided	9	8.9
4	Disagree	48	47.5
5	Strongly disagree	28	27.7
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 3.851      Standard error 0.104      Median 4.031  
 Mode 4.000      Standard deviation 1.043

Table 23

Item: Accountants do not believe any one else can design a system which gives due weight to their requirements for control and internal checks.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	1	1.0
2	Agree	35	34.7
3	Undecided	14	13.9
4	Disagree	40	39.6
5	Strongly disagree	11	10.9
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 3.248      Standard error 0.108      Median 3.513  
 Mode 4.000      Standard deviation 1.081



Table 24

Item: Accountants oppose the idea of establishing computer facilities not under their control.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	1	1.0
2	Agree	19	18.8
3	Undecided	15	14.9
4	Disagree	52	51.5
5	Strongly disagree	14	13.9
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 3.584      Standard error 0.098      Median 3.798  
 Mode 4.000      Standard deviation 0.983

Table 25

Item: Accountants do not accept any criticism of accounting systems and principles, particularly by D.P. specialists.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	2	2.0
2	Agree	17	16.8
3	Undecided	11	10.9
4	Disagree	54	53.5
5	Strongly disagree	17	16.8
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 3.663      Standard error 0.101      Median 3.880  
 Mode 4.000      Standard deviation 1.013

Table 26

Item: Accountants are one of the greatest obstacles to the development and growth of computer-based information systems.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	0	0.0
2	Agree	2	2.0
3	Undecided	11	10.9
4	Disagree	52	51.5
5	Strongly disagree	36	35.6
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 4.208      Standard error 0.071      Median 4.221  
 Mode 4.000      Standard deviation 0.712

Table 27

Item: Senior accounting executives are encouraging accountants to co-operate with D.P. specialists for the development and growth of computer-based information systems.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	0	0.0
2	Disagree	1	1.0
3	Undecided	10	9.9
4	Agree	74	73.3
5	Strongly agree	16	15.8
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 4.040      Standard error 0.054      Median 4.034  
 Mode 4.000      Standard deviation 0.546

Table 28

Item: Criticism of accountants and accounting systems and principles are welcomed in the finance departments.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	4	4.0
2	Disagree	34	33.7
3	Undecided	29	28.7
4	Agree	32	31.7
5	Strongly agree	2	2.0
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 2.941      Standard error 0.094      Median 2.931  
 Mode 2.000      Standard deviation 0.947

Table 29

Item: Ethical standards of the accounting profession have been affected, to a great extent, by recent developments in computer and information technology areas.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	8	7.9
2	Disagree	47	46.5
3	Undecided	22	21.8
4	Agree	24	23.8
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 2.614      Standard error 0.093      Median 2.404  
 Mode 2.000      Standard deviation 0.938



Table 30

Item: Accountants accept the establishment of computer facilities not under their control.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly disagree	0	0.0
2	Disagree	10	9.9
3	Undecided	18	17.8
4	Agree	69	68.3
5	Strongly agree	4	4.0
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 3.663 Standard error 0.071 Median 3.826  
 Mode 4.000 Standard deviation 0.711

Table 31

Item: Accountants seek, by all means to establish computer capabilities under their control.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	2	2.0
2	Agree	19	18.8
3	Undecided	20	19.8
4	Disagree	56	55.4
5	Strongly disagree	4	4.0
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 3.406 Standard error 0.090 Median 3.670  
 Mode 4.000 Standard deviation 0.908

Table 32

Item: It appears that ethical standards of the accounting profession have not been too much affected by recent developments in computer information technology areas.

Value	Value Label	Absolute Frequency	Adjusted Relative Frequency %
1	Strongly agree	7	6.9
2	Agree	52	51.5
3	Undecided	24	23.8
4	Disagree	17	16.8
5	Strongly disagree	1	1.0
0	Inapplicable	9	Missing
8	Refused to answer	0	Missing
9	Don't know	0	Missing
	TOTAL	110	100.0

## Statistics

Mean 2.535 Standard error 0.089 Median 2.337  
 Mode 2.000 Standard deviation 0.890



APPENDIX A # 4.

DOCUMENTARY AND DESIGN

APPENDIX A, ~~4~~ 4.1.

EDP SPECIALISTS' MAILED-QUESTIONNAIRE  
(ABRIDGED)

THE UNIVERSITY OF SHEFFIELD

DIVISION OF ECONOMIC STUDIES

INTRODUCTION:

It is evident that accounting activities have been affected by recent developments in the areas of Electronic Data Processing. Opinions and views of Computer and D.P. specialists are essential in learning about some of the factual and attitudinal aspects of communication and working relationships with accountants. The study, of which this questionnaire is a part, is an attempt to investigate the problems arising out of these developments. In particular, we are interested in obtaining information relating to the following questions:

What are D.P. managers' opinions and views concerning accountants' involvement in the computer technology field?

What is the degree of accountants' involvement in computer applications?

What are the problems of communication between accountants and D.P. specialists?

What is the suitable strategy for ensuring co-operation between the two specialists for efficient attack on the joint problems?

It is hoped that this survey will give an indication about the extent to which D.P. managers are satisfied with accountants' actual part in the development and implementation of computer-based information systems.

A vital step is to ask D.P. managers about the obstacles and problems as they perceive them. We therefore request your co-operation for these purposes by completing the following questionnaire.

It is emphasised that any information given will be treated in strict confidence and also that all information will be analysed in a general manner as statistical summaries so that individuals and specific institutions are not identifiable.



A - PRELIMINARY INFORMATION

- (A - 1) Are you currently engaged in computer and information Technology areas?

Yes	No
<input type="checkbox"/> 1	<input type="checkbox"/> 2
↓	Go to Question H

- (A - 2) What is the title of your present job?
- (A - 3) Using the following table, please state your age and D.P. experience.
- (A - 4) Tick in the corresponding space in the following table according to your qualification/experience, and your current involvement.  
Please tick only one cell

B - COMPUTER AND INFORMATION TECHNOLOGY SPECIALISTS WITHOUT ACCOUNTINGQUALIFICATION AND/OR EXPERIENCE

- (B - 1) Do you have any past experience in communicating with accountants in your firm or organisation - concerning computerization of accounting and non-accounting activities - that enables you to participate in discussing some of the problems related to this area?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
↓	Go to Question F

- (B - 2) As far as explaining the technical aspects of the accounting discipline is concerned, to what extent are accountants helpful in putting their ideas across to your activities?
- (B - 3) How often do you assist accountants, in programming and guiding their management and accounting problems.
- (B - 4) How much pressure do you experience, from the accounting group in your organisation? (Pressure in terms of contesting and taking any opportunity to take over some of your jobs)
- (B - 5) If you feel that there is any kind of pressure from accountants on your responsibilities, what is your interpretation of that pressure in terms of:
- (i) Its causes:
- (ii) Its effect on your morale:
- |     |                     |   |
|-----|---------------------|---|
| ( ) | a. Very good effect | (because of stirring up the competition )   |
| ( ) | b. Good effect      | (between D.P. specialists and accountants.) |
| ( ) | c. No effect at all | (No difference)                             |
| ( ) | d. Bad effect       | (because of deteriorating the co-operation) |
| ( ) | e. Very bad effect  | (between D.P. specialists and accountants.) |

(iii) Your reaction to that pressure:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Very much Welcome it	Like it	Pay no attention to it	Dislike it	Very much Dislike it

(B - 6) Below, you find a number of statements expressing opinions and views about accountants in your firm or organisation. You may or may not agree with these statements. There are no wrong or right answers in this report, please indicate your own opinion by ticking the appropriate box. "One tick only for each item"

Go to Question (D - 1)

C - COMPUTER AND INFORMATION TECHNOLOGY SPECIALISTS WITH ACCOUNTING QUALIFICATION AND/OR EXPERIENCE

(C - 1) What courses of training have you attended in the E.D.P. area? Please indicate opposite each type of course attended, its duration in accordance with your classification to them on the scale below.

"Please write only the number of days or weeks in the appropriate cell(s)".

(C - 2) Please indicate the main method of your training in E.D.P. field and your degree of satisfaction.

(C - 3) In accordance with your degree of satisfaction indicated above please clarify the following points: (by placing a check mark (✓) in one of the spaces that seems appropriate to you).

(C - 4) Have you used software packages either in manipulating accounting problems, or in assisting other departments (by providing the relevant information for those packages)?

Yes	No
<input type="checkbox"/> 1	<input type="checkbox"/> 2
↓	Go to Question D - 1

(C - 5) Please indicate the packages used and your evaluation of the effects of using these packages.

(C - 6) If you have comments or particular opinion(s) concerning specific packages, please indicate them below (use overleaf if necessary).

D - ACCOUNTANTS' INVOLVEMENT IN COMPUTER INFORMATION TECHNOLOGY AREAS:

(D - 1) Please evaluate the state of accountants' direct participation in the development and implementation of computer-based information systems and setting up the computer department in your organisation from the following points of view:



- (i) Accountants' interest in the E.D.P. field:
- (ii) Effect of accountants' actual participation in the E.D.P. field:
- (iii) Accountants' support to D.P. services:
- (iv) Your consideration of accountants' participation in D.P. services:
- (v) Your position of accountants' participation in the D.P. field:
- (vi) Your degree of satisfaction of the accounting involvement in the D.P. field:
- (vii) Accountants' opposition to D.P. specialists:

E - COMPUTERIZATION OF ACCOUNTING ACTIVITIES:

(E - 1) Have you personally supervised or participated in the computerization of some of the accounting activities in your firm or organisation?

Yes
No

1
  2

Go to Question G - 1

(E - 2) Please indicate which of the following accounting activities you personally supervised or participated in the computerization process:

F - ACCOUNTING - COMPUTER AND INFORMATION TECHNOLOGY FUTURE RELATIONSHIPS:

(F - 1) In connection with the "accounting E.D.P. and information technology" relationship in business organisations in the longer-run, please list (giving brief descriptions) two of the general problem areas which need additional research and investigation. (The aim here is to identify the most critical problems facing business organisations with respect to "accounting - computer and information technology" future relationships that need further additional investigation).

1. a. (title) - - - - - b. (brief description of the problem)	2. a. (title) - - - - - b. (brief description of the problem)
--	--

(F - 2) Looking into the future, what is your opinion of the kind of relationship between computer technology and accounting function in your organisations?

(F - 3) If you have been asked to appoint an accountant to work with your D.P. group, what type of educational background, training, experience and, personality traits, would you require in him for the purpose of that job?



G - D.P. EQUIPMENT AND MANPOWER FACILITIES AVAILABLE:

- (G - 1) What kind of equipment is available to your organisation?
- (G - 2) How do you classify your 'Installed-in-house' Computer, according to characteristics of the equipment's central processor?
- |        |                  |    |
|--------|------------------|----|
| (    ) | a. Large-sized.  | 1. |
| (    ) | b. Medium-sized. | 2. |
| (    ) | c. Small-sized.  | 3. |
- (G - 3) Please indicate the authority responsible for, and the actual location of your D.P. activities. "Tick only one cell".
- (G - 4) Please indicate your organisation's experience in the Data Processing field, according to the major areas of application - commercial, scientific, technical, etc.
- (G - 5) Please explain the organisational structure of your D.P. department (or division) in your organisation in terms of the category of jobs and staff numbers in each category. Also, if possible, please indicate how many of each category have accounting experience and/or qualification.
- (G - 6) Are there any significant (or critical) problems facing the growth and development of your D.P. activities as a result of the actual location (of the installed-in-house computer and/or the authority for the use of computers in service bureaux).  
"Tick only one box"
- (G - 7) Please evaluate this situation (the actual location and/or the use of computers in service bureaux) in terms of the advantages and disadvantages.

H - FURTHER COMMENTS

Please give below any further opinions - as a member of the Computer and information technology group - about working relationships and problems of communication between D.P. specialists and accountants.

Thank you very much for your interest and co-operation.

APPENDIX A, ~~4~~ 4.2.

MS/OR SPECIALISTS' MAILED-QUESTIONNAIRE

(SPECIMEN)

MS/OR SPECIALISTS' MAILED-QUESTIONNAIRE (SPECIMEN)

The document was designed to collect some of the basic factual data about MS/OR specialists (such as age, length of experience, the subject and year or first degree - if any) and about their organization (e.g. location of their MS/OR units and their functional relationships with accounting and finance departments); to gather some of the attitudinal type of data describing MS/OR specialists impression regarding accountants and accounting functions; and to serve as a basis for exploring the more important variables in the domain of Accountants - MS/OR specialists working relationships and communication patterns.

The validity of the completed document rested on the fulfilment of two necessary conditions, viz: the respondent's organization must be using internal (as opposed to outside consultancy) MS/OR services; and he should have past experience (in conducting MS/OR projects and studies in practice) that enables him to partake in discussing and evaluating some aspects of the MS/OR working relationship, especially those connected with accounting function and accountants. The object of specifying these two requirements in the leading section of the document was for the purification purposes by precluding opinions and views of MS/OR specialists who had either no such function nor the sought type of experience.



THE UNIVERSITY OF SHEFFIELD

DIVISION OF ECONOMIC STUDIES

INTRODUCTION:

It is evident that accounting activities have been affected by recent developments in operational research and information technology areas. Opinions and views of operational research specialists are essential in learning about factual and some of the additudenal aspects of communication between accountants and operational research specialists. The study of which this questionnaire is a part, in effect, is an attempt to investigate the problems arising out of these developments by obtaining information relating to the following questions:

What are the problems of communication between operational researchers and accountants?

What are the major contributing factors to those problems?

What is the degree of accountant's involvement in operational research activities and vice versa?

What is the operational researcher's visualization of the kind of relationship between them and accountants in the longer-run?

What is the suitable strategy for ensuring co-operation between the two groups for efficient attack on the joint problems?

It is hoped that this survey will give an indication about the extent to which O.R. specialists are satisfied with accountants' actual part in providing cost and financial information needed for O.R. projects. The survey is being used in deriving a theoretical framework of analysis which calls upon accountants to utilize more efficient ways for gathering and analysing cost and financial information to suit needs of those working closely to management, and, in particular, O.R. specialists, and for adopting better channels of communication with O.R. specialists.

A vital step is to ask O.R. specialists about the obstacles and problems as they perceive them. We therefore request your co-operation for these purposes by completing the following questionnaire.

It is emphasised that any information given will be treated in strict confidence and also that all information will be analysed in a general manner as statistical summaries so that individuals and specific institutions are not identifiable.

Card 1

A - BACKGROUND INFORMATION

(A - 1) Does your firm or organization conduct any form of operational research activities?

Yes

1

↓

No

2

Go to Section H, last page.

(A - 2) Do you have any past experience (in conducting O.R. projects and studies in practice) that enables you to participate in discussing and evaluating some of O.R. working relationships especially those connected with accounting function and accountants?

Yes

1

↓

No

2

Go to Section H, last page.

(A - 3) Using the following table, please state your age and O.R. experience.

Experience \ Age	1	2	3	4	5
	Less than 3 years	4 - 7 years	8 - 11 years	12 - 15 years	Over 15 years
Under 25					
26 - 30					
31 - 35					
36 - 40					
41 - 45					
46 - 50					
Over 50					

(A - 4) Please indicate the subject of your first degree and the year of the award.  
The subject was \_\_\_\_\_ 19 \_\_\_\_\_



Card 1

(A - 5) Please indicate the length of your O.R. service with your present firm.

History	Number of Years
With the present group	
With other O.R. groups for the present firm	
With other functions (please specify) -----	
Total length of service for your present firm	

(A - 6) Please state the organizational location of your O.R. group and - your opinion of - its best or optimum location.

	1	2
Organizational location of your O.R. unit	The actual location	The best or optimum location
* in an independent department under the responsibility of - the Managing Director or - the Production Director or - other non-accounting Director	----- ----- -----	----- ----- -----
* in the accounting department under the responsibility of the finance Director.		
* separate from the accounting department but under the responsibility of the finance Director.		
* Joint responsibility of the accounting, engineering and production departments.		
* Joint responsibility of the accounting and engineering departments only.		
Others (please specify) ----- -----	-----	-----



(A - 7) Are there any significant (or critical) problems facing the growth and development of your O.R. unit as a result of the actual location?

"Tick only one box"

No significant problems, i.e., the actual location is successful and healthy for the development and growth of my O.R. unit.	<input type="checkbox"/>
Some critical difficulties, but no need to change the actual location, i.e., there are some difficulties facing the development and growth of my O.R. unit mainly because of its actual location. But by overcoming these difficulties, it is possible to grow in the future.	<input type="checkbox"/>
Severe difficulties and the only solution is to change the actual location, i.e., there are some severe difficulties resulting from the <u>wrong</u> location. In other words, the actual location is mostly the main cause of these difficulties, and no other solution but changing the actual location.	<input type="checkbox"/>

(A - 8) Please state those difficulties facing the actual location of your O.R. group in your organization, and - if possible - your suggestions to overcome them.

the difficulties are	Suggestions to overcome these difficulties are
1. _____ _____ _____	1. _____ _____ _____
2. _____ _____ _____	2. _____ _____ _____

B - GENERAL IMPRESSION REGARDING ACCOUNTANTS AND ACCOUNTING FUNCTION:

The following questions in this section have been designed to obtain analysis of O.R. specialists' general impression regarding accountants and accounting function. There are no "standard" or "right" answers in this respect. Please indicate your actual impression concerning the following matters:

(B - 1) To what extent do you like to accept the accountant's participation in O.R. projects and studies?

<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
Completely acceptable	Acceptable	Undecided	Un-acceptable	Completely unacceptable

(B - 2) In general, how interested are accountants in O.R. projects and studies, do you think?

<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
Very much interested	Interested	Fairly interested	Little interest	No interest

(B - 3) In particular, how interested is the finance director in O.R. projects and studies?

<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
Very much interested	Interested	Fairly interested	Little interest	No interest

(B - 4) In general, how supportive are accountants in your firm to the O.R. function?

<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
Fully supportive	Supportive	Fairly supportive	Little support	No support

(B - 5) In particular, how supportive is the finance director to the O.R. function?

<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
Fully supportive	Supportive	Fairly supportive	Little support	No support

(B - 6) How opposing are accountants in your firm to the O.R. function?

<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
Very much opposing	Opposing	Fairly opposing	Little opposition	No opposition

(B - 7) How important is it to get accountants acquainted with O.R. concepts?

(i) Degree of Importance

<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
Extremely important	Important	Fairly important	Of little importance	Not important



(B - 7) (ii) Factors that led to this belief are:

- (1) -----  
-----
- (2) -----  
-----

(iii) If you think that it is extremely, important, or fairly, important that the accountant be acquainted with O.R. concepts, please tick any of the following approaches and categories that you think are appropriate in accordance with the extent of their suitability in this respect.

Extent of suitability Approaches	To a very great extent	To a considerable extent	To some extent	To a small extent	To a very little extent
Using the case study approach to train accountants to be familiar with O.R. nature and methodology.					
Training accountants in standard O.R. models (such as linear programming, inventory control, and queuing).					
Training accountants in basic mathematics and statistics.					
Others (please specify) ----- -----					

(B - 8) As far as implementing O.R. recommendations, do you think that accountants constitute a major obstacle in this respect?

Yes  1                      No  2

(B - 9) What is your interpretation of this situation?

(i)

(ii)



Office  
Use  
Only

	1-4
Card 3	(5)

C - ACCOUNTANT'S ATTITUDE TOWARDS O.R. RESPONSIBILITIES.

As you know, any firm or organization, at any point of time, is composed of human forces which result in different patterns of behaviour. Some forces - characterised in a person, or department, or division, or function - may tend to impose pressure (or stress) on the behaviour of others for different reasons. Emphasis here is to find out - from your experience in your current O.R. work - whether you have ever been under such pressure from accountants. If not, please tick here  and then skip to section D, next page.

(6)

(C - 1) How much pressure do you experience, from the accounting group in your organization? (Pressure in terms of contesting and taking any opportunity to take over some of your job).

Kind of Activities	Sources of Pressure	Amount of Pressure				
		5 A great deal	4 A fair amount	3 Some	2 Little	1 None
Total responsibility of O.R. projects and studies.	The finance director					
	The chief accountant					
	Accounting department individuals					
All O.R. projects and studies related to the accounting department	The finance director					
	The chief accountant					
	Accounting department individuals					
Some O.R. projects and studies related to the accounting department	The finance director					
	The chief accountant					
	Accounting department individuals					
Other activities which are: ----- -----	The finance director					
	The chief accountant					
	Accounting department individuals					

(7)

(8)

(9)

(10)

(11)

(12)

(13)

(14)

(15)

(16)

~  
(17)

(C - 2) If you feel that there is any kind of pressure from accountants on your responsibilities, what is your interpretation of that pressure in terms of:

(i) Its cause

1. -----

2. -----

-----

(ii) Its effect on your moral

1. ( ) a. Very good effect (because of stirring up the  
2. ( ) b. Good effect {competition between O.R.  
specialists and  
accountants.}

3. ( ) c. No effect at all (no difference)

4. ( ) d. Bad effect (because of deteriorating the  
5. ( ) e. Very bad effect {co-operation between O.R.  
specialists and accountants.}

(iii) Your reaction to that pressure

<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5
Very much welcome it		Welcome it		Pay no attention to it		Dislike it		Very much dislike it	

D - WORKING RELATIONSHIPS WITH ACCOUNTANTS

(D - 1) Do you communicate with accountants for the cost and financial information required for O.R. projects?

No	Yes
<input type="checkbox"/>	<input type="checkbox"/>
(No communication with accountants)	Go to Question D - 4, page 9.

(D - 2) If you do not depend upon the accounting staff for providing you with the information required, please indicate how you obtain your cost and financial information:

-----

-----

-----



(D - 3) Please check the reason(s) below for not getting the cost and financial information by means of accountants.

"Tick one box in any row that applies"

The Reason(s)	Degree of Importance				
	Of great importance	Important	Fairly important	Of little importance	Unimportant
	5	4	3	2	1
(i) The accounting information is <u>not</u> reliable.					
(ii) The accounting information is <u>not</u> relevant.					
(iii) The accounting people <u>cannot</u> understand the required information.					
(iv) The accounting people are over-awed by the technical terminology of and techniques of operational research.					
(v) The accounting people spend too much time to give the required information.					
(vi) The accounting people are <u>not</u> willing to provide the information required.					
(vii) Others (please specify)					
-----					
-----					
-----					

Go to Question (F - 1), p.14.



Card 4.

"Communication with Accountants"

If you communicate with accountants to provide the data and information required for O.R. projects, please clarify the following issues:

(D - 4) How does the accountant provide the required data and information?

"Tick any of the following statements that are appropriate".

The Mean(s)	Frequency				
	5	4	3	2	1
	Usually	Often	Occasionally	Rarely	Never
(i) Accounting representative in the O.R. team discussions.					
(ii) Giving detailed information about costing and financial matters.					
(iii) Giving brief and approximate information about costing and financial matters.					
(iv) Sending a copy (or copies) of their financial and costing data.					
(v) Others (please specify)					
- - - - -					
- - - - -					
- - - - -					

(D - 7) Please tick any of the following statements which explain your responding in D - 5.

The Reasons Are	
* <u>Accountants</u> are not willing to know about O.R. concepts and methodology and their application in actual business problems.	
* <u>Accountants</u> are chiefly concerned with financial transactions; their recording, classification, and legalistic issues rather than managerial functions.	
* <u>Accountants</u> have limited knowledge of O.R. concepts and methodology.	
* <u>The firm or the organisation</u> - offers training in O.R. of little value for accountants. or - offers training in O.R. of no use for accountants. or - <u>does not</u> offer O.R. training for accountants. or - <u>does not</u> encourage O.R. training for accountants.	----- ----- ----- -----
Others (please specify) ----- ----- -----	

Go to Question (E - 1, next page)

(D - 8) Please tick any of the following statements which explain your responding in D - 5.

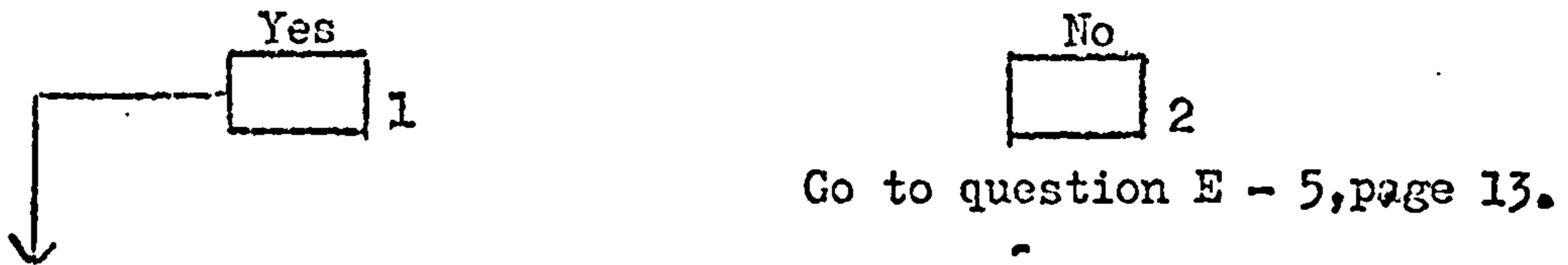
The Reasons Are	
* <u>Accountants</u> have <u>no</u> idea about O.R. concepts and methodology.	
* <u>Accountants</u> have <u>some</u> idea about O.R. concepts and methodology, but they have <u>no</u> idea about their application in the actual business problems.	
* <u>Accountants</u> themselves are not willing to know about O.R. concepts and methodology.	
* <u>Accountants</u> have <u>some</u> idea about O.R. concepts and methodology and their application in actual business problems, but operational research specialists have little or no confidence in data or information provided by accountants.	
* <u>The firm or the organisation</u> <u>does not</u> offer or encourage accountant's training in operational research concepts and methodology.	
* Others (please specify) ----- ----- ----- -----	



Card 05

E - O.R. CONCEPTS AND METHODOLOGY USED IN DEALING WITH ACCOUNTING PROBLEMS.\*

(E - 1) Have you been called upon by accountants in your firm or organization to participate in dealing with accounting problems?



(E - 2) To what extent do you feel that you are involved with accountants in your organization to participate in dealing with accounting problems?

Extent of involvement Accounting problems **	To a very great extent	To a considerable extent	To some extent	To a small extent	To very little extent
Operating Budgets.					
Capital Budgets,					
Cost allocation.					
Cost control.					
Analysis of distribution costs.					
Others (please specify)					
-----					
-----					
-----					

\* This section is applicable also if O.R. unit of activity in you firm or organization is under the responsibility of the finance director, the controller, or the chief accountant.

\*\* Of course, it is difficult to attach - with complete accuracy - some problems to specific departments within the firm or the organization such as accounting problems and marketing problems. Nevertheless, it is possible to segment - with moderate confidence - the firm's problems into sub-systems such as : accounting sub-system, engineering sub-system, R. and D. sub-system, and so on. Accordingly, problems listed in the above table are generally accounting ones.



(E - 3) In assisting in dealing with accounting problems, have you found any difficulty?

Yes

1

↓

No

2

Go to question (F - 1, next page)

(E - 4) Please tick any of the following factors that apply.

(i)	Accountants do not explain their problems clearly.	
(ii)	Shortage of trained accounting staff to work with me in dealing with their problems.	
(iii)	Senior accounting executive does not encourage the application of O.R. concepts and methodology.	
(iv)	The need for training in accounting systems, concepts and methodology which I - have no time to devote to and/or - find it difficult and/or - am not willing to undergo	--- --- ---
(v)	Others (please specify) ----- ----- ----- -----	

Go to question (F - 1, next page)

(E - 5) If possible, what are your reactions to not being called upon by accountants to participate in dealing with accounting problems?

1. \_\_\_\_\_  
 \_\_\_\_\_

2. \_\_\_\_\_  
 \_\_\_\_\_

3. \_\_\_\_\_  
 \_\_\_\_\_

Card .6

F - BACKGROUND EDUCATION AND/OR TRAINING IN ACCOUNTING AND INFORMATION SYSTEMS

(F - 1) How relevant do you consider education and/or training in accounting and information systems' topics?

- a. Wholly relevant.
- b. Partly relevant.
- c. A little relevant. → Go to
- d. Not relevant at all. → question
- e. Undecided. → (G - 1, page 16)

(F - 2) Please indicate which of the following accounting and information system's topics that you have any idea about in accordance with the main source of acquiring that information.

"Tick only one box on each row"

Accounting and Information Systems Topics	Formal Education and Training Through		Informal Personal Reading	Combination of formal and informal education and Training.	Others	None
	Formal Exam. Courses	Formal Training Courses				
Accounting theory and principles.						
Cost classification and basic cost records.						
Estimation of costs.						
Cost allocation.						
Budgetary control systems.						
Standard cost systems.						
Computer-based management information systems.						
Others (please specify)						
-----						
-----						
-----						
-----						

Card 6

(F - 3) Please indicate how often do you feel that you should know about accounting and information systems.

<input style="width: 80%; height: 80%;" type="checkbox"/>	<input style="width: 80%; height: 80%;" type="checkbox"/>	<input style="width: 80%; height: 80%;" type="checkbox"/>	<input style="width: 80%; height: 80%;" type="checkbox"/>	<input style="width: 80%; height: 80%;" type="checkbox"/>
5	4	3	2	1
Not at all	Occasionally	Sometimes	Quite often	Very often

(F - 4) Of your experience in the operational research field, to what extent do you feel that you are willing to attend training and/or educational courses in accounting and information systems.

"Tick only one box on each row"

	5	4	3	2	1
Type of accounting and information systems course	To a very great extent	To considerable extent	To some extent	To a very little extent	Not at all
Accounting theory and principles.					
Cost classification and basic cost records.					
Estimation of costs.					
Cost allocation.					
Budgetary control systems.					
Standard cost systems.					
Computer-based management information systems.					
Others (please specify)					
-----					
-----					
-----					



G - 'O.R. - ACCOUNTING' PRESENT AND FUTURE RELATIONSHIPS

Present Relationships

(G - 1) The following series of statements have been designed to obtain analysis of the kind of relationship between O.R. and accounting at present as seen by O.R. specialists. There are no right or wrong answers in this respect. Using the scale below, please tick only one answer on each row.

Statements	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1. Accountants are willing to provide O.R. specialists with the cost and financial information needed for O.R. projects.					
2. Criticism of accountants and accounting systems and principles are mostly welcomed in the finance department.					
3. The senior accounting executive is always contesting for control over O.R. activities.					
4. I do not like working with accountants.					
5. Accountants do not have to actively participate in dealing with O.R. problems and studies; they should only focus on accounting matters only.					
6. Accountants are mostly enthusiastic about O.R. proposals and recommendations.					
7. I feel at ease in working with accountants.					
8. Accountants are chiefly concerned with the financial transactions: their recording, classification and legalistic issues rather than the managerial function.					
9. Accountants do not accept any criticism of accounting systems and principles, particularly by O.R. specialists.					

Card 7

(G - 1) Continued from previous page.

Statements	5	4	3	2	1
	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
10. Accountants are one of the greatest obstacles to acceptance of recommendations of O.R. specialists.					
11. The senior accounting executive is encouraging accountants to co-operate with O.R. specialists for the cost and financial information needed for O.R. projects.					
12. Accountants should take an active interest in O.R. projects and studies as well as in the accounting activities.					

(G 4:2) How would you describe the reputation of your O.R. group as seen by the following individuals and groups.

"Tick only one answer on each row"

Reputation of your O.R. Group As seen by:	Very Good	Good	I don't know	Poor	Very Poor
The managing director					
The consensus view of senior management					
The finance director or the controller					
The chief accountant					
Yourself					
Your O.R. group					
Accounting department individuals					
Others (please specify)					
-----					
-----					



Future Relationships

(G - 3) With regard to "O.R. - Accounting" relationship in the longer-run, please list (giving brief descriptions) two of the general problem areas which need additional research and investigation. (The aim here is to identify the most critical problems with respect to "O.R. specialists - Accountants" relationships that need further additional investigation).

1. a. (title) _____ b. (brief description of the problem) _____ _____ _____ _____ _____	2. a. (title) _____ b. (brief description of the problem) _____ _____ _____ _____ _____
---	---

(G - 4) Looking into the future, what is your opinion of the kind of relationship between O.R. responsibilities and accounting function?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(G - 5) If you have been asked to appoint an accountant to work with your O.R. group, what type of educational background, training, experience, and personality traits, would you require in him for the purpose of that job?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

K - FURTHER COMMENTS

Please give below any further comments which you - as a member of the operational research group - have about the manner and the problems of communication with accountants in your firm or organisation.

Thank you very much for your interest and co-operation.



APPENDIX A, <sup>4</sup> 4.3.

ICMA MAILED-QUESTIONNAIRE

(ABRIDGED)

The University of Sheffield  
Division of Economic Studies

Introduction

It is evident that accountants play an essential role in industry, commerce, government and to society in general. The value of the accounting function in general is not questioned. Keeping abreast of developments in the closely related fields of expertise, has been one of the key features of recent accounting developments.

Recent developments in computer technology, operational research, and behavioural science have very much affected the accountant's environment. This has led us to attempt to investigate the working relationships and communication problems between accountants on the one hand, and operational researchers, data processing and information technology specialists on the other. Basically, this research project, of which this questionnaire is a part, does not make accounting systems and principles the main focus, but the emphasis is mainly directed towards investigating the effects of these recent developments (in computer technology and operational research) upon the accounting field, by obtaining information relating to the following questions:

What are the problems of communication between accountants, O.R. and D.P. specialists?

What are the major contributing factors to these problems?

What is the degree of accountants' involvement in these areas?

What is the suitable strategy for the accountant for gaining the opportunity and facing the challenge of these recent developments in the management areas?

It is hoped that this survey will give an indication of the present shape of working relationships and communication problems between accountants, O.R. and D.P. specialists; and the extent to which accountants are satisfied with the present contextual shape of this type of relationship.

A vital step is to ask accountants about the obstacles and problems as they perceive them. We therefore request your co-operation for these purposes by completing the following questionnaire.

It is emphasized that any information given will be treated in strict confidence and also that all information will be analysed in a general manner as statistical summaries so that individuals and specific institutions are not identifiable.

A - Background information

(A-1) Please describe your present job from the following dimensions:

- (i) Position in the organisation:
- (ii) Area of specialisation:
- (iii) The person(s) (or managerial level) you have to report to:
- (iv) The person(s) (or managerial level) reporting to you:
- (v) Number of years with this firm:
- (vi) Number of years in the present jobs (if different from above):

(A-2) Please state your age and total experience in the field of accounting for managerial planning and control purposes:

(A-3) Please indicate below your membership of professional societies or associations:

- (i) Professional accounting societies or associations:
- (ii) Professional non-accounting societies or associations:

(A-4) Please indicate below your mathematical and/or statistical background - if any?

(A-5) Please indicate below your thinking, of the mathematical and statistical background that the management accountant ought to have in the seventies?

(A-6) How often do you feel that you should know about operational research concepts and techniques?

B - O.R. Education and training

(B-1) What ideas do you have about O.R. concepts and techniques? (If none, go to question (D-1)).

(B-2) If you have any idea about O.R. concepts and techniques, please explain the main source of acquiring that information.

(B-3) If you have attended education or training courses in O.R. please evaluate them from the point of view of level of mathematical sophistication as a pre-requisite and the reference to accounting examples and problems.



- (B-4) Please explain how interesting the course(s) that you have attended are in showing the importance of the application of the following techniques to accounting problems.
- (B-5) In attending education or training course(s) in O.R. please indicate the main difficulties - if any - that you have met.

Implications for the future education of accountants

- (B-6) How important is it to get accountants acquainted with O.R. concepts?
- (i) Degree of importance
- (ii) Factors that led to this belief are:
- (iii) If you think that it is extremely, important, or fairly, important that the accountant be acquainted with O.R. concepts, please tick any of the approaches and categories that you think are appropriate in accordance with the extent of their suitability in this respect.

C - Working Relationships with O.R. specialists

- (C-1) Does your firm or organization conduct (formally or informally) any form of O.R. activities:  
(If no, go to question (F-1)).
- (C-2) What kinds of communication are there between you and the O.R. specialists in your firm or organization?
- (No communication with O.R. specialists)
- (C-3) If there is no kind of communication between you and the O.R. specialists in your firm or organization please explain the reasons for that situation:
- (C-4) Does this situation (i.e. non-communication with O.R. specialists in your firm or organization) make you feel concerned? and if so, please indicate how often:  
(Go to section F, " ").

Communication with O.R. specialists:

- (C-5) If you communicate with O.R. specialists to provide them with the data and information required for O.R. projects and studies, please tick any of the statements that are appropriate:

(C-6) Please indicate from the list below the categories from which you have furnished the O.R. specialists with relevant information in the last three years:

\* Attention is here directed towards the distinction between data and information: data is the accounting reports and statements as it is without change or modification to meet the different needs of O.R. projects and studies; and information is the extraction of specific details to be presented to meet the requirements of O.R. projects and studies.

(C-7) Please tick in one of the three boxes below that which is the closest statement giving your degree of satisfaction with the information you provide as an aid in building O.R. models and training solutions:

"TICK only one box"

(If completely satisfied go to question (C-8))

(If partly satisfied go to question (C-9))

(If not satisfied at all go to question (C-10))

(C-8) Please tick any of the statements which explain your response in (C-7).

(C-9) Please tick any of the statements which explain your response in (C-7).

(C-10) Please tick any of the statements which explain your response in (C-7).

D - "Accounting - O.R." future relationships:

Present Relationships:

(D-1) The following series of statements have been designed to obtain analysis of the kind of relationship between accounting and O.R., at present, as seen by accountants. There are no right or wrong answers in this respect. Using the scale below, please tick only one answer on each row.

(D-2) As far as the development and implementation of O.R. projects, how would you describe the reputation of O.R. specialists - in your firm or organization - as seen by the following individuals and groups?



Future Relationships:

(D-3) As far as <sup>the</sup> "Accounting - O.R." relationships in the longer-term is concerned, please list (giving brief descriptions) two of the general problem areas which need additional research and investigation. (The aim here is to identify the most critical problems with respect to "Accounting - O.R." relationships that need further additional investigation).

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| 1. a. (title)                         | 2. a. (title)                         |
| b. (brief description of the problem) | b. (brief description of the problem) |

(D-4) Looking into the future, what is your opinion of the kind of relationship between accounting function and O.R. responsibilities?

E - O.R. concepts and techniques used in dealing with accounting problems:

Please answer this section if you are an accountant who has had some experience in the application of O.R. concepts and methodology to accounting problems and projects. Otherwise, tick here and then go to Section F, below.

- (i) Accounting application areas are:
- (ii) O.R. concepts and methodology used are:
- (iii) The extent to which OR specialists - in your firm - are participating in dealing with accounting applications:

F - Training in the E.D.P. Field:

(F-1) How relevant, do you consider training in the E.D.P. field?

- |                         |                       |
|-------------------------|-----------------------|
| a. Wholly relevant.     |                       |
| b. Partly relevant.     |                       |
| c. A little relevant    | } Go to question G-1. |
| d. Not relevant at all. |                       |
| e. Undecided.           |                       |

(F-2) Have you had any formal training in the E.D.P. field in the recent past?  
(If no go to question G-1)

(F-3) Are you at present engaged in any area related to the E.D.P. field?  
(If no go to question H-2).



- (F-4) What courses of training have you attended in the E.D.P. field? Please indicate opposite each type of course attended, its duration in accordance with your classification; Appreciation, intermediate or advanced\*.

"Please write only the number of days or weeks in the appropriate cell(s)".

- \* There is no hard distinction between these categories. Nevertheless, it is hoped that there are broad lines as a guide in this respect. For example, the appreciation course is mostly an introduction to the computer; concepts, logic, uses, advantages and limitations. Also, the intermediate course is intended to give a fairly good idea about one or more high level languages (Fortran, Algol, Cobol, etc.,) and their application to the firm's problems. Consequently, the advanced course is intended to provide a sophisticated understanding in the use and application of computerisation.

#### G - Accountants' involvement in computer and information technology areas

Please evaluate the state of accountants' direct participation in the development and implementation of computer-based information systems and setting up of a computer department in your firm's organization from the following points of view:

- (i) Accountants' interest:
- (ii) Effects of accountants' participation:
- (iii) Accountants' support to E.D.P. services:
- (iv) Your consideration of accountants' participation in E.D.P. services:
- (v) Your position of accountants' participation in E.D.P.
- (vi) Your degree of satisfaction of the accounting involvement in the E.D.P. field.

#### H - "Accounting - Computer and Information Technology" Future Relationships

##### Present relationships:

- (H-1) The following series of statements have been designed to obtain analysis of the kind of relationship between accounting function on the one hand and D.P. and information technology responsibilities on the other, in business organizations or firms at present. There are no wrong or right answers in this respect. Using the scale, please tick only one answer on each row.

Future Relationships:

(H-2) In connection with the "accounting D.P. and information technology" relationship in business organizations in the long term, please list (giving brief descriptions) two of the general problem areas which need additional research and investigation. (The aim here is to identify the most critical problems facing business organizations with respect to "accounting - computer and information technology" future relationships that need further additional investigation).

1. a. (title)

2. a. (title)

b. (brief description  
of the problem)

b. (brief description  
of the problem)

(H-3) Looking into the future, what is your opinion of the kind of relationship between computer technology and the accounting function in your organization?

(H-4) If you have been asked to appoint a computer specialist to join your accounting group, what type of educational background, training, experience and, personal traits, would you require in him for the purpose of that job?

I - Further Comments:

Please give below any further comments you have about working relationships and communication problems with O.R. and computer and information technology specialists in your firm or organization.

Thank you very much for your interest and co-operation.

APPENDIX B

APPENDIX TO PART III: A CLOSER LOOK INTO ACCOUNTANTS-D.P.  
AND MS/OR SPECIALISTS INTERACTION.

---

- B, # 1. Organizations participated.
  - B, # 1.1. Selection criteria.
  - B, # 1.2. Several stages of carrying out 'case-studies' for the qualitative evidence.
  - B, # 1.3. The "statistical evidence" and the sampling methodology adopted.
  
- B, # 2. Summary statistics and raw data.
  - B, # 2.1. Summary statistics and raw data of the accountants - D.P. specialists' interaction.
  - B, # 2.2. Summary statistics and raw data of the accountants - MS/OR specialists' interaction.
  
- B, # 3. Documentary and Design.
  - B, # 3.1. Personal and organizational background and functional information (abridged).
  - B, # 3.2. Accountants - D.P. specialists' interaction (specimen).
  - B, # 3.3. Accountants - MS/OR specialists' interaction (specimen).



APPENDIX B, # 1.

ORGANIZATIONS PARTICIPATED

APPENDIX B, ~~1~~ 1. ORGANIZATIONS PARTICIPATED

The objective of this appendix is to explain in some detail the various selection criteria and the stages of carrying out a small number of detailed case studies presented in chapter seven. These detailed case studies have provided the researcher with a "richer" qualitative evidence needed to qualify the direction of much of the quantitative evidence presented in chapters eight and nine.

Accordingly appendix B, 1.1. examines the criteria used in selecting detailed case study organizations. Appendix B, 1.2. discusses the several stages of carrying out the organizational diagnosis of participating organizations presented in chapter seven. Appendix B, 1.3. details the sampling methodology adopted in the course of collecting empirical data about the attitudinal and factual aspects of communication between the respective groups.

APPENDIX B, ~~§~~ 1.1. SELECTION CRITERIA

The conditions upon which this study has outlined its boundaries are:

- (i) use of MS/OR and E.D.P. services. Organizations in which it was believed that no internal MS/OR type activities took place, and/or no involvement in the E.D.P. field occurred, were excluded from the study.
- (ii) willingness on the part of the respective organizations to take part in the study. Guided by the results of the explorative phase reported in part II, the researcher was able to select a number of organizations that might be interested in taking part in the study.

In this respect, the researcher did not wish to limit this phase of the study to one type of industry. This is possible in view of the fact that there were not very many organizations that were willing to give full-fledged case-study facilities.



APPENDIX B, # 1.2. SEVERAL STAGES OF CARRYING OUT  
'CASE-STUDIES' FOR THE QUALITATIVE EVIDENCE

- First: Introducing the researcher to the organization in general through introducing him to heads of departments, groups or divisions concerned: finance and accounting, operational research and data processing, for a preliminary discussion about the functioning of the systems they manage and supervise.
- Second: Providing the researcher with any material that managers - of the above-mentioned groups, departments, or divisions - think may help in forming a background knowledge about that department's function within the organization's activities. This material would help in understanding the attitudinal aspects of communication and working relationships between accountants, D.P. and OR specialists.
- Third: The next step was to interview interested individuals and groups for their opinions and views about communication patterns and working relationships between these functions, based on a combination of structured - and semi-structured - interview schedules.
- Fourth: If possible, permitting the researcher to observe the development and/or implementation of sub-systems such as: OR project being developed; the use of computer package; attending meetings or discussions at which such projects are discussed between the OR, D.P., and accounting functions. The aim of this stage was to help the researcher to understand elements and factors governing accountants interface with MS/OR and D.P. specialists. This phase, if granted, was to be carried out concurrently with the previous one; interviews.

APPENDIX B, # 1.3. THE STATISTICAL EVIDENCE AND THE  
SAMPLING METHODOLOGY ADOPTED.

---

For the statistical evidence the dominant sampling methodology employed in this part of the study is the stratified approach. It was applied on three fronts to maximize the number of cases that would take part in the fully-structured part of the closer look into accountants/E.D.P. and MS/OR specialists' interaction, within the limited financial resources available to the research. The three fronts were:

(a) again approaching those respondents who took part in the first empirical phase (see appendix A, #2.) with some modifications:

(i) approaching only those respondents who were, in the researcher's opinion, in one way or another, willing to take part in further examination of the problem under investigation. The researcher based his judgement on one or more of several criteria. Amongst these criteria were the explicit statement of the respondent to further participate in the study; completing the original form sent to him in a comprehensive manner with elaborations on many of his answers; the willingness to be interviewed about the points that he thought he was interested in; and the absence of any direct or indirect indication that the respondent would decline any further invitation to participate in the study.

(ii) cross-checking that they were still in their organizations that should be within those ranked amongst the top third of British industry. If they moved to other organizations outside the outlined scope of the study, they were excluded from the sampling design at this stage.

- (iii) excluding those respondents who indicated they had no direct relationship or even indirect involvement in the area under investigation. Since the research is mainly concerned with accountants/E.D.P. and MS/OR specialists' interaction, those who had little or no experience in this respect are excluded from the phase of the study.
- (b) including interviewees from the small number of case study organizations, particularly those interviewed after the researcher was satisfied with consistency, content and face validity, and reliability of the measurement instruments used.
- (c) selecting a random sample of a small number of respondents from organizations (within the top third of British industrial organizations as ranked by the Times 1000) that were not represented according to considerations (a) and (b) above, together with the detailed criteria outlined in appendix A, 2., and its subsections.

Implementation of the stratified strategy was carried out by asking those contacted - according to (a), (b), and (c) above - to give names and addresses of possible contacts within their organizations whom they consider to be experienced about the area of research and whom they think would be willing to partake in the research. Each of these functional groups within an organization is considered as a stratum. In this respect, it is worth mentioning that the researcher had to take appropriate measures to make sure that participants' observations were very much independent. Completed documents from the same organization, or more specifically, the nominator's and nominee's completed forms, were checked by the researcher for their independence. Although the researcher



has endeavoured to maintain, as much as possible, an equal weight from participating organizations and groups of interest to the study, the findings of the present survey are not the subject of sweeping generalizations.

The researcher, however, is satisfied that the adopted methodology has reasonably represented the broad view of each of the group's attitudes.

APPENDIX B, # 2.

SUMMARY STATISTICS AND RAW DATA

APPENDIX B, # 2.1

SUMMARY STATISTICS AND RAW DATA OF THE  
ACCOUNTANTS - EDP SPECIALISTS' INTERACTION

Tables 1 → 59	Cross-classification* of the behavioural indicators (1 - 59) according to participants' field of specialization; that is, accounting or EDP.**
Table 60 - a	Pearson's product moment correlation co-efficients.
Table 60 - b	Eigenvalues.
Table 60 - c	Cumulative proportion of total variance.
Table 60 - d	Factor matrix before rotation.
Table 61	Kendall rank order correlation co-efficients.

---

\* The numbers and labels on the left margin of every table are, respectively, the value codes and value labels corresponding to the behavioural indicator(s). The numbers and labels on the upper margin of every table are the value codes and value labels corresponding to group classification of participants. Cross-tabulations are performed excluding missing data.

\*\* Absolute frequencies (COUNT), column percentages (COL PCT) and total percentages (TOT PCT) of the entire table are presented. (For further description of the structure of these tables, see Nie et al, pp. 121 - 125).



Table 1-0

	COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
			1	2	
MODERATELY DISAGREE	2	I	2	2	4
			2.3	3.3	2.7
		I	1.4	1.4	
SLIGHTLY DISAGREE	3	I	0	2	2
			0.0	3.3	1.4
		I	0.0	1.4	
UNDECIDED	4	I	2	1	3
			2.3	1.7	2.1
		I	1.4	.7	
SLIGHTLY AGREE	5	I	0	11	17
			7.0	18.3	11.0
		I	4.1	7.0	
MODERATELY AGREE	6	I	41	20	69
			47.7	40.7	47.3
		I	28.1	19.2	
STRONGLY AGREE	7	I	33	16	51
			40.7	20.7	34.9
		I	24.0	11.0	
COLUMN TOTAL			86	60	146
			58.9	41.1	100.0

Table 1-R

	COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
			1	2	
DISAGREE	1	I	2	4	6
			2.3	6.7	4.1
		I	1.4	2.7	
UNDECIDED	2	I	2	1	3
			2.3	1.7	2.1
		I	1.4	.7	
AGREE	3	I	42	55	137
			95.3	91.7	93.8
		I	56.2	37.7	
COLUMN TOTAL			86	60	146
			58.9	41.1	100.0

Table 2-0

	COUNT	COL TOT	PCT PCT	ACCOUNTING		EDP	ROW TOTAL
				1	2		
STRONGLY AGREE	1			4	5	9	
				4.7	8.3	6.2	
				2.7	3.4		
MODERATELY AGREE	2			0	17	25	
				9.3	28.3	17.1	
				5.5	11.0		
SLIGHTLY AGREE	3			23	13	36	
				26.7	21.7	24.7	
				15.8	0.9		
UNDECIDED	4			4	5	9	
				4.7	8.3	6.2	
				2.7	3.4		
SLIGHTLY DISAGREE	5			0	6	14	
				9.3	10.0	9.6	
				5.5	4.1		
MODERATELY DISAGREE	6			19	8	27	
				22.1	13.3	18.5	
				13.0	5.5		
STRONGLY DISAGREE	7			20	6	26	
				23.3	10.0	17.8	
				13.7	4.1		
COLUMN TOTAL				86	60	146	
				58.9	41.1	100.0	

Table 2-R

	COUNT	COL TOT	PCT PCT	ACCOUNTING		EDP	ROW TOTAL
				1	2		
AGREE	1			35	35	70	
				40.7	58.3	47.9	
				24.0	24.0		
UNDECIDED	2			4	5	9	
				4.7	8.3	6.2	
				2.7	3.4		
DISAGREE	3			47	20	67	
				54.7	33.3	45.9	
				32.2	13.7		
COLUMN TOTAL				86	60	146	
				58.9	41.1	100.0	

Table 3.0

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
STRONGLY AGREE	1	5 5.0 3.4	11 18.3 7.5		16 11.0
MODERATELY AGREE	2	8 9.3 5.5	17 28.3 11.6		25 17.1
SLIGHTLY AGREE	3	15 17.4 10.3	7 11.7 4.8		22 15.1
UNDECIDED	4	3 3.5 2.1	1 1.7 .7		4 2.7
SLIGHTLY DISAGREE	5	7 8.1 4.8	7 11.7 4.8		14 9.6
MODERATELY DISAGREE	6	22 25.6 15.1	6 10.0 4.1		28 19.2
STRONGLY DISAGREE	7	26 30.2 17.8	11 18.3 7.5		37 25.3
COLUMN TOTAL		86 58.9	60 41.1		146 100.0

Table 3-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
AGREE	1	28 32.6 19.2	35 58.3 24.8		63 43.2
UNDECIDED	2	3 3.5 2.1	1 1.7 .7		4 2.7
DISAGREE	3	55 64.0 37.7	24 40.0 16.4		79 54.1
COLUMN TOTAL		86 58.9	60 41.1		146 100.0



Table 4-0

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
	1	2			
STRONGLY DISAGREE	1	1.2	1.7	1.4	2
		.7	.7		
MODERATELY DISAGREE	2	1.2	1.7	1.4	2
		.7	.7		
SLIGHTLY DISAGREE	3	1.2	3.3	2.1	3
		.7	1.4		
UNDECIDED	4	2.3	1.7	2.1	3
		1.4	.7		
SLIGHTLY AGREE	5	9	19	20	20
		10.5	31.7	19.2	19.2
		6.2	13.0		
MODERATELY AGREE	6	42	20	70	70
		48.8	46.7	47.9	47.9
		28.8	19.2		
STRONGLY AGREE	7	30	0	30	30
		34.9	13.3	26.0	26.0
		20.5	5.5		
COLUMN TOTAL		86	60	146	146
		58.9	41.1	100.0	

Table 4-R

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
	1	2			
DISAGREE	1	3	4	7	7
		3.5	6.7	4.8	4.8
		2.1	2.7		
UNDECIDED	2	2	1	3	3
		2.3	1.7	2.1	2.1
		1.4	.7		
AGREE	3	81	55	136	136
		94.2	91.7	93.2	93.2
		55.5	37.7		
COLUMN TOTAL		86	60	146	146
		58.9	41.1	100.0	

Table 5-0

	COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
			1	2	
STRONGLY DISAGREE	1	0	5	5	5
		0.0	8.3	3.4	
		0.0	3.4		
MODERATELY DISAGREE	2	3	14	17	17
		3.5	23.3	11.6	
		2.1	9.6		
SLIGHTLY DISAGREE	3	9	12	21	21
		10.5	20.0	14.4	
		6.2	8.2		
UNDECIDED	4	4	0	12	12
		4.7	13.3	8.2	
		2.7	5.5		
SLIGHTLY AGREE	5	10	6	22	22
		18.6	10.0	15.1	
		11.0	4.1		
MODERATELY AGREE	6	37	13	50	50
		43.0	21.7	34.2	
		25.3	8.9		
STRONGLY AGREE	7	17	2	19	19
		19.0	3.3	13.0	
		11.6	1.4		
COLUMN TOTAL		86	60	146	
		58.9	41.1	100.0	

Table 5-R

	COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
			1	2	
DISAGREE	1	12	31	43	43
		14.0	51.7	29.5	
		8.2	21.2		
UNDECIDED	2	4	8	12	12
		4.7	13.3	8.2	
		2.7	5.5		
AGREE	3	70	21	91	91
		81.4	35.0	62.3	
		47.9	14.4		
COLUMN TOTAL		86	60	146	
		58.9	41.1	100.0	

Table 6-0

	COUNT	COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
			1	2	
STRONGLY AGREE	1	7.1 4.1	6	5	11
			7.1	8.3	7.6
			4.1	3.4	
MODERATELY AGREE	2	14.1 8.3	12	12	24
			14.1	20.0	16.6
			8.3	0.3	
SLIGHTLY AGREE	3	12.9 7.6	11	11	22
			12.9	10.3	15.2
			7.6	7.6	
UNDECIDED	4	1.2 .7	1	5	6
			1.2	8.3	4.1
			.7	3.4	
SLIGHTLY DISAGREE	5	17.6 10.3	15	8	23
			17.6	13.3	15.9
			10.3	5.5	
MODERATELY DISAGREE	6	28.2 16.6	24	13	37
			28.2	21.7	25.5
			16.6	9.0	
STRONGLY DISAGREE	7	18.0 11.0	10	0	22
			18.0	10.0	15.2
			11.0	4.1	
COLUMN TOTAL			85	60	145
			58.6	41.4	100.0

Table 6-R

	COUNT	COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
			1	2	
AGREE	1	34.1 20.0	29	20	57
			34.1	46.7	39.3
			20.0	19.3	
UNDECIDED	2	1.2 .7	1	5	6
			1.2	8.3	4.1
			.7	3.4	
DISAGREE	3	64.7 37.0	55	27	82
			64.7	45.0	56.6
			37.0	18.6	
COLUMN TOTAL			85	60	145
			58.6	41.4	100.0



Table 7-0

	COUNT COL PCT TOT PCT	I I I	ACCOUNTING		EDP	ROW TOTAL
			1	2		
USUALLY NOT THE CASE	2	I	1		4	5
		I	1.2		6.7	3.4
		I	.7		2.7	
MORE FALSE THAN TRUE	3	I	7		6	13
		I	8.1		10.0	8.9
		I	4.8		4.1	
UNCERTAIN ABOUT THIS	4	I	7		6	13
		I	8.1		10.0	8.9
		I	4.8		4.1	
MORE TRUE THAN FALSE	5	I	35		23	58
		I	40.7		38.3	39.7
		I	24.0		15.8	
OFTEN TRUE	6	I	26		15	41
		I	30.2		25.0	28.1
		I	17.0		10.3	
DEFINITELY TRUE	7	I	10		6	16
		I	11.6		10.0	11.0
		I	6.0		4.1	
COLUMN TOTAL			86 58.9	60 41.1	146 100.0	

Table 7-R

	COUNT COL PCT TOT PCT	I I I	ACCOUNTING		EDP	ROW TOTAL
			1	2		
FALSE	1	I	8		10	18
		I	9.3		16.7	12.3
		I	5.5		6.8	
UNCERTAIN ABOUT THIS	2	I	7		6	13
		I	8.1		10.0	8.9
		I	4.8		4.1	
TRUE	3	I	71		44	115
		I	82.6		73.3	78.8
		I	48.6		30.1	
COLUMN TOTAL			86 58.9	60 41.1	146 100.0	

Table 8-0

	COUNT	COL TOT	PCT PCT	ACCOUNTING	EDP		ROW TOTAL
					1	2	
STRONGLY AGREE	1	11			5		16
		12.9			8.3		11.0
		7.6			3.4		
MODERATELY AGREE	2	19			11		30
		22.4			18.3		20.7
		13.1			7.6		
SLIGHTLY AGREE	3	19			22		41
		22.4			36.7		28.3
		13.1			15.2		
UNDECIDED	4	7			4		11
		8.2			6.7		7.6
		4.8			2.8		
SLIGHTLY DISAGREE	5	11			4		15
		12.9			6.7		10.3
		7.6			2.8		
MODERATELY DISAGREE	6	12			7		19
		14.1			11.7		13.1
		8.3			4.8		
STRONGLY DISAGREE	7	6			7		13
		7.1			11.7		9.0
		4.1			4.8		
COLUMN TOTAL		85			60		145
		58.6			41.4		100.0

Table 8-R

	COUNT	COL TOT	PCT PCT	ACCOUNTING	EDP		ROW TOTAL
					1	2	
AGREE	1	49			38		87
		57.6			63.3		60.0
		33.8			26.2		
UNDECIDED	2	7			4		11
		8.2			6.7		7.6
		4.8			2.8		
DISAGREE	3	29			18		47
		34.1			30.0		32.4
		20.0			12.4		
COLUMN TOTAL		85			60		145
		58.0			41.4		100.0

Table 9-0

	COUNT	ACCOUNTING		EDP	ROW TOTAL
		COL TOT	PCT PCT		
	1	1	2		
STRONGLY AGREE	1	20	22	42	
		23.3	36.7	28.0	
		13.7	15.1		
MODERATELY AGREE	2	19	11	30	
		22.1	18.3	20.5	
		13.0	7.5		
SLIGHTLY AGREE	3	25	15	40	
		29.1	25.0	27.4	
		17.1	10.3		
UNDECIDED	4	5	2	7	
		5.8	3.3	4.8	
		3.4	1.4		
SLIGHTLY DISAGREE	5	6	6	12	
		7.0	10.0	8.2	
		4.1	4.1		
MODERATELY DISAGREE	6	8	3	11	
		9.3	5.0	7.5	
		5.5	2.1		
STRONGLY DISAGREE	7	3	1	4	
		3.5	1.7	2.7	
		2.1	.7		
COLUMN TOTAL		86	60	146	
		58.9	41.1	100.0	

Table 9-R

	COUNT	ACCOUNTING		EDP	ROW TOTAL
		COL TOT	PCT PCT		
	1	1	2		
AGREE	1	64	48	112	
		74.4	80.0	76.7	
		43.8	32.9		
UNDECIDED	2	5	2	7	
		5.8	3.3	4.8	
		3.4	1.4		
DISAGREE	3	17	10	27	
		19.8	16.7	18.5	
		11.6	6.8		
COLUMN TOTAL		86	60	146	
		58.9	41.1	100.0	



Table 10-0

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1 DEFINITELY FALSE	5 5.9 3.4	0 0.0 0.0	5 3.4	5 3.4	5 3.4
2 USUALLY NOT THE CASE	9 10.6 6.2	7 11.7 4.8	16 11.0	16 11.0	16 11.0
3 MORE FALSE THAN TRUE	10 11.0 6.9	5 8.3 3.4	15 10.3	15 10.3	15 10.3
4 UNCERTAIN ABOUT THIS	10 11.0 6.9	0 13.3 3.3	10 12.4	10 12.4	10 12.4
5 MORE TRUE THAN FALSE	22 25.9 15.2	13 21.7 9.8	35 24.1	35 24.1	35 24.1
6 OFTEN TRUE	19 22.4 13.1	14 23.3 9.7	33 22.8	33 22.8	33 22.8
7 DEFINITELY TRUE	10 11.0 6.9	13 21.7 9.8	23 15.9	23 15.9	23 15.9
COLUMN TOTAL	85 58.6	60 41.4	145 100.0	145 100.0	145 100.0

Table 10-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1 FALSE	24 28.2 16.6	12 20.0 8.3	36 24.8	36 24.8	36 24.8
2 UNCERTAIN ABOUT THIS	10 11.0 6.9	8 13.3 5.5	18 12.4	18 12.4	18 12.4
3 TRUE	51 60.8 35.2	40 66.7 27.6	91 62.8	91 62.8	91 62.8
COLUMN TOTAL	85 58.6	60 41.4	145 100.0	145 100.0	145 100.0

Table 11-0

	COUNT	COL PCT	TOT PCT	ACCOUNTING	EDP		ROW TOTAL
					1	2	
STRONGLY DISAGREE	1	1.2	.7	1	0.0	0.0	1.7
MODERATELY DISAGREE	2	12.9	7.0	11	4	6.7	10.3
SLIGHTLY DISAGREE	3	11.0	6.9	10	2	3.3	8.3
UNDECIDED	4	12.9	7.6	11	2	3.3	9.0
SLIGHTLY AGREE	5	24.7	14.5	21	9	15.0	20.7
MODERATELY AGREE	6	24.7	14.5	21	27	45.0	33.1
STRONGLY AGREE	7	11.0	6.9	10	10	26.7	17.9
COLUMN TOTAL		58.6		85	60	41.4	145

Table 11-R

	COUNT	COL PCT	TOT PCT	ACCOUNTING	EDP		ROW TOTAL
					1	2	
DISAGREE	1	25.9	15.2	22	6	10.0	19.3
UNDECIDED	2	12.9	7.6	11	2	3.3	9.0
AGREE	3	61.2	35.9	52	52	86.7	71.7
COLUMN TOTAL		58.6		85	60	41.4	145

Table 12-0

	COUNT COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
		1	2	
1				
STRONGLY AGREE	1 1.2 .7	1 1.2 .7	5 8.3 3.4	6 4.1
2				
MODERATELY AGREE	2 21.2 12.4	18 21.2 12.4	10 16.7 6.9	28 19.3
3				
SLIGHTLY AGREE	3 29.4 17.2	25 29.4 17.2	17 28.3 11.7	42 29.0
4				
UNDECIDED	4 10.6 6.2	9 10.6 6.2	5 8.3 3.4	14 9.7
5				
SLIGHTLY DISAGREE	5 18.8 11.0	16 18.8 11.0	5 8.3 3.4	21 14.5
6				
MODERATELY DISAGREEE	6 12.9 7.0	11 12.9 7.0	8 13.3 5.5	19 13.1
7				
STRONGLY DISAGREEE	7 5.9 3.4	5 5.9 3.4	10 16.7 6.9	15 10.3
COLUMN TOTAL	85 58.6	85 58.6	60 41.4	145 100.0

Table 12-R

	COUNT COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
		1	2	
1				
AGREE	1 51.8 30.3	44 51.8 30.3	32 53.3 22.1	76 52.4
2				
UNDECIDED	2 10.6 6.2	9 10.6 6.2	5 8.3 3.4	14 9.7
3				
DISAGREE	3 37.6 22.1	32 37.6 22.1	23 38.3 15.9	55 37.9
COLUMN TOTAL	85 58.6	85 58.6	60 41.4	145 100.0



Table 13-0

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
DEFINITELY TRUE	1 3 3.5 2.1	3 4.9 2.1	3 4.9 2.1	6 4.1	
OFTEN TRUE	2 18 21.2 12.3	12 19.7 8.2	12 19.7 8.2	30 20.5	
MORE TRUE THAN FALSE	3 15 17.6 10.3	12 19.7 8.2	12 19.7 8.2	27 18.5	
UNCERTAIN ABOUT THIS	4 19 22.4 13.0	0 13.1 5.5	0 13.1 5.5	27 10.5	
MORE FALSE THAN TRUE	5 12 14.1 8.2	8 13.1 5.5	8 13.1 5.5	20 13.7	
USUALLY NOT THE CASE	6 18 21.2 12.3	15 24.6 10.3	15 24.6 10.3	33 22.6	
DEFINITELY FALSE	7 0 0.0 0.0	3 4.9 2.1	3 4.9 2.1	3 2.1	
COLUMN TOTAL	85 58.2	61 41.0	61 41.0	146 100.0	

Table 13-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
TRUE	1 36 42.4 24.7	27 44.3 18.5	27 44.3 18.5	63 43.2	
UNCERTAIN ABOUT THIS	2 19 22.4 13.0	8 13.1 5.5	8 13.1 5.5	27 18.5	
FALSE	3 30 35.3 20.5	26 42.6 17.8	26 42.6 17.8	56 38.4	
COLUMN TOTAL	85 58.2	61 41.0	61 41.0	146 100.0	

Table 14-O

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1 DEFINITELY FALSE	1 1.2 .7	1 1.2 .7	1 1.0 .7	2 1.4	2 1.4
2 USUALLY NOT THE CASE	2 12.9 7.5	11 12.9 7.5	9 14.8 6.2	20 13.7	20 13.7
3 MORE FALSE THAN TRUE	3 10.6 6.2	9 10.6 6.2	10 16.4 6.8	19 13.0	19 13.0
4 UNCERTAIN ABOUT THIS	4 9.4 5.5	8 9.4 5.5	3 4.9 2.1	11 7.5	11 7.5
5 MORE TRUE THAN FALSE	5 31.0 18.5	27 31.0 18.5	20 32.8 13.7	47 32.2	47 32.2
6 OFTEN TRUE	6 27.1 15.8	23 27.1 15.8	12 19.7 8.2	35 24.0	35 24.0
7 DEFINITELY TRUE	7 7.1 4.1	6 7.1 4.1	6 9.8 4.1	12 8.2	12 8.2
COLUMN TOTAL	85 58.2	85 58.2	61 41.8	146 100.0	146 100.0

Table 14-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1 FALSE	1 24.7 14.4	21 24.7 14.4	20 32.8 13.7	41 28.1	41 28.1
2 UNCERTAIN ABOUT THIS	2 9.4 5.5	8 9.4 5.5	3 4.9 2.1	11 7.5	11 7.5
3 TRUE	3 65.9 38.4	56 65.9 38.4	38 62.3 26.0	94 64.4	94 64.4
COLUMN TOTAL	85 58.2	85 58.2	61 41.8	146 100.0	146 100.0

Table 15-0

	COUNT COL PCT TOT PCT	I ACCOUNTING	EDP		ROW TOTAL
			1	2	
STRONGLY DISAGREE	1	I	3	2	5
		I	3.5	3.3	3.4
		I	2.1	1.4	
MODERATELY DISAGREE	2	I	6	8	14
		I	7.1	13.1	9.6
		I	4.1	5.5	
SLIGHTLY DISAGREE	3	I	8	7	15
		I	9.4	11.5	10.3
		I	5.5	4.8	
UNDECIDED	4	I	0	4	12
		I	9.4	6.6	8.2
		I	5.5	2.7	
SLIGHTLY AGREE	5	I	21	17	38
		I	24.7	27.9	26.0
		I	14.4	11.6	
MODERATELY AGREE	6	I	35	20	55
		I	41.2	32.8	37.7
		I	24.0	13.7	
STRONGLY AGREE	7	I	4	3	7
		I	4.7	4.9	4.8
		I	2.7	2.1	
	COLUMN TOTAL		85	61	146
			58.2	41.8	100.0

Table 15-R

	COUNT COL PCT TOT PCT	I ACCOUNTING	EDP		ROW TOTAL
			1	2	
DISAGREE	1	I	17	17	34
		I	20.0	27.9	23.3
		I	11.6	11.6	
UNDECIDED	2	I	8	4	12
		I	9.4	6.6	8.2
		I	5.5	2.7	
AGREE	3	I	60	40	100
		I	70.6	65.6	68.5
		I	41.1	27.4	
	COLUMN TOTAL		85	61	146
			58.2	41.8	100.0



Table 16-0

	COUNT	ACCOUNTING		EDP	ROW TOTAL
		COL TOT	PCT PCT		
		1	2		
STRONGLY AGREE	1	37	14		51
		43.5	23.9		34.9
		25.3	9.6		
MODERATELY AGREE	2	22	16		38
		25.9	26.2		26.0
		15.1	11.0		
SLIGHTLY AGREE	3	13	15		28
		15.3	24.6		19.2
		8.9	10.3		
UNDECIDED	4	3	0		3
		3.5	0.0		2.1
		2.1	0.0		
SLIGHTLY DISAGREE	5	1	5		6
		1.2	8.2		4.1
		.7	3.4		
MODERATELY DISAGREE	6	4	8		12
		4.7	13.1		8.2
		2.7	5.5		
STRONGLY DISAGREE	7	5	3		8
		5.9	4.9		5.5
		3.4	2.1		
COLUMN TOTAL		85	61		146
		58.2	41.8		100.0

Table 16-R

	COUNT	ACCOUNTING		EDP	ROW TOTAL
		COL TOT	PCT PCT		
		1	2		
AGREE	1	72	45		117
		84.7	73.8		80.1
		49.3	30.8		
UNDECIDED	2	3	0		3
		3.5	0.0		2.1
		2.1	0.0		
DISAGREE	3	10	16		26
		11.8	26.2		17.8
		6.8	11.0		
COLUMN TOTAL		85	61		146
		58.2	41.0		100.0

Table 17-0

	COUNT	I		EDP	ROW TOTAL
		COL. TOT	ACCOUNTING		
	PCT	PCT	1	2	
	TOT	TOT	1	2	
DEFINITELY FALSE	1	1	1.2	2	3
			.7	1.4	2.1
USUALLY NOT THE CASE	2	8	9.4	11	19
			5.5	7.5	13.0
MORE FALSE THAN TRUE	3	9	10.6	11	20
			6.2	7.5	13.7
UNCERTAIN ABOUT THIS	4	9	10.6	6	15
			6.2	4.1	10.3
MORE TRUE THAN FALSE	5	18	21.2	11	29
			12.3	7.5	19.9
OFTEN TRUE	6	31	36.5	9	40
			21.2	6.2	27.4
DEFINITELY TRUE	7	9	10.6	11	20
			6.2	7.5	13.7
COLUMN TOTAL		95	58.2	61	146
				41.8	100.0

Table 17-R

	COUNT	I		EDP	ROW TOTAL
		COL. TOT	ACCOUNTING		
	PCT	PCT	1	2	
	TOT	TOT	1	2	
FALSE	1	18	21.2	24	42
			12.3	16.4	28.8
UNCERTAIN ABOUT THIS	2	9	10.6	6	15
			6.2	4.1	10.3
TRUE	3	58	68.2	31	89
			39.7	21.2	61.0
COLUMN TOTAL		95	58.2	61	146
				41.8	100.0

Table 18-O

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL. TOT	PCT. PCT			
	1	2	1	2	
DEFINITELY FALSE	1	0.7	1.2	0.0	1.7
USUALLY NOT THE CASE	2	1.4	0.0	3.3	1.4
MORE FALSE THAN TRUE	3	6.9	4.8	9.8	6.9
UNCERTAIN ABOUT THIS	4	6.9	6.0	8.2	6.9
MORE TRUE THAN FALSE	5	35.2	33	18	51
OFTEN TRUE	6	27.6	26	14	40
DEFINITELY TRUE	7	21.4	15	16	31
COLUMN TOTAL		145	84	61	145
		100.0	57.9	42.1	100.0

Table 18-R

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL. TOT	PCT. PCT			
	1	2	1	2	
FALSE	1	9.0	5	0	13
UNCERTAIN ABOUT THIS	2	6.9	5	5	10
TRUE	3	84.1	74	48	122
COLUMN TOTAL		145	84	61	145
		100.0	57.9	42.1	100.0



Table 19-0

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
DEFINITELY FALSE	1 1.2 .7	1 1.2 .7	1 1.6 .7	2 1.4	2 1.4
USUALLY NOT THE CASE	2 2.4 1.4	2 2.4 1.4	5 0.2 3.4	7 4.8	7 4.8
MORE FALSE THAN TRUE	3 12.9 7.3	11 12.9 7.3	15 24.6 10.3	26 17.8	26 17.8
UNCERTAIN ABOUT THIS	4 14.1 8.2	12 14.1 8.2	5 0.2 3.4	17 11.6	17 11.6
MORE TRUE THAN FALSE	5 28.2 16.4	24 28.2 16.4	8 13.1 5.5	32 21.9	32 21.9
OFTEN TRUE	6 27.1 15.8	23 27.1 15.8	12 19.7 8.2	35 24.0	35 24.0
DEFINITELY TRUE	7 14.1 8.2	12 14.1 8.2	15 24.6 10.3	27 18.5	27 18.5
COLUMN TOTAL		85 58.2	61 41.8	146 100.0	146 100.0

Table 19-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
FALSE	1 16.5 9.6	14 16.5 9.6	21 34.4 14.4	35 24.0	35 24.0
UNCERTAIN ABOUT THIS	2 14.1 0.2	12 14.1 0.2	5 0.2 3.4	17 11.6	17 11.6
TRUE	3 69.4 40.4	59 69.4 40.4	35 57.4 24.0	94 64.4	94 64.4
COLUMN TOTAL		85 58.2	61 41.8	146 100.0	146 100.0

Table 20-O

	COUNT COL PCT TOT PCT	ACCOUNTING 1	EDP 2	ROW TOTAL
STRONGLY AGREE	1 1.2 .7	1 1.2 .7	2 3.3 1.4	3 2.0
MODERATELY AGREE	2 25.6 15.0	22 25.6 15.0	12 19.7 8.2	34 23.1
SLIGHTLY AGREE	3 27.9 16.3	24 27.9 16.3	15 24.6 10.2	39 26.5
UNDECIDED	4 4.7 2.7	4 4.7 2.7	1 1.6 .7	5 3.4
SLIGHTLY DISAGREE	5 15.1 8.8	13 15.1 8.8	13 21.3 8.8	26 17.7
MODERATELY DISAG- REE	6 20.9 12.2	10 20.9 12.2	14 23.8 9.5	32 21.8
STRONGLY DISAGREE	7 4.7 2.7	4 4.7 2.7	4 6.6 2.7	8 5.4
COLUMN TOTAL	86 58.5	86 58.5	61 41.5	147 100.0

Table 20-R

	COUNT COL PCT TOT PCT	ACCOUNTING 1	EDP 2	ROW TOTAL
AGREE	1 54.7 32.0	47 54.7 32.0	29 47.5 19.7	76 51.7
UNDECIDED	2 4.7 2.7	4 4.7 2.7	1 1.6 .7	5 3.4
DISAGREE	3 40.7 23.8	35 40.7 23.8	31 50.8 21.1	66 44.9
COLUMN TOTAL	86 58.5	86 58.5	61 41.5	147 100.0

Table 21-0

COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
		1	2	
1 DEFINITELY TRUE	9 10.5 6.1	17 27.9 11.0	26 17.7	
2 OFTEN TRUE	27 31.4 10.4	23 37.7 10.0	50 34.0	
3 MORE TRUE THAN FALSE	23 26.7 15.0	0 13.1 5.4	31 21.1	
4 UNCERTAIN ABOUT THIS	11 12.0 7.5	0 0.0 0.0	11 7.5	
5 MORE FALSE THAN TRUE	5 5.0 3.4	6 9.0 4.1	11 7.5	
6 USUALLY NOT THE CASE	10 11.0 6.8	7 11.5 4.8	17 11.0	
7 DEFINITELY FALSE	1 1.2 .7	0 0.0 0.0	1 .7	
COLUMN TOTAL	86 58.5	61 41.5	147 100.0	

Table 21-R

COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
		1	2	
1 TRUE	59 68.6 40.1	48 78.7 32.7	107 72.0	
2 UNCERTAIN ABOUT THIS	11 12.0 7.5	0 0.0 0.0	11 7.5	
3 FALSE	16 10.0 10.0	13 21.3 0.0	29 19.7	
COLUMN TOTAL	86 58.5	61 41.5	147 100.0	



Table 22-0

	COUNT		ACCOUNTING	EDP		ROW TOTAL
	COL TOT	PCT PCT		1	2	
STRONGLY AGREE	1	15	17.4	15	24.6	30
		10.2		10.2		20.4
MODERATELY AGREE	2	23	26.7	24	39.3	47
		15.6		16.3		32.0
SLIGHTLY AGREE	3	15	17.4	13	21.3	20
		10.2		8.8		19.0
UNDECIDED	4	7	8.1	1	1.6	8
		4.8		.7		5.4
SLIGHTLY DISAGREE	5	12	14.0	3	4.9	15
		8.2		2.0		10.2
MODERATELY DISAGREE	6	10	11.6	4	6.6	14
		6.8		2.7		9.5
STRONGLY DISAGREE	7	4	4.7	1	1.6	5
		2.7		.7		3.4
COLUMN TOTAL		86	58.5	61	41.5	147
						100.0

Table 22-R

	COUNT		ACCOUNTING	EDP		ROW TOTAL
	COL TOT	PCT PCT		1	2	
AGREE	1	53	61.6	52	85.2	105
		36.1		35.4		71.4
UNDECIDED	2	7	8.1	1	1.6	8
		4.8		.7		5.4
DISAGREE	3	26	30.2	8	13.1	34
		17.7		5.4		23.1
COLUMN TOTAL		86	58.5	61	41.5	147
						100.0

Table 23-0

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
			1	2	
STRONGLY AGREE	1		13	15	28
			15.3	24.6	19.2
			8.9	10.3	
MODERATELY AGREE	2		22	15	37
			25.9	24.6	25.3
			15.1	10.3	
SLIGHTLY AGREE	3		21	14	35
			24.7	23.0	24.0
			14.4	9.6	
UNDECIDED	4		19	6	25
			22.4	9.8	17.1
			13.0	4.1	
SLIGHTLY DISAGREE	5		3	1	4
			3.5	1.6	2.7
			2.1	.7	
MODERATELY DISAGREE	6		6	7	13
			7.1	11.5	8.9
			4.1	4.8	
STRONGLY DISAGREE	7		1	3	4
			1.2	4.9	2.7
			.7	2.1	
COLUMN TOTAL			85	61	146
			58.2	41.8	100.0

Table 23-R

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
			1	2	
AGREE	1		56	44	100
			65.9	72.1	68.5
			38.4	30.1	
UNDECIDED	2		19	6	25
			22.4	9.8	17.1
			13.0	4.1	
DISAGREE	3		10	11	21
			11.8	18.0	14.4
			6.8	7.5	
COLUMN TOTAL			85	61	146
			58.2	41.8	100.0

Table 24-0

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
			1	2	
STRONGLY AGREE	1		22	22	44
			25.6	36.1	29.9
			15.0	15.0	
MODERATELY AGREE	2		19	14	33
			22.1	23.0	22.4
			12.9	9.5	
SLIGHTLY AGREE	3		15	4	19
			17.4	6.6	12.9
			10.2	2.7	
UNDECIDED	4		20	14	34
			23.3	23.0	23.1
			13.6	9.5	
SLIGHTLY DISAGREE	5		2	1	3
			2.3	1.6	2.0
			1.4	.7	
MODERATELY DISAGREE	6		7	4	11
			8.1	6.6	7.5
			4.8	2.7	
STRONGLY DISAGREE	7		1	2	3
			1.2	3.3	2.0
			.7	1.4	
COLUMN TOTAL			86	61	147
			58.5	41.5	100.0

Table 24-R

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
			1	2	
AGREE	1		56	40	96
			65.1	65.6	65.3
			38.1	27.2	
UNDECIDED	2		20	14	34
			23.3	23.0	23.1
			13.6	9.5	
DISAGREE	3		10	7	17
			11.6	11.5	11.6
			6.8	4.8	
COLUMN TOTAL			86	61	147
			58.5	41.5	100.0



Table 25-0

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
	1		1	2	
STRONGLY DISAGREE	1		1 1.2 .7	0 0.0 0.0	1 .7
MODERATELY DISAGREE	2		1 1.2 .7	3 4.9 2.0	4 2.7
SLIGHTLY DISAGREE	3		2 2.3 1.4	0 0.0 0.0	2 1.4
UNDECIDED	4		9 10.5 6.1	3 4.9 2.0	12 8.2
SLIGHTLY AGREE	5		19 22.1 12.9	20 32.8 13.6	39 26.5
MODERATELY AGREE	6		32 37.2 21.8	24 39.3 16.3	56 38.1
STRONGLY AGREE	7		22 25.6 15.0	11 18.0 7.5	33 22.4
COLUMN TOTAL			86 58.5	61 41.5	147 100.0

Table 25-R

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
	1		1	2	
DISAGREE	1		4 4.7 2.7	3 4.9 2.0	7 4.8
UNDECIDED	2		9 10.5 6.1	3 4.9 2.0	12 8.2
AGREE	3		73 84.9 49.7	55 90.2 37.4	128 87.1
COLUMN TOTAL			86 58.5	61 41.5	147 100.0

Table 26-0

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1		4	0		4
STRONGLY DISAGREE		4.7	0.0		2.7
		2.7	0.0		
2		5	0		5
MODERATELY DISAGREE		5.8	0.0		3.4
		3.4	0.0		
3		11	5		16
SLIGHTLY DISAGREE		12.8	8.2		10.9
		7.5	3.4		
4		7	2		9
UNDECIDED		8.1	3.3		6.1
		4.8	1.4		
5		20	4		24
SLIGHTLY AGREE		23.3	6.6		16.3
		13.6	2.7		
6		26	23		49
MODERATELY AGREE		30.2	37.7		33.3
		17.7	15.0		
7		13	27		40
STRONGLY AGREE		15.1	44.3		27.2
		8.8	18.4		
	COLUMN TOTAL	86	61		147
		58.5	41.5		100.0

Table 26-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1		20	5		25
DISAGREE		23.3	8.2		17.0
		13.6	3.4		
2		7	2		9
UNDECIDED		8.1	3.3		6.1
		4.8	1.4		
3		59	54		113
AGREE		68.6	88.5		76.9
		40.1	36.7		
	COLUMN TOTAL	86	61		147
		58.5	41.5		100.0

Table 27-0

	COUNT		ACCOUNTING	EDP		ROW TOTAL
	COL TOT	PCT PCT		1	2	
DEFINITELY TRUE	1		3	0	3	
			3.5	0.0	2.1	
			2.1	0.0		
OFTEN TRUE	2		12	11	23	
			14.1	10.0	15.8	
			8.2	7.5		
MORE TRUE THAN FALSE	3		20	17	37	
			23.5	27.9	25.3	
			13.7	11.6		
UNCERTAIN ABOUT THIS	4		14	3	17	
			16.5	4.9	11.6	
			9.6	2.1		
MORE FALSE THAN TRUE	5		20	15	35	
			23.5	24.6	24.0	
			13.7	10.3		
USUALLY NOT THE CASE	6		14	12	26	
			16.5	19.7	17.8	
			9.6	8.2		
DEFINITELY FALSE	7		2	3	5	
			2.4	4.9	3.4	
			1.4	2.1		
COLUMN TOTAL			85	61	146	
			58.2	41.8	100.0	

Table 27-R

	COUNT		ACCOUNTING	EDP		ROW TOTAL
	COL TOT	PCT PCT		1	2	
TRUE	1		35	28	63	
			41.2	45.9	43.2	
			24.0	19.2		
UNCERTAIN ABOUT THIS	2		14	3	17	
			16.5	4.9	11.6	
			9.6	2.1		
FALSE	3		36	30	66	
			42.4	40.2	45.2	
			24.7	20.5		
COLUMN TOTAL			85	61	146	
			58.2	41.8	100.0	



Table 28-0

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
DEFINITELY TRUE	1	0	4		4
		0.0	6.6		2.7
		0.0	2.7		
OFTEN TRUE	2	5	17		22
		5.8	27.9		15.0
		3.4	11.6		
MORE TRUE THAN FALSE	3	15	11		26
		17.4	18.0		17.7
		10.2	7.5		
UNCERTAIN ABOUT THIS	4	2	6		8
		2.3	9.8		5.4
		1.4	4.1		
MORE FALSE THAN TRUE	5	27	7		34
		31.4	11.5		23.1
		18.4	4.8		
USUALLY NOT THE CASE	6	20	9		37
		32.6	14.8		25.2
		19.0	6.1		
DEFINITELY FALSE	7	9	7		16
		10.5	11.5		10.9
		6.1	4.8		
COLUMN TOTAL		86 58.5	61 41.5		147 100.0

Table 28-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
TRUE	1	20	32		52
		23.3	52.5		35.4
		13.6	21.8		
UNCERTAIN ABOUT THIS	2	2	6		8
		2.3	9.8		5.4
		1.4	4.1		
FALSE	3	64	23		87
		74.4	37.7		59.2
		43.5	15.6		
COLUMN TOTAL		86 58.5	61 41.5		147 100.0

Table 29-0

	COUNT COL PCT TOT PCT	I ACCOUNTING	EDP		ROW TOTAL
			1	2	
STRONGLY AGREE	1	I	1	13	14
		I	1.2	21.3	9.5
		I	.7	0.8	
MODERATELY AGREE	2	I	15	14	29
		I	17.4	23.0	19.7
		I	10.2	9.5	
SLIGHTLY AGREE	3	I	18	15	33
		I	20.9	24.6	22.4
		I	12.2	10.2	
UNDECIDED	4	I	6	2	8
		I	7.0	3.3	5.4
		I	4.1	1.4	
SLIGHTLY DISAGREE	5	I	14	3	17
		I	16.3	4.9	11.6
		I	9.5	2.0	
MODERATELY DISAGREE	6	I	20	10	30
		I	23.3	16.4	20.4
		I	13.6	6.8	
STRONGLY DISAGREE	7	I	12	4	16
		I	14.0	6.6	10.9
		I	8.2	2.7	
COLUMN TOTAL			86	61	147
			58.5	41.5	100.0

Table 29-R

	COUNT COL PCT TOT PCT	I ACCOUNTING	EDP		ROW TOTAL
			1	2	
AGREE	1	I	34	42	76
		I	39.5	68.9	51.7
		I	23.1	28.6	
UNDECIDED	2	I	6	2	8
		I	7.0	3.3	5.4
		I	4.1	1.4	
DISAGREE	3	I	46	17	63
		I	53.5	27.9	42.9
		I	31.3	11.6	
COLUMN TOTAL			86	61	147
			58.5	41.5	100.0

Table 30-0

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
STRONGLY AGREE	1	23	15		38
		27.1	24.6		26.0
		15.8	10.3		
MODERATELY AGREE	2	23	23		46
		27.1	37.7		31.5
		15.8	15.8		
SLIGHTLY AGREE	3	22	15		37
		25.9	24.6		25.3
		15.1	10.3		
UNDECIDED	4	4	1		5
		4.7	1.6		3.4
		2.7	.7		
SLIGHTLY DISAGREE	5	4	2		6
		4.7	3.3		4.1
		2.7	1.4		
MODERATELY DISAGREE	6	5	2		7
		5.9	3.3		4.8
		3.4	1.4		
STRONGLY DISAGREE	7	4	3		7
		4.7	4.9		4.8
		2.7	2.1		
COLUMN TOTAL		85	61		146
		58.2	41.8		100.0

Table 30-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
AGREE	1	68	53		121
		80.0	86.9		82.9
		46.6	36.3		
UNDECIDED	2	4	1		5
		4.7	1.6		3.4
		2.7	.7		
DISAGREE	3	13	7		20
		15.3	11.5		13.7
		8.9	4.8		
COLUMN TOTAL		85	61		146
		58.2	41.8		100.0



Table 31-0

	COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
			1	2	
STRONGLY AGREE	1	28	27	55	
		32.9	44.3	37.7	
		19.2	10.5		
MODERATELY AGREE	2	20	15	35	
		23.5	24.6	24.0	
		13.7	10.3		
SLIGHTLY AGREE	3	14	8	22	
		16.5	13.1	15.1	
		9.6	5.5		
UNDECIDED	4	8	1	9	
		9.4	1.6	6.2	
		5.5	.7		
SLIGHTLY DISAGREE	5	3	3	6	
		3.5	4.9	4.1	
		2.1	2.1		
MODERATELY DISAGREE	6	10	3	13	
		11.8	4.9	8.9	
		6.8	2.1		
STRONGLY DISAGREE	7	2	4	6	
		2.4	6.6	4.1	
		1.4	2.7		
COLUMN TOTAL		85	61	146	
		58.2	41.8	100.0	

Table 31-R

	COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
			1	2	
AGREE	1	62	50	112	
		72.9	82.0	76.7	
		42.5	34.2		
UNDECIDED	2	8	1	9	
		9.4	1.6	6.2	
		5.5	.7		
DISAGREE	3	15	10	25	
		17.6	16.4	17.1	
		10.3	6.8		
COLUMN TOTAL		85	61	146	
		58.2	41.8	100.0	

Table 32-O

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL	PCT			
	TOT	PCT			
STRONGLY AGREE	1		20 23.3 13.6	6 9.8 4.1	26 17.7
MODERATELY AGREE	2		10 20.9 12.2	17 27.9 11.0	35 23.0
SLIGHTLY AGREE	3		27 31.4 18.4	10 16.4 6.8	37 25.2
UNDECIDED	4		10 11.6 6.8	10 16.4 6.8	20 13.6
SLIGHTLY DISAGREE	5		5 5.8 3.4	4 6.6 2.7	9 6.1
MODERATELY DISAGREE	6		5 5.8 3.4	0 13.1 5.4	13 8.8
STRONGLY DISAGREE	7		1 1.2 .7	6 9.8 4.1	7 4.0
COLUMN TOTAL			86 58.5	61 41.5	147 100.0

Table 32-R

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL	PCT			
	TOT	PCT			
AGREE	1		65 75.6 44.2	33 54.1 22.4	98 66.7
UNDECIDED	2		10 11.6 6.8	10 16.4 6.8	20 13.6
DISAGREE	3		11 12.8 7.5	18 29.5 12.2	29 19.7
COLUMN TOTAL			86 58.5	61 41.5	147 100.0

Table 33-0

COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
		1	2	
1 STRONGLY DISAGREE	0 0.0 0.0	1 1.0 .7	1 .7	1 1.7
2 MODERATELY DISAGREE	5 5.9 3.4	3 4.9 2.1	8 5.5	8 5.5
3 SLIGHTLY DISAGREE	4 4.7 2.7	1 1.6 .7	5 3.4	5 3.4
4 UNDECIDED	7 8.2 4.8	8 13.1 5.5	15 10.3	15 10.3
5 SLIGHTLY AGREE	17 20.0 11.6	11 10.0 7.5	28 19.2	28 19.2
6 MODERATELY AGREE	34 40.0 23.3	22 30.1 15.1	56 30.4	56 30.4
7 STRONGLY AGREE	18 21.2 12.3	15 24.6 10.3	33 22.6	33 22.6
COLUMN TOTAL	85 58.2	61 41.8	146 100.0	146 100.0

Table 33-R

COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
		1	2	
1 DISAGREE	9 10.6 6.2	5 8.2 3.4	14 9.6	14 9.6
2 UNDECIDED	7 8.2 4.8	8 13.1 5.5	15 10.3	15 10.3
3 AGREE	69 81.2 47.3	40 78.7 32.9	117 80.1	117 80.1
COLUMN TOTAL	85 58.2	61 41.8	146 100.0	146 100.0



Table 34-O

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL	PCT			
	TOT	PCT	1	2	
MODERATELY DISAGREE	2		5 5.9 3.4	0 0.0 0.0	5 3.4
SLIGHTLY DISAGREE	3		5 5.9 3.4	2 3.3 1.4	7 4.8
UNDECIDED	4		9 10.6 6.2	2 3.3 1.4	11 7.5
SLIGHTLY AGREE	5		19 22.4 13.0	22 36.1 15.1	41 28.1
MODERATELY AGREE	6		38 44.7 26.0	23 37.7 15.8	61 41.8
STRONGLY AGREE	7		9 10.6 6.2	12 19.7 8.2	21 14.4
COLUMN TOTAL			85 58.2	61 41.8	146 100.0

Table 34-R

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL	PCT			
	TOT	PCT	1	2	
DISAGREE	1		10 11.8 6.8	2 3.3 1.4	12 8.2
UNDECIDED	2		9 10.6 6.2	2 3.3 1.4	11 7.5
AGREE	3		66 77.6 45.2	57 93.4 39.0	123 84.2
COLUMN TOTAL			85 58.2	61 41.8	146 100.0

Table 35-0

	COUNT		I ACCOUNTING	EDP		ROW TOTAL
	COL TOT	PCT PCT		1	2	
STRONGLY DISAGREE	1		0	2	2	
			0.0	3.3	1.4	
			0.0	1.4		
MODERATELY DISAGREE	2		6	5	11	
			7.0	8.2	7.5	
			4.1	3.4		
SLIGHTLY DISAGREE	3		8	9	17	
			9.3	14.0	11.0	
			5.4	6.1		
UNDECIDED	4		3	1	4	
			3.5	1.6	2.7	
			2.0	.7		
SLIGHTLY AGREE	5		26	17	43	
			30.2	27.9	29.3	
			17.7	11.0		
MODERATELY AGREE	6		36	18	54	
			41.9	29.5	36.7	
			24.5	12.2		
STRONGLY AGREE	7		7	9	16	
			8.1	14.8	10.9	
			4.8	6.1		
COLUMN TOTAL			86	61	147	
			58.5	41.5	100.0	

Table 35-R

	COUNT		I ACCOUNTING	EDP		ROW TOTAL
	COL TOT	PCT PCT		1	2	
DISAGREE	1		14	16	30	
			16.3	26.2	20.4	
			9.5	10.9		
UNDECIDED	2		3	1	4	
			3.5	1.6	2.7	
			2.0	.7		
AGREE	3		69	44	113	
			80.2	72.1	76.9	
			46.9	29.9		
COLUMN TOTAL			86	61	147	
			58.5	41.5	100.0	

Table 36-0

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
	1	2	1	2	
STRONGLY DISAGREE	4	0	4.7	0.0	4.7
			2.7	0.0	2.7
MODERATELY DISAGREE	5	1	5.8	1.6	7.4
			3.4	.7	4.1
SLIGHTLY DISAGREE	9	5	10.5	8.2	18.7
			6.1	3.4	9.5
UNDECIDED	9	10	10.5	16.4	26.9
			6.1	6.8	12.9
SLIGHTLY AGREE	23	17	26.7	27.9	54.6
			15.0	11.0	27.2
MODERATELY AGREE	31	17	36.0	27.9	63.9
			21.1	11.6	32.7
STRONGLY AGREE	5	11	5.8	18.0	23.8
			3.4	7.5	10.9
COLUMN TOTAL	86	61	58.5	41.5	100.0

Table 36-R

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
	1	2	1	2	
DISAGREE	18	6	20.9	9.8	30.7
			12.2	4.1	16.3
UNDECIDED	9	10	10.5	16.4	26.9
			6.1	6.8	12.9
AGREE	59	45	68.0	73.8	141.8
			40.1	30.6	70.7
COLUMN TOTAL	86	61	58.5	41.5	100.0



Table 37-0

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1 STRONGLY DISAGREE	4 4.7 2.7	1 1.6 .7	5 3.4		
2 MODERATELY DISAGREE	13 15.3 8.9	14 23.0 9.0	27 18.5		
3 SLIGHTLY DISAGREE	23 27.1 15.8	17 27.9 11.6	40 27.4		
4 UNDECIDED	6 7.1 4.1	3 4.9 2.1	9 6.2		
5 SLIGHTLY AGREE	10 11.8 6.8	8 13.1 5.5	18 12.3		
6 MODERATELY AGREE	21 24.7 14.4	9 14.8 6.2	30 20.5		
7 STRONGLY AGREE	8 9.4 5.5	9 14.8 6.2	17 11.6		
COLUMN TOTAL	85 58.2	61 41.8	146 100.0		

Table 37-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1 DISAGREE	40 47.1 27.4	32 52.5 21.9	72 49.3		
2 UNDECIDED	6 7.1 4.1	3 4.9 2.1	9 6.2		
3 AGREE	39 45.9 26.7	26 42.6 17.8	65 44.5		
COLUMN TOTAL	85 58.2	61 41.8	146 100.0		

Table 38-0

	COUNT	ACCOUNTING		EDP	ROW TOTAL
	COL TOT	PCT TOT	1		
STRONGLY AGREE	1	10	11.8	10	20
		0.8	6.8	6.8	13.7
MODERATELY AGREE	2	7	8.2	11	18
		4.8	4.8	7.5	12.3
SLIGHTLY AGREE	3	9	10.6	7	16
		6.2	6.2	4.8	11.0
UNDECIDED	4	13	15.3	9	22
		8.9	8.9	6.2	15.1
SLIGHTLY DISAGREE	5	11	12.9	4	15
		7.5	7.5	2.7	10.3
MODERATELY DISAGREE	6	20	23.5	3	23
		13.7	13.7	2.1	15.8
STRONGLY DISAGREE	7	15	17.6	17	32
		10.3	10.3	11.6	21.9
COLUMN TOTAL		85	58.2	61	146
				41.8	100.0

Table 38-R

	COUNT	ACCOUNTING		EDP	ROW TOTAL
	COL TOT	PCT TOT	1		
AGREE	1	26	30.6	28	54
		17.8	17.8	19.2	37.0
UNDECIDED	2	13	15.3	9	22
		8.9	8.9	6.2	15.1
DISAGREE	3	46	54.1	24	70
		31.5	31.5	16.4	47.9
COLUMN TOTAL		85	58.2	61	146
				41.8	100.0

Table 39-0

	COUNT	ACCOUNTING		EDP	ROW TOTAL
	COL	PCT	TOT	PCT	
	1	2	3	4	
STRONGLY DISAGREE	3	3	3.5	4.9	6 4.1
			2.0	2.0	
MODERATELY DISAGREE	4	3	4.7	4.9	7 4.8
			2.7	2.0	
SLIGHTLY DISAGREE	6	7	7.0	11.5	13 8.8
			4.1	4.8	
UNDECIDED	9	0	10.5	13.1	17 11.6
			6.1	5.4	
SLIGHTLY AGREE	22	12	25.6	19.7	34 23.1
			15.0	8.2	
MODERATELY AGREE	29	16	33.7	26.2	45 30.6
			19.7	10.9	
STRONGLY AGREE	13	12	15.1	19.7	25 17.0
			8.8	8.2	
COLUMN TOTAL	86	61	58.5	41.5	147 100.0

Table 39-R

	COUNT	ACCOUNTING		EDP	ROW TOTAL
	COL	PCT	TOT	PCT	
	1	2	3	4	
DISAGREE	13	13	15.1	21.3	26 17.7
			8.8	8.8	
UNDECIDED	9	8	10.5	13.1	17 11.6
			6.1	5.4	
AGREE	64	40	74.4	65.6	104 70.7
			43.5	27.2	
COLUMN TOTAL	86	61	58.5	41.5	147 100.0



Table 40-O

COUNT COL PCT TOT PCT	ACCOUNTING 1	EDP 2	ROW TOTAL
1 DEFINITELY TRUE	21 24.4 14.3	15 24.6 10.2	36 24.5
2 OFTEN TRUE	28 32.6 19.0	10 29.5 12.2	46 31.3
3 MORE TRUE THAN FALSE	20 23.3 13.6	14 23.0 9.5	34 23.1
4 UNCERTAIN ABOUT THIS	6 7.0 4.1	2 3.3 1.4	8 5.4
5 MORE FALSE THAN TRUE	3 3.5 2.0	7 11.5 4.8	10 6.8
6 USUALLY NOT THE CASE	7 8.1 4.8	5 8.2 3.4	12 8.2
7 DEFINITELY FALSE	1 1.2 .7	0 0.0 0.0	1 .7
COLUMN TOTAL	86 58.5	61 41.5	147 100.0

Table 40-R

COUNT COL PCT TOT PCT	ACCOUNTING 1	EDP 2	ROW TOTAL
1 TRUE	69 80.2 46.9	47 77.0 32.0	116 78.9
2 UNCERTAIN ABOUT THIS	6 7.0 4.1	2 3.3 1.4	8 5.4
3 FALSE	11 12.8 7.5	12 19.7 8.2	23 15.6
COLUMN TOTAL	86 50.5	61 41.5	147 100.0

Table 41-O

COUNT	COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
			1	2	
1	4	4	0	4	4
STRONGLY DISAGREE	4.7	4.7	0.0	0.0	2.0
	2.8	2.8	0.0	0.0	
2	11	11	10	21	21
MODERATELY DISAGREE	12.8	12.8	16.9	14.5	14.5
	7.6	7.6	6.9	6.9	
3	14	14	8	22	22
SLIGHTLY DISAGREE	16.3	16.3	13.6	15.2	15.2
	9.7	9.7	5.5	5.5	
4	1	1	4	5	5
UNDECIDED	1.2	1.2	6.8	3.4	3.4
	.7	.7	2.0	2.0	
5	18	18	7	25	25
SLIGHTLY AGREE	20.9	20.9	11.9	17.2	17.2
	12.4	12.4	4.8	4.8	
6	26	26	21	47	47
MODERATELY AGREE	30.2	30.2	35.6	32.4	32.4
	17.9	17.9	14.5	14.5	
7	12	12	9	21	21
STRONGLY AGREE	14.0	14.0	15.3	14.5	14.5
	8.3	8.3	6.2	6.2	
COLUMN TOTAL	86	86	59	145	145
	59.3	59.3	40.7	100.0	100.0

Table 41-R

COUNT	COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
			1	2	
1	29	29	18	47	47
DISAGREE	33.7	33.7	30.5	32.4	32.4
	20.0	20.0	12.4	12.4	
2	1	1	4	5	5
UNDECIDED	1.2	1.2	6.8	3.4	3.4
	.7	.7	2.8	2.8	
3	56	56	37	93	93
AGREE	65.1	65.1	62.7	64.1	64.1
	38.6	38.6	25.5	25.5	
COLUMN TOTAL	86	86	59	145	145
	59.3	59.3	40.7	100.0	100.0

Table 42-O

	COUNT	ACCOUNTING	EDP	ROW
	COL PCT TOT PCT	1	2	TOTAL
STRONGLY AGREE	1 6 7.1 4.1	7 11.7 4.8	13 9.0	
MODERATELY AGREE	2 24 28.2 16.6	16 26.7 11.0	40 27.6	
SLIGHTLY AGREE	3 26 30.6 17.9	22 36.7 15.2	48 33.1	
UNDECIDED	4 15 17.6 10.3	3 5.0 2.1	18 12.4	
SLIGHTLY DISAGREE	5 6 7.1 4.1	2 3.3 1.4	8 5.5	
MODERATELY DISAGREE	6 7 8.2 4.8	8 13.3 5.5	15 10.3	
STRONGLY DISAGREE	7 1 1.2 .7	2 3.3 1.4	3 2.1	
COLUMN TOTAL	85 58.6	60 41.4	145 100.0	

Table 42-R

	COUNT	ACCOUNTING	EDP	ROW
	COL PCT TOT PCT	1	2	TOTAL
AGREE	1 56 65.9 38.6	45 75.0 31.0	101 69.7	
UNDECIDED	2 15 17.6 10.3	3 5.0 2.1	18 12.4	
DISAGREE	3 14 16.5 9.7	12 20.0 8.3	26 17.9	
COLUMN TOTAL	85 58.6	60 41.4	145 100.0	



Table 43-O

COUNT COL PCT TOT PCT	ACCOUNTING 1	EDP 2	ROW TOTAL
2 MODERATELY DISAG- REE	2 2.3 1.4	2 3.4 1.4	4 2.8
3 SLIGHTLY DISAGREE	2 2.3 1.4	4 6.8 2.0	6 4.1
4 UNDECIDED	1 1.2 .7	0 0.0 0.0	1 .7
5 SLIGHTLY AGREE	21 24.4 14.5	19 32.2 13.1	40 27.6
6 MODERATELY AGREE	44 51.2 30.3	26 44.1 17.9	70 48.3
7 STRONGLY AGREE	10 10.0 11.0	8 13.6 5.5	24 16.6
COLUMN TOTAL	86 59.3	59 40.7	145 100.0

Table 43-R

COUNT COL PCT TOT PCT	ACCOUNTING 1	EDP 2	ROW TOTAL
1 DISAGREE	4 4.7 2.8	6 10.2 4.1	10 6.9
2 UNDECIDED	1 1.2 .7	0 0.0 0.0	1 .7
3 AGREE	81 94.2 55.9	53 89.8 36.6	134 92.4
COLUMN TOTAL	86 59.3	59 40.7	145 100.0

Table 44-0

COUNT COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
	1	2	
1 STRONGLY AGREE	8 9.3 5.5	1 1.7 .7	9 6.2
2 MODERATELY AGREE	12 14.0 8.3	8 13.6 5.5	20 13.8
3 SLIGHTLY AGREE	13 15.1 9.0	11 18.6 7.6	24 16.0
4 UNDECIDED	10 11.6 6.9	5 8.5 3.4	15 10.3
5 SLIGHTLY DISAGREE	19 22.1 13.1	9 15.3 6.2	28 19.3
6 MODERATELY DISAG- REE	15 17.4 10.3	12 20.3 8.3	27 18.6
7 STRONGLY DISAGREE	9 10.5 6.2	13 22.0 9.0	22 15.2
COLUMN TOTAL	86 59.3	59 40.7	145 100.0

Table 44-R

COUNT COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
	1	2	
1 AGREE	33 38.4 22.8	20 33.9 13.8	53 36.6
2 UNDECIDED	10 11.6 6.9	5 8.5 3.4	15 10.3
3 DISAGREE	43 50.0 29.7	34 57.0 23.4	77 53.1
COLUMN TOTAL	86 59.3	59 40.7	145 100.0



Table 45-O

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1 STRONGLY DISAGREE	6 7.0 4.1	7 11.7 4.8	13 8.9		
2 MODERATELY DISAGREE	13 15.1 8.9	14 23.3 9.0	27 18.5		
3 SLIGHTLY DISAGREE	11 12.8 7.5	11 18.3 7.5	22 15.1		
4 UNDECIDED	19 22.1 13.0	3 8.3 3.4	24 16.4		
5 SLIGHTLY AGREE	19 22.1 13.0	10 16.7 6.0	29 19.9		
6 MODERATELY AGREE	17 19.8 11.6	11 18.3 7.5	28 19.2		
7 STRONGLY AGREE	1 1.2 .7	2 3.3 1.4	3 2.1		
COLUMN TOTAL	86 58.9	60 41.1	146 100.0		

Table 45-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1 DISAGREE	30 34.9 20.5	32 53.3 21.9	62 42.5		
2 UNDECIDED	19 22.1 13.0	5 8.3 3.4	24 16.4		
3 AGREE	37 43.0 25.3	23 38.3 15.8	60 41.1		
COLUMN TOTAL	86 58.9	60 41.1	146 100.0		



Table 45-0

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
STRONGLY DISAGREE	1 6 7.0 4.1	7 11.7 4.8	13 8.9		
MODERATELY DISAGREE	2 13 15.1 8.9	14 23.3 9.0	27 18.5		
SLIGHTLY DISAGREE	3 11 12.8 7.5	11 18.3 7.5	22 15.1		
UNDECIDED	4 19 22.1 13.0	5 8.3 3.4	24 16.4		
SLIGHTLY AGREE	5 19 22.1 13.0	10 16.7 6.0	29 19.9		
MODERATELY AGREE	6 17 19.8 11.6	11 18.3 7.5	28 19.2		
STRONGLY AGREE	7 1 1.2 .7	2 3.3 1.4	3 2.1		
COLUMN TOTAL	86 58.9	60 41.1	146 100.0		

Table 45-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
DISAGREE	1 30 34.9 20.5	32 53.3 21.9	62 42.5		
UNDECIDED	2 19 22.1 13.0	5 8.3 3.4	24 16.4		
AGREE	3 37 43.0 25.3	23 38.3 15.8	60 41.1		
COLUMN TOTAL	86 58.9	60 41.1	146 100.0		

Table 46-0

	COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
			1	2	
1	9	5	14		
STRONGLY AGREE	10.5	8.3	9.6		
	6.2	3.4			
2	26	10	44		
MODERATELY AGREE	30.2	30.0	30.1		
	17.0	12.3			
3	15	14	29		
SLIGHTLY AGREE	17.4	23.3	19.9		
	10.3	9.6			
4	10	5	20		
UNDECIDED	17.4	8.3	13.7		
	10.3	3.4			
5	11	6	17		
SLIGHTLY DISAGREE	12.8	10.0	11.6		
	7.5	4.1			
6	8	8	16		
MODERATELY DISAG- REE	9.3	13.3	11.0		
	5.5	5.5			
7	2	4	6		
STRONGLY DISAGREE	2.3	6.7	4.1		
	1.4	2.7			
COLUMN TOTAL	86	60	146		
	58.9	41.1	100.0		

Table 46-R

	COUNT COL PCT TOT PCT	ACCOUNTING	EDP		ROW TOTAL
			1	2	
1	50	37	87		
AGREE	58.1	61.7	59.6		
	34.2	25.3			
2	15	5	20		
UNDECIDED	17.4	8.3	13.7		
	10.3	3.4			
3	21	18	39		
DISAGREE	24.4	30.0	26.7		
	14.4	12.3			
COLUMN TOTAL	86	60	146		
	58.9	41.1	100.0		

Table 47-O

COUNT	COL PCT TOT PCT	ACCOUNTI	EDP	ROW
		NG		TOTAL
		1	2	
1		7	3	12
STRONGLY AGREE		8.1	8.5	8.3
		4.8	3.4	
2		18	12	30
MODERATELY AGREE		20.9	20.3	20.7
		12.4	8.3	
3		19	9	28
SLIGHTLY AGREE		22.1	15.3	19.3
		13.1	6.2	
4		7	9	16
UNDECIDED		8.1	15.3	11.0
		4.8	6.2	
5		15	9	24
SLIGHTLY DISAGREE		17.4	15.3	16.6
		10.3	6.2	
6		20	12	32
MODERATELY DISAG- REE		23.3	20.3	22.1
		13.8	8.3	
7		0	3	3
STRONGLY DISAGREE		0.0	5.1	2.1
		0.0	2.1	
COLUMN TOTAL		86	59	145
		59.3	40.7	100.0

Table 47-R

COUNT	COL PCT TOT PCT	ACCOUNTI	EDP	ROW
		NG		TOTAL
		1	2	
1		44	26	70
AGREE		51.2	44.1	48.3
		30.3	17.9	
2		7	9	16
UNDECIDED		8.1	15.3	11.0
		4.8	6.2	
3		35	24	59
DISAGREE		40.7	40.7	40.7
		24.1	16.6	
COLUMN TOTAL		86	59	145
		59.3	40.7	100.0



Table 48-0

COUNT COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
	1	2	
1 STRONGLY DISAGREE	5 6.0 3.4	1 1.6 .7	6 4.1
2 MODERATELY DISAGREE	10 11.9 6.9	7 11.5 4.8	17 11.7
3 SLIGHTLY DISAGREE	12 14.3 8.3	1 1.6 .7	13 9.0
4 UNDECIDED	27 32.1 18.6	10 16.4 6.9	37 25.5
5 SLIGHTLY AGREE	10 11.9 6.9	15 24.6 10.3	25 17.2
6 MODERATELY AGREE	13 15.5 9.0	21 34.4 14.5	34 23.4
7 STRONGLY AGREE	7 8.3 4.8	6 9.0 4.1	13 9.0
COLUMN TOTAL	84 57.9	61 42.1	145 100.0

Table 48-R

COUNT COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
	1	2	
1 DISAGREE	27 32.1 18.6	9 14.8 6.2	36 24.8
2 UNDECIDED	27 32.1 18.6	10 16.4 6.9	37 25.5
3 AGREE	30 35.7 20.7	42 68.9 29.0	72 49.7
COLUMN TOTAL	84 57.9	61 42.1	145 100.0

Table 49-0

COUNT COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
	1	2	
1 STRONGLY AGREE	5 5.8 3.4	1 1.7 .7	6 4.1
2 MODERATELY AGREE	16 18.6 11.0	20 33.3 13.7	36 24.7
3 SLIGHTLY AGREE	25 29.1 17.1	20 33.3 13.7	45 30.8
4 UNDECIDED	7 8.1 4.8	4 6.7 2.7	11 7.5
5 SLIGHTLY DISAGREE	13 15.1 8.9	6 10.0 4.1	19 13.0
6 MODERATELY DISAG- REE	15 17.4 10.3	8 13.3 5.5	23 15.8
7 STRONGLY DISAGREE	5 5.8 3.4	1 1.7 .7	6 4.1
COLUMN TOTAL	86 58.9	60 41.1	146 100.0

Table 49-R

COUNT COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
	1	2	
1 AGREE	46 53.5 31.5	41 68.3 28.1	87 59.6
2 UNDECIDED	7 8.1 4.8	4 6.7 2.7	11 7.5
3 DISAGREE	13 38.4 22.0	15 25.0 10.3	48 32.9
COLUMN TOTAL	86 58.9	60 41.1	146 100.0



Table 50-0

	COUNT	ACCOUNTING	EDP	ROW TOTAL
	COL PCT TOT PCT	1	2	
STRONGLY DISAGREE	1 11 12.8 7.5	5 8.2 3.4	16 10.9	
MODERATELY DISAGREE	2 7 8.1 4.8	6 9.8 4.1	13 8.8	
SLIGHTLY DISAGREE	3 9 10.5 6.1	5 8.2 3.4	14 9.5	
UNDECIDED	4 4 4.7 2.7	10 16.4 6.8	14 9.5	
SLIGHTLY AGREE	5 11 12.8 7.5	6 9.8 4.1	17 11.6	
MODERATELY AGREE	6 25 29.1 17.0	10 16.4 6.8	35 23.8	
STRONGLY AGREE	7 19 22.1 12.9	19 31.1 12.9	38 25.9	
COLUMN TOTAL	86 58.5	61 41.5	147 100.0	

Table 50-R

	COUNT	ACCOUNTING	EDP	ROW TOTAL
	COL PCT TOT PCT	1	2	
DISAGREE	1 27 31.4 18.4	16 26.2 10.9	43 29.3	
UNDECIDED	2 4 4.7 2.7	10 16.4 6.8	14 9.5	
AGREE	3 55 64.0 37.4	35 57.4 23.8	90 61.2	
COLUMN TOTAL	86 58.5	61 41.5	147 100.0	



Table 51-0

	COUNT	ACCOUNTING	EDP	ROW TOTAL
	COL PCT TOT PCT	1	2	
1	9	7	16	
STRONGLY DISAGREE	10.8	11.5	11.1	
	6.3	4.9		
2	8	3	11	
MODERATELY DISAGREE	9.6	4.9	7.6	
	5.6	2.1		
3	7	2	9	
SLIGHTLY DISAGREE	8.4	3.3	6.3	
	4.9	1.4		
4	5	5	10	
UNDECIDED	6.0	8.2	6.9	
	3.5	3.5		
5	19	12	31	
SLIGHTLY AGREE	22.9	19.7	21.5	
	13.2	0.3		
6	18	18	36	
MODERATELY AGREE	21.7	29.5	25.0	
	12.5	12.5		
7	17	14	31	
STRONGLY AGREE	20.5	23.0	21.5	
	11.8	9.7		
COLUMN TOTAL	83	61	144	
	57.6	42.4	100.0	

Table 51-R

	COUNT	ACCOUNTING	EDP	ROW TOTAL
	COL PCT TOT PCT	1	2	
1	24	12	36	
DISAGREE	28.9	19.7	25.0	
	16.7	8.3		
2	5	5	10	
UNDECIDED	6.0	8.2	6.9	
	3.5	3.5		
3	54	44	98	
AGREE	65.1	72.1	68.1	
	37.5	30.6		
COLUMN TOTAL	83	61	144	
	57.6	42.4	100.0	

Table 52-0

	COUNT COL PCT TOT PCT	ACCOUNTING 1	EDP 2	ROW TOTAL
STRONGLY AGREE	1 7.0 4.1	6 9.8 4.1	6 8.2	12 8.2
MODERATELY AGREE	2 17.4 10.2	16 26.2 10.9	31 21.1	31 21.1
SLIGHTLY AGREE	3 26.7 15.6	19 31.1 12.9	42 28.6	42 28.6
UNDECIDED	4 4.7 2.7	3 4.9 2.0	7 4.8	7 4.8
SLIGHTLY DISAGREE	5 17.4 10.2	8 13.1 5.4	23 15.6	23 15.6
MODERATELY DISAGREE	6 20.9 12.2	8 13.1 5.4	26 17.7	26 17.7
STRONGLY DISAGREE	7 5.8 3.4	1 1.6 .7	6 4.1	6 4.1
COLUMN TOTAL	86 58.5	61 41.5	147 100.0	147 100.0

Table 52-R

	COUNT COL PCT TOT PCT	ACCOUNTING 1	EDP 2	ROW TOTAL
AGREE	1 51.2 29.9	44 67.2 27.9	85 57.8	85 57.8
UNDECIDED	2 4.7 2.7	3 4.9 2.0	7 4.8	7 4.8
DISAGREE	3 44.2 25.9	17 27.9 11.6	55 37.4	55 37.4
COLUMN TOTAL	86 58.5	61 41.5	147 100.0	147 100.0

Table 53-0

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
	1	2	1	2	
STRONGLY AGREE	15	10	17.4	16.4	25
	10.2	6.8			17.0
MODERATELY AGREE	32	19	37.2	31.1	51
	21.8	12.9			34.7
SLIGHTLY AGREE	24	14	27.9	23.0	38
	16.3	9.5			25.9
UNDECIDED	6	3	7.0	4.9	9
	4.1	2.0			6.1
SLIGHTLY DISAGREE	6	3	7.0	4.9	9
	4.1	2.0			6.1
MODERATELY DISAGREE	3	5	3.5	8.2	8
	2.0	3.4			5.4
STRONGLY DISAGREE	0	7	0.0	11.5	7
	0.0	4.8			4.8
COLUMN TOTAL	86	61	58.5	41.5	147
					100.0

Table 53-R

	COUNT		ACCOUNTING	EDP	ROW TOTAL
	COL TOT	PCT PCT			
	1	2	1	2	
AGREE	71	43	82.6	70.5	114
	48.3	29.3			77.6
UNDECIDED	6	3	7.0	4.9	9
	4.1	2.0			6.1
DISAGREE	9	15	10.5	24.6	24
	6.1	10.2			16.3
COLUMN TOTAL	86	61	58.5	41.5	147
					100.0



Table 54-O

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1 STRONGLY DISAGREE	1	1 1.2 .7	4 6.6 2.8	5 3.4	
2 MODERATELY DISAG- REE	2	5 6.0 3.4	7 11.5 4.8	12 8.3	
3 SLIGHTLY DISAGREE	3	8 9.5 5.5	8 13.1 5.5	16 11.0	
4 UNDECIDED	4	49 58.3 33.8	18 29.5 12.4	67 46.2	
5 SLIGHTLY AGREE	5	8 9.5 5.5	17 27.9 11.7	25 17.2	
6 MODERATELY AGREE	6	10 11.9 6.9	6 9.8 4.1	16 11.0	
7 STRONGLY AGREE	7	3 3.6 2.1	1 1.6 .7	4 2.8	
COLUMN TOTAL		84 57.9	61 42.1	145 100.0	

Table 54-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1 DISAGREE	1	14 16.7 9.7	19 31.1 13.1	33 22.8	
2 UNDECIDED	2	49 58.3 33.8	18 29.5 12.4	67 46.2	
3 AGREE	3	21 25.0 14.5	24 39.3 16.6	45 31.0	
COLUMN TOTAL		84 57.9	61 42.1	145 100.0	

Table 55-0

COUNT COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
	1	2	
1 STRONGLY DISAGREE	1 1.2 .7	3 4.9 2.0	4 2.7
2 MODERATELY DISAGREE	1 1.2 .7	3 4.9 2.0	4 2.7
3 SLIGHTLY DISAGREE	2 2.3 1.4	2 3.3 1.4	4 2.7
4 UNDECIDED	3 3.5 2.0	5 8.2 3.4	8 5.4
5 SLIGHTLY AGREE	25 29.1 17.0	16 26.2 10.9	41 27.9
6 MODERATELY AGREE	26 30.2 17.7	17 27.9 11.6	43 29.3
7 STRONGLY AGREE	28 32.6 19.0	15 24.6 10.2	43 29.3
COLUMN TOTAL	86 58.5	61 41.5	147 100.0

Table 55-R

COUNT COL PCT TOT PCT	ACCOUNTING	EDP	ROW TOTAL
	1	2	
1 DISAGREE	4 4.7 2.7	8 13.1 5.4	12 8.2
2 UNDECIDED	3 3.5 2.0	5 8.2 3.4	8 5.4
3 AGREE	79 91.9 53.7	48 78.7 32.7	127 86.4
COLUMN TOTAL	86 58.5	61 41.5	147 100.0

Table 56-0

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1	15	9	24		
STRONGLY AGREE	17.4	14.8	16.3		
	10.2	6.1			
2	23	19	42		
MODERATELY AGREE	26.7	31.1	28.6		
	15.6	12.9			
3	14	13	27		
SLIGHTLY AGREE	16.3	21.3	18.4		
	9.5	8.8			
4	2	2	4		
UNDECIDED	2.3	3.3	2.7		
	1.4	1.4			
5	12	0	20		
SLIGHTLY DISAGREE	14.0	13.1	13.6		
	8.2	5.4			
6	10	7	17		
MODERATELY DISAG- REE	11.6	11.5	11.6		
	6.8	4.8			
7	10	3	13		
STRONGLY DISAGREE	11.6	4.9	8.8		
	6.8	2.8			
COLUMN TOTAL	86	61	147		
	58.5	41.5	100.0		

Table 56-R

	COUNT COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL
		1	2		
1	52	41	93		
AGREE	60.5	67.2	63.3		
	35.4	27.9			
2	2	2	4		
UNDECIDED	2.3	3.3	2.7		
	1.4	1.4			
3	32	18	50		
DISAGREE	37.2	29.5	34.0		
	21.8	12.2			
COLUMN TOTAL	86	61	147		
	58.5	41.5	100.0		



Table 57-0

	COUNT	ACCOUNTING		EDP	ROW
	COL	PCT	TOT	PCT	TOTAL
	1	2	3	4	5
STRONGLY AGREE	24	6	30	27.9	20.4
	16.3	4.1			
MODERATELY AGREE	24	15	39	27.9	26.5
	16.3	10.2			
SLIGHTLY AGREE	20	25	51	30.2	34.7
	17.7	17.0			
UNDECIDED	5	1	6	5.8	4.1
	3.4	.7			
SLIGHTLY DISAGREE	4	4	8	4.7	5.4
	2.7	2.7			
MODERATELY DISAGREE	3	8	11	3.5	7.0
	2.0	3.4			
STRONGLY DISAGREE	0	2	2	0.0	1.4
	0.0	1.4			
COLUMN TOTAL	86	61	147	58.5	100.0

Table 57-R

	COUNT	ACCOUNTING		EDP	ROW
	COL	PCT	TOT	PCT	TOTAL
	1	2	3	4	5
AGREE	74	46	120	86.0	81.6
	50.3	31.3			
UNDECIDED	5	1	6	5.8	4.1
	3.4	.7			
DISAGREE	7	14	21	8.1	14.3
	4.9	9.5			
COLUMN TOTAL	86	61	147	58.5	100.0

Table 58-0

COUNT	COL TOT	PCT PCT	ACCOUNTING	EDP		ROW TOTAL
				1	2	
1	1		1	0		1
STRONGLY DISAGREE	1.2		0.0	0.0		.7
	.7					
2	4		4	4		8
MODERATELY DISAGREE	4.7		6.7	2.7		5.3
	2.7					
3	1		3	3		4
SLIGHTLY DISAGREE	1.2		5.0	2.1		2.7
	.7					
4	2		5	5		7
UNDECIDED	2.3		8.3	3.4		4.8
	1.4					
5	10		10	10		20
SLIGHTLY AGREE	20.9		16.7	6.0		19.2
	12.3					
6	24		24	24		48
MODERATELY AGREE	27.9		40.0	16.4		32.9
	16.4					
7	30		14	14		50
STRONGLY AGREE	41.0		23.3	9.6		34.2
	24.7					
COLUMN TOTAL	86		60	60		146
	58.9		41.1	41.1		100.0

Table 58-R

COUNT	COL TOT	PCT PCT	ACCOUNTING	EDP		ROW TOTAL
				1	2	
1	6		7	7		13
DISAGREE	7.0		11.7	4.8		8.9
	4.1					
2	2		5	5		7
UNDECIDED	2.3		8.3	3.4		4.8
	1.4					
3	78		48	48		126
AGREE	90.7		80.0	32.9		86.3
	53.4					
COLUMN TOTAL	86		60	60		146
	58.9		41.1	41.1		100.0

Table 59-0

	COUNT	COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL	
			1	2			
DEFINITELY TRUE	1		I	0	I	3	11 7.5
			I	9.3	I	4.9	
			I	5.4	I	2.0	
OFTEN TRUE	2		I	24	I	9	33 22.4
			I	27.9	I	14.0	
			I	16.3	I	6.1	
MORE TRUE THAN FALSE	3		I	22	I	11	33 22.4
			I	25.6	I	10.0	
			I	15.0	I	7.5	
UNCERTAIN ABOUT THIS	4		I	9	I	0	17 11.6
			I	10.5	I	13.1	
			I	0.1	I	5.4	
MORE FALSE THAN TRUE	5		I	10	I	11	21 14.3
			I	11.0	I	18.0	
			I	0.0	I	7.0	
USUALLY NOT THE CASE	6		I	10	I	10	26 17.7
			I	11.0	I	20.2	
			I	6.0	I	10.9	
DEFINITELY FALSE	7		I	3	I	3	6 4.1
			I	3.5	I	4.9	
			I	2.0	I	2.0	
COLUMN TOTAL				86 58.5		61 41.5	147 100.0

Table 59-R

	COUNT	COL PCT TOT PCT	ACCOUNTING		EDP	ROW TOTAL	
			1	2			
TRUE	1		I	54	I	23	77 52.4
			I	62.8	I	37.7	
			I	36.7	I	15.6	
UNCERTAIN ABOUT THIS	2		I	9	I	8	17 11.6
			I	10.5	I	13.1	
			I	6.1	I	5.4	
FALSE	3		I	23	I	30	53 36.1
			I	26.7	I	49.2	
			I	15.6	I	20.4	
COLUMN TOTAL				86 58.5		61 41.5	147 100.0



Table 60-a. Pearson's product moment correlation coefficients

V	1	2	3	4	5	6	7	8	9	10
1	1.00000									
2	0.32340	1.00000								
3	0.48490	0.42180	1.00000							
4	0.58370	0.35310	0.45800	1.00000						
5	0.46320	0.51340	0.42680	0.44240	1.00000					
6	0.30850	0.25040	0.44420	0.30320	0.24780	1.00000				
7	0.30820	0.29580	0.34420	0.40070	0.35950	0.31120	1.00000			
8	0.10480	0.18040	0.09220	-0.04290	0.14640	0.12600	0.07300	1.00000		
9	0.11740	0.29310	0.18760	0.24720	0.36840	0.15980	0.15220	0.07850	1.00000	
10	0.19180	0.10820	0.12180	-0.01920	0.01690	0.13770	0.15120	0.37620	-0.08210	1.00000
11	-0.00420	-0.11210	-0.03240	-0.18450	-0.14430	-0.06280	-0.03760	0.31220	-0.22060	0.43340
12	0.10340	0.28240	0.19760	0.17860	0.17130	0.13980	0.21060	0.17990	0.20530	0.03460
13	0.25000	0.26510	0.23880	0.11600	0.20730	0.09710	0.09590	0.35240	0.16680	0.33090
14	0.13460	0.17230	0.27270	0.15310	0.31180	0.18400	0.17140	0.02880	0.16430	0.20910
15	0.21240	0.07910	0.24080	0.20260	0.27090	0.15750	0.22560	0.11560	0.04140	0.19600
16	0.18140	0.19350	0.21220	0.16200	0.06790	0.30730	0.12900	0.15850	0.18970	0.24230
17	0.45660	0.31520	0.46500	0.28700	0.46640	0.27880	0.37540	0.34960	0.17520	0.43450
18	0.30150	0.22800	0.28420	0.19600	0.28270	0.25380	0.37180	0.10430	0.10350	0.26790
19	0.39300	0.36900	0.31010	0.24300	0.37220	0.23280	0.32500	0.22260	0.04050	0.49710
20	0.18350	0.28680	0.22470	0.13840	0.11810	0.15640	0.18900	0.21970	0.28230	0.60400
21	0.33130	0.34050	0.28220	0.23400	0.39660	0.22590	0.18450	0.09770	0.30510	0.06800
22	0.18260	0.21980	0.27110	0.09440	0.23940	0.18440	0.12400	-0.01730	0.19860	0.03410
23	0.13830	0.13880	0.10200	-0.00720	0.16690	0.18030	0.04360	0.37750	0.20210	0.32920
24	0.07370	0.17510	0.15580	0.09350	0.20900	0.13750	0.03520	0.10910	0.31290	0.00760
25	0.40260	0.14890	0.20140	0.31480	0.16600	0.24520	0.20740	0.17330	0.04090	0.29470
26	-0.09240	-0.07390	-0.02290	-0.21850	-0.23660	0.01510	-0.10590	0.25960	-0.03480	0.44830
27	0.08690	0.16940	0.17040	-0.01390	0.17360	0.14810	0.21060	0.34810	0.04220	0.31220
28	0.30080	0.37610	0.36850	0.39500	0.42130	0.37070	0.32470	0.16210	0.35160	0.09510
29	0.20820	0.38170	0.28180	0.29950	0.43960	0.15140	0.22530	0.04910	0.29380	0.06690
30	0.09470	0.09790	0.11180	0.01970	0.18540	0.13800	0.02280	0.38800	0.23800	0.27610
31	-0.04630	0.22533	0.14950	0.04740	0.23290	0.15070	0.23280	0.15120	0.22050	0.18160
32	0.02930	0.13940	0.00090	0.01860	-0.00870	0.16240	-0.04290	0.36780	0.24080	0.26050
33	0.39450	0.14400	0.22600	0.29150	0.22810	0.34010	0.23710	0.16370	0.07200	0.32480
34	0.08500	0.02610	0.10200	0.02950	-0.05040	0.14750	0.01070	0.22780	0.01790	0.28210
35	0.35150	0.29540	0.30940	0.29640	0.36780	0.18620	0.24130	0.19510	0.24870	0.21680
36	0.07720	0.07250	0.07430	-0.00860	0.00280	0.12300	-0.04050	0.22990	0.00290	0.34820
37	0.16830	0.17840	0.25030	0.07310	0.14110	0.21950	0.15670	0.22980	0.17450	0.43770
38	0.05100	0.18260	0.15870	0.10740	0.18500	0.19400	0.18970	0.07300	0.08880	0.19330
39	0.20930	0.24330	0.22600	0.05030	0.18560	0.15860	0.21780	0.30700	0.07900	0.45280
40	0.20850	0.17820	0.31590	0.15570	0.16680	0.32700	0.05600	0.16940	0.25630	0.14410
41	0.26830	0.17110	0.29320	0.19190	0.16430	0.33080	0.20860	0.22460	0.15550	0.50080
42	0.19930	0.36240	0.17410	0.24990	0.24450	0.13540	0.17340	0.10370	0.13090	0.23600
43	0.27750	0.31520	0.28180	0.22400	0.38390	0.23220	0.30340	0.09980	0.10190	0.37210
44	0.04140	0.23370	0.23380	0.01360	0.10630	0.20630	0.20440	0.16250	0.02230	0.31110
45	0.28820	0.13480	0.08700	0.14350	0.32080	0.10130	0.04840	0.23620	0.18560	0.27070
46	0.19930	0.17240	0.12510	0.12260	0.10210	0.22060	0.16090	0.13250	0.08820	0.39650
47	0.10670	0.06300	0.17200	0.03460	0.09980	0.15200	0.18380	0.23200	0.11230	0.30170
48	0.07130	-0.00330	0.04260	-0.06940	0.00770	0.16040	0.04490	0.14750	0.00230	0.30110
49	0.08750	0.55380	0.25180	0.18730	0.39770	0.17740	0.21000	0.23470	0.32160	0.18750
50	0.12450	-0.05810	-0.05770	0.00790	-0.00110	-0.06200	0.03640	0.04660	-0.12750	0.05210
51	0.02800	0.11620	-0.03510	-0.01870	0.15230	-0.11740	0.07260	0.01430	0.07560	0.00750
52	0.16190	0.23410	0.10790	0.23930	0.24140	0.10440	0.15920	-0.09060	0.25210	-0.03260
53	0.07250	0.12230	0.08930	-0.06860	0.10560	0.13550	0.19250	0.12090	0.12260	0.44130
54	0.02710	0.01040	-0.02460	-0.05600	0.17890	-0.04190	-0.08760	-0.02130	0.12770	0.12970
55	0.13330	0.07410	0.09380	0.25720	0.28770	-0.02310	0.16840	-0.00180	0.07130	-0.07770
56	0.32450	0.28350	0.42600	0.24790	0.18560	0.43140	0.24910	0.19240	0.30930	0.23620
57	0.11290	0.11410	0.05220	-0.11830	0.00250	0.10350	0.11910	0.17820	-0.00430	0.42310
58	-0.06680	0.01090	-0.02700	0.05190	0.03820	-0.06670	0.13550	0.01760	-0.04810	-0.06650
59	0.07910	0.06610	0.14820	-0.09720	-0.10310	0.20850	0.04210	0.07890	0.12510	0.39460

V = variable or indicator

Table 60-a. Pearson's product moment correlation coefficients (r<sub>ij</sub>)

V	11	12	13	14	15	16	17	18	19	20
11	1.00000									
12	-0.08350	1.00000								
13	0.22130	0.27690	1.00000							
14	0.15450	0.04390	0.08420	1.00000						
15	0.24180	-0.07130	0.06820	0.36090	1.00000					
16	0.19880	0.13120	0.39120	0.12980	0.14710	1.00000				
17	0.25760	0.18160	0.26590	0.23150	0.38250	0.14930	1.00000			
18	0.18900	0.11240	0.28090	0.17430	0.34240	0.22290	0.50320	1.00000		
19	0.29980	0.21740	0.32110	0.28750	0.22270	0.24920	0.59790	0.62100	1.00000	
20	0.16610	0.18390	0.44490	0.13920	0.18030	0.42220	0.36810	0.34140	0.33400	1.00000
21	-0.04350	0.18030	0.19910	0.35550	0.17930	0.22380	0.23820	0.14340	0.27870	0.33030
22	-0.03770	0.04390	0.12030	0.39760	0.29510	0.20400	0.01480	0.05680	0.07370	0.19630
23	0.22420	0.19100	0.41710	0.20140	0.13360	0.32430	0.19150	0.19190	0.24080	0.27840
24	-0.00160	0.18420	0.22440	0.19780	0.17390	0.30260	0.15930	-0.05110	0.01480	0.28850
25	0.20760	-0.00120	0.12890	0.12920	0.24680	0.10850	0.37410	0.33590	0.49410	0.14720
26	0.43400	0.12080	0.21040	0.05620	0.02060	0.19220	0.22270	0.09050	0.24530	0.28790
27	0.08260	0.32040	0.46440	0.11340	0.01300	0.23720	0.26370	0.17660	0.38000	0.13170
28	0.00810	0.23710	0.31040	0.28270	0.13760	0.16620	0.34310	0.18880	0.33340	0.29620
29	-0.09020	0.20620	0.15830	0.17490	0.14830	0.17250	0.28320	0.06360	0.29460	0.27660
30	0.14600	0.11060	0.43400	0.09900	0.14290	0.41300	0.24210	0.17040	0.12520	0.37170
31	0.03930	0.17620	0.37610	0.16000	0.04760	0.21300	0.18760	0.05620	0.15910	0.33160
32	0.14460	0.11280	0.32010	0.01410	-0.02720	0.24610	0.18460	0.03780	0.14970	0.27240
33	0.16230	0.08300	0.17080	0.17640	0.15300	0.19230	0.45530	0.37200	0.51900	0.17110
34	0.45970	0.02490	0.23370	0.10720	0.21560	0.17800	0.21190	0.15840	0.30690	0.13020
35	0.14770	0.28460	0.38740	0.16730	0.21100	0.19750	0.44640	0.35970	0.40360	0.36760
36	0.36200	0.05870	0.23430	0.12530	0.11890	0.14230	0.26550	0.28100	0.42680	0.20900
37	0.12510	0.25870	0.29040	0.28910	0.21410	0.33340	0.36510	0.30120	0.43530	0.38250
38	0.16260	0.14260	0.16430	0.25660	0.21310	0.07270	0.31270	0.24950	0.35180	0.16280
39	0.23190	0.08300	0.32100	0.24430	0.24180	0.18790	0.38150	0.33550	0.53130	0.33110
40	0.06060	0.06790	0.26790	0.17720	0.10280	0.40460	0.12370	0.03570	0.09530	0.34430
41	0.24830	0.14890	0.28630	0.31890	0.39460	0.39340	0.42760	0.60200	0.50690	0.37930
42	0.09900	0.32190	0.23960	0.23990	0.05800	0.20660	0.23320	0.23410	0.36020	0.29650
43	0.14180	0.23590	0.28700	0.24040	0.26310	0.18760	0.34450	0.31490	0.48680	0.32840
44	0.18010	0.15670	0.23550	0.13390	0.14110	0.21110	0.27730	0.15320	0.20660	0.27220
45	0.36450	0.07180	0.27980	0.28840	0.21860	0.12900	0.33870	0.19700	0.31180	0.17450
46	0.18310	0.07680	0.32830	0.23400	0.20660	0.42080	0.28340	0.38200	0.49420	0.35600
47	0.16240	0.09120	0.27190	0.23050	0.19150	0.21470	0.24090	0.19870	0.26330	0.38200
48	0.36930	-0.01430	0.13320	0.31930	0.24720	0.17920	0.18100	0.14940	0.29170	0.20030
49	0.03730	0.25200	0.22400	0.18990	0.12630	0.19740	0.28360	0.18430	0.28890	0.29140
50	0.21360	-0.02430	0.03310	0.02840	0.00620	0.03070	-0.00330	-0.03510	0.04610	-0.10210
51	0.15260	0.07900	0.03950	0.09820	0.03190	-0.12790	0.05290	0.06600	0.10260	0.00770
52	-0.16210	0.04920	0.15250	0.16770	0.10960	0.17220	0.12010	0.06180	0.08400	0.10320
53	0.21800	0.15040	0.38570	0.17110	0.08220	0.30160	0.25920	0.21590	0.28090	0.34150
54	0.07150	-0.03310	0.07390	0.14140	0.12330	-0.00980	0.00150	0.04730	0.11430	0.12980
55	0.10430	-0.00170	-0.13310	0.08180	0.02260	-0.36900	0.22280	0.04180	0.14980	-0.23710
56	0.04190	0.24120	0.30210	0.24970	0.15870	0.46130	0.31360	0.19890	0.30530	0.35370
57	0.24820	0.18040	0.27700	0.27960	0.12570	0.27650	0.23150	0.17400	0.30610	0.27180
58	0.03170	-0.11490	-0.10050	-0.04980	-0.01290	-0.19320	-0.05360	-0.10510	-0.03530	-0.14800
59	0.14550	0.17100	0.27320	0.22810	0.05010	0.37230	0.28670	0.19640	0.27450	0.44520

V = variable or indicator.

Table 60-a. Pearson's product moment correlation coefficients (cont'd)

V	21	22	23	24	25	26	27	28	29	30
21	1.00000									
22	0.42590	1.00000								
23	0.32900	0.31560	1.00000							
24	0.39500	0.34360	0.29820	1.00000						
25	0.17620	0.16050	0.20010	0.10510	1.00000					
26	-0.00610	-0.11720	0.24720	0.04790	0.07220	1.00000				
27	0.17750	0.00430	0.36490	0.04830	0.04370	0.23610	1.00000			
28	0.37920	0.27750	0.21830	0.21110	0.31990	-0.00590	0.21670	1.00000		
29	0.34320	0.36620	0.18160	0.23750	0.27550	-0.10920	0.19390	0.47410	1.00000	
30	0.13220	0.18350	0.51140	0.27350	0.05590	0.18970	0.38410	0.20920	0.11120	1.00000
31	0.19160	0.18540	0.26160	0.28160	-0.03180	0.14860	0.23770	0.16970	0.23590	0.21360
32	0.11780	0.00290	0.21470	0.25360	0.19430	0.20020	0.10050	0.05610	0.00380	0.20050
33	0.23360	0.07890	0.19180	0.08240	0.74130	0.13470	0.13350	0.29140	0.21570	0.11400
34	0.02240	0.15320	0.23710	0.12900	0.43540	0.38150	0.05040	0.10840	0.12210	0.19760
35	0.24750	0.12830	0.24480	0.10960	0.42280	0.24050	0.13280	0.37510	0.39440	0.21380
36	0.01460	0.04340	0.24600	-0.04900	0.33390	0.36000	0.13640	0.04640	0.07730	0.21680
37	0.31990	0.18010	0.40270	0.17260	0.25350	0.24630	0.39950	0.21390	0.31410	0.33210
38	0.28260	0.12800	0.16410	0.22820	0.22780	0.03220	0.22610	0.29360	0.33510	0.09680
39	0.27740	0.18770	0.34940	0.09130	0.29310	0.32000	0.32710	0.19490	0.21500	0.13730
40	0.25050	0.23940	0.30050	0.10910	0.06250	0.05880	0.24160	0.27180	0.12950	0.37560
41	0.28980	0.18120	0.31170	0.16780	0.41180	0.24040	0.21030	0.21900	0.21580	0.27760
42	0.24060	0.21330	0.13370	0.19060	0.15400	0.14920	0.12380	0.24310	0.24110	0.17720
43	0.34810	0.20370	0.22770	0.21600	0.33720	0.10670	0.23240	0.32330	0.30260	0.09350
44	0.13990	0.17970	0.24870	0.02620	0.07080	0.26910	0.46240	0.15850	0.19040	0.28330
45	0.21200	0.22370	0.27660	0.16310	0.17190	0.20070	0.13620	0.26610	0.04230	0.27460
46	0.20330	0.21630	0.36770	0.20300	0.28830	0.22330	0.30800	0.21970	0.24070	0.39770
47	0.23600	0.20750	0.29280	0.20140	0.23370	0.31580	0.23240	0.24570	0.19570	0.20730
48	0.12730	0.20780	0.21350	0.04920	0.29310	0.19730	0.10790	0.11540	-0.00290	0.19790
49	0.28980	0.26340	0.26490	0.24850	0.16750	0.06170	0.14460	0.31220	0.24140	0.19250
50	-0.08960	0.09310	0.03760	-0.06710	0.06830	0.01030	0.17290	-0.01960	0.09930	0.07560
51	-0.02940	-0.03650	-0.05930	-0.08340	0.02700	-0.02830	-0.06380	0.00020	-0.03370	-0.16930
52	0.24440	0.12680	0.14560	0.13370	0.05580	-0.13680	0.03280	0.17810	0.14110	0.15790
53	0.16000	0.17010	0.35090	0.16970	0.09320	0.31640	0.43690	-0.02790	0.14120	0.30350
54	0.31630	0.15640	0.11820	0.08050	0.16100	0.18280	0.09340	0.08870	0.17650	0.05150
55	0.06910	-0.13310	-0.18250	-0.08450	0.17780	-0.09690	-0.10940	0.21420	0.09300	-0.30110
56	0.37760	0.28170	0.25740	0.27890	0.27990	0.14960	0.21110	0.28700	0.27900	0.27540
57	0.16620	0.11070	0.27700	0.16280	0.09720	0.36810	0.36020	-0.05940	0.07680	0.18810
58	-0.12200	-0.00710	-0.08250	-0.15850	0.20370	-0.12000	-0.03140	0.15270	0.04370	-0.13290
59	0.21830	0.09910	0.27010	0.22430	0.07730	0.42920	0.26380	0.12920	0.19380	0.27160

V = variable or indicator.



Table 60 - a. Pearson's product moment correlation coefficients (contd.)

V	31	32	33	34	35	36	37	38	39	40
31	1.00000									
32	0.21320	1.00000								
33	0.03590	0.23170	1.00000							
34	0.06900	0.21660	0.40030	1.00000						
35	0.19240	0.12060	0.37250	0.42790	1.00000					
36	0.08890	0.34730	0.35390	0.53880	0.36340	1.00000				
37	0.13350	0.11530	0.32530	0.25150	0.23910	0.25340	1.00000			
38	0.05130	0.07040	0.23800	0.17780	0.23370	0.16340	0.38970	1.00000		
39	0.28630	0.17430	0.31800	0.22940	0.38830	0.34610	0.34450	0.23490	1.00000	
40	0.21450	0.18740	0.06670	0.05380	0.09830	0.04000	0.19160	-0.00990	0.13290	1.00000
41	0.21300	0.25500	0.41870	0.28430	0.38780	0.32840	0.60150	0.24980	0.42710	0.23790
42	0.24940	0.23120	0.25780	0.22610	0.26630	0.30290	0.29910	0.23970	0.11160	0.11430
43	0.22420	0.08430	0.38100	0.13040	0.32890	0.09420	0.30820	0.33570	0.37900	0.11580
44	0.17900	0.11120	0.09960	0.10530	0.13090	0.13600	0.29940	0.11050	0.28840	0.45420
45	0.13210	0.05900	0.17390	0.22450	0.31670	0.13520	0.09890	0.16960	0.25350	0.20600
46	0.17560	0.21450	0.38200	0.39830	0.32070	0.41470	0.47250	0.30350	0.32620	0.23750
47	0.23260	0.24680	0.21600	0.23850	0.29640	0.19780	0.20910	0.16770	0.51100	0.19330
48	0.12210	0.10210	0.28560	0.33930	0.22470	0.33080	0.22380	0.17800	0.26790	0.10460
49	0.27670	0.26080	0.21010	0.18180	0.19620	0.22120	0.31470	0.12520	0.25890	0.17450
50	0.06660	0.05920	0.12070	0.15450	-0.02730	0.11220	0.03440	0.03590	-0.01910	-0.12770
51	-0.10450	0.05670	0.02530	0.02920	0.06400	0.03070	-0.13530	0.03290	0.06140	-0.08400
52	0.15480	0.04320	0.00200	-0.11980	0.07330	0.01360	0.13480	0.17890	0.02860	0.17040
53	0.30300	0.22570	0.14950	0.22570	0.14380	0.16470	0.34440	0.09600	0.29040	0.20690
54	0.11350	-0.03120	0.17290	0.09210	0.16030	0.13490	0.11740	-0.00700	0.24220	0.05220
55	-0.06060	-0.05700	0.17350	0.03720	0.11250	-0.02350	-0.15020	0.10770	-0.01720	-0.15910
56	0.33650	0.15030	0.34090	0.20920	0.29060	0.13930	0.31440	0.22380	0.30870	0.31410
57	0.23830	0.22180	0.12380	0.21290	0.10920	0.19500	0.37260	0.07410	0.20540	0.20540
58	-0.03750	-0.16080	0.10710	0.17790	0.02220	-0.08050	-0.10780	0.00160	-0.05150	-0.18500
59	0.24970	0.21570	0.19030	0.19590	0.21800	0.22830	0.41630	0.21510	0.25950	0.29390

= variable  
or  
indicator

Table 60 - a. Pearson's product moment correlation coefficients (contd.)

V	41	42	43	44	45	46	47	48	49	50
41	1.00000									
42	0.30730	1.00000								
43	0.42900	0.33910	1.00000							
44	0.17240	0.28620	0.25330	1.00000						
45	0.20770	0.25580	0.30120	0.16540	1.00000					
46	0.49630	0.47050	0.30570	0.24600	0.28200	1.00000				
47	0.35810	0.11430	0.27290	0.26580	0.22730	0.32720	1.00000			
48	0.29350	0.14970	0.08570	0.13700	0.21080	0.26810	0.18600	1.00000		
49	0.28480	0.39740	0.23850	0.22750	0.23650	0.24910	0.22580	0.11290	1.00000	
50	0.00930	0.18280	0.03180	0.09200	0.03570	0.16330	-0.04130	0.04510	0.02480	1.00000
51	-0.09970	0.01860	0.00040	-0.06010	0.26270	-0.05090	0.05620	0.06180	0.09650	0.01930
52	0.10920	0.09210	0.18770	0.04900	-0.01810	0.05150	-0.08190	-0.11450	0.20160	-0.10630
53	0.27810	0.32340	0.23750	0.47750	0.24130	0.35980	0.23910	0.16510	0.28830	0.14280
54	0.12250	0.08310	0.24380	-0.01400	0.22210	0.05240	0.28180	0.25220	0.08330	0.06480
55	-0.07210	-0.00370	0.12400	-0.21680	0.18030	-0.16750	-0.01020	-0.16140	0.03240	0.09210
56	0.48950	0.14780	0.28170	0.10980	0.13270	0.23190	0.23110	0.13790	0.26680	-0.03320
57	0.30880	0.31700	0.14160	0.40790	0.20310	0.26800	0.21700	0.24420	0.24050	0.09350
58	-0.08970	-0.18180	0.03960	-0.14470	0.02940	-0.07700	0.02710	0.09350	0.00740	0.09840
59	0.33020	0.19770	0.15390	0.41720	0.08990	0.34340	0.31080	0.26080	0.15810	-0.09510
V	51	52	53	54	55	56	57	58	59	
51	1.00000									
52	-0.18200	1.00000								
53	-0.02140	0.11810	1.00000							
54	0.14680	-0.09580	0.01400	1.00000						
55	0.37890	-0.07300	-0.24700	0.16630	1.00000					
56	-0.18950	0.31000	0.23730	-0.04510	-0.13800	1.00000				
57	-0.02440	0.10390	0.70970	0.05030	-0.23150	0.22970	1.00000			
58	0.13340	-0.08240	-0.07460	0.11620	0.28280	-0.12060	-0.21610	1.00000		
59	-0.20030	0.08110	0.46530	0.03250	-0.38300	0.34480	0.54750	-0.30550	1.00000	

V = Variable  
or  
indicator

Table 60-b

Eigen values<sup>\*</sup>

Factor #	Eigen-value	Factor #	Eigen-value
1	12.72	9	1.53
2	4.64	10	1.38
3	3.62	11	1.27
4	2.25	12	1.20
5	2.14	13	1.18
6	1.92	14	1.14
7	1.71	15	1.05
8	1.62	16	1.03

Table 60-c

Cumulative proportion of total variance<sup>\*</sup>

Factor #	Cumulative proportion of total variance	Factor #	Cumulative proportion of total variance
1	.22	9	.54
2	.29	10	.57
3	.36	11	.59
4	.39	12	.61
5	.43	13	.63
6	.46	14	.65
7	.49	15	.67
8	.52	16	.68

\* These values are computed on the basis of table 60-a above; that is, on the basis of Pearson's product moment correlation coefficients.





Table 60-d. Factor matrix before rotation (contd)

VARIABLE	FACTOR					
	11	12	13	14	15	16
1	0.29618	0.14130	0.25906	-0.06928	-0.09596	-0.12989
2	-0.05198	-0.05371	-0.20395	0.21131	-0.04388	-0.13135
3	-0.07942	-0.17077	0.02125	-0.01359	-0.20547	-0.18790
4	0.12200	0.02905	0.04432	-0.14479	-0.02553	0.02539
5	0.05974	0.06955	-0.03769	0.10689	0.01696	-0.14888
6	-0.19202	-0.09105	0.11356	0.13736	-0.01474	0.16741
7	-0.18398	0.10081	-0.24924	-0.19654	0.01184	0.21760
8	-0.29549	0.03742	0.05344	0.20713	-0.22731	-0.05599
9	0.00777	0.01964	-0.01278	0.01280	0.29848	0.09001
10	-0.04702	0.16362	0.02526	0.05604	-0.03655	0.03582
11	-0.21288	-0.06918	0.05011	-0.23476	0.01320	-0.03368
12	-0.05405	-0.29109	0.18460	-0.11524	-0.13458	0.02069
13	0.16384	0.03412	-0.06017	-0.20528	-0.01088	-0.03128
14	-0.20452	-0.10838	0.09853	0.06864	-0.01511	-0.04282
15	-0.17497	0.00229	-0.22052	-0.06774	-0.15878	-0.03548
16	0.10424	0.01481	-0.06903	-0.17743	-0.03394	0.21419
17	-0.15780	-0.01133	0.06464	-0.03533	-0.00845	-0.12333
18	0.17054	-0.02925	-0.26081	0.02668	0.02254	0.13904
19	0.09922	0.01325	-0.00995	0.05343	0.00740	-0.03673
20	0.16707	-0.04585	-0.23963	-0.17605	-0.01640	0.14228
21	0.07294	0.08399	0.28461	0.11415	-0.04201	-0.03606
22	0.00418	-0.04736	-0.12696	0.02614	-0.19620	-0.07638
23	0.01434	0.07623	0.05361	0.14231	0.04275	-0.05329
24	-0.21664	0.06742	0.19388	-0.24747	-0.17084	0.11137
25	0.02123	0.18228	0.07628	0.06608	0.16337	0.03680
26	-0.02689	-0.10643	0.17309	-0.17123	0.02344	-0.16824
27	0.03733	-0.02843	0.15203	0.11169	0.01596	0.01875
28	-0.04846	-0.28379	0.05046	-0.04093	0.12714	0.09536
29	0.05886	-0.11863	-0.04812	-0.07861	-0.02956	-0.15708
30	0.10794	-0.07829	-0.07592	0.01952	0.07326	0.02265
31	-0.12423	0.25838	-0.23459	-0.27082	-0.13203	-0.11972
32	-0.17443	0.24334	0.08125	0.19756	-0.10152	0.20539
33	0.06176	0.17888	0.18968	0.11426	0.10568	0.11273
34	-0.12531	-0.15900	-0.07864	-0.16015	0.08829	-0.17390
35	0.20295	-0.21192	-0.11411	-0.24204	0.07161	-0.26921
36	0.06810	-0.11303	-0.14606	0.22633	0.00021	-0.27515
37	-0.04065	-0.08844	0.09535	0.21826	-0.00757	0.02454
38	-0.29652	-0.27000	0.13237	-0.01501	0.06443	0.17494
39	0.03777	0.15746	-0.15794	0.14891	-0.17584	-0.12950
40	0.11910	-0.13865	0.08302	0.16942	0.16941	0.09288
41	-0.04615	0.12745	-0.02697	0.06420	-0.11539	0.10989
42	0.14439	-0.13399	0.01119	0.00703	-0.13384	0.09550
43	0.08040	0.19227	0.06819	-0.09284	-0.01189	0.17521
44	0.03030	-0.17454	-0.01710	0.15609	0.07713	0.00952
45	0.11084	-0.09100	0.17396	-0.14951	0.15195	0.06340
46	0.21434	-0.10230	-0.14241	0.03224	-0.02092	0.27431
47	0.04281	0.06027	-0.10359	-0.01296	-0.16685	0.20974
48	-0.05788	-0.15463	-0.11826	0.08775	0.09782	-0.03498
49	-0.20344	0.06590	-0.24835	0.30422	0.03138	-0.04434
50	0.08401	0.20597	0.09552	-0.15132	-0.28494	0.00643
51	0.02310	-0.12086	-0.03151	0.03413	0.07505	0.27579
52	-0.11965	0.29243	-0.05125	0.00376	0.42153	-0.21866
53	-0.00752	0.23848	-0.01750	-0.11086	0.24226	0.01030
54	0.42823	0.16087	0.10251	0.11144	0.01037	-0.06896
55	-0.14710	0.04954	0.26070	-0.04102	0.04262	0.03268
56	-0.20801	0.13964	0.09235	-0.16852	-0.00653	-0.12705
57	-0.09149	0.16201	0.16831	-0.05566	0.15641	-0.10499
58	-0.20223	0.07770	-0.25182	-0.10280	0.31003	0.09737
59	0.01371	-0.15106	0.13570	-0.08918	0.16177	-0.05738



Table 61. Kendall rank order correlation coefficients.

V	1	2	3	4	5	6	7	8	9	10
1	1.00000									
2	0.26160	1.00000								
3	0.46500	0.31970	1.00000							
4	0.50160	0.26560	0.41600	1.00000						
5	0.39630	0.38040	0.33670	0.46630	1.00000					
6	0.21240	0.18940	0.37920	0.27550	0.20990	1.00000				
7	0.31150	0.21970	0.25960	0.33290	0.29340	0.24250	1.00000			
8	0.04870	0.13250	0.08370	-0.01830	0.07230	0.10490	0.04340	1.00000		
9	0.10940	0.20890	0.17450	0.24330	0.29450	0.15400	0.10030	0.07390	1.00000	
10	0.27170	0.10370	0.13240	0.06030	0.03770	0.10790	0.13340	0.29190	-0.08310	1.00000
11	0.06090	-0.09130	-0.04030	-0.07490	-0.09940	-0.04040	-0.01790	0.24960	-0.17530	0.34800
12	0.07230	0.21930	0.15370	0.10440	0.11910	0.16130	0.16330	0.15740	0.14200	0.03930
13	0.24430	0.18440	0.21260	0.10640	0.14030	0.11210	0.07060	0.29700	0.13690	0.27000
14	0.19010	0.14640	0.23550	0.19940	0.24560	0.18940	0.19410	0.04530	0.09090	0.19160
15	0.24730	0.10520	0.21090	0.26340	0.23340	0.14770	0.21770	0.11020	0.03050	0.20160
16	0.15990	0.15490	0.14660	0.11650	0.00130	0.24850	0.08560	0.19470	0.18330	0.22750
17	0.46070	0.25110	0.37350	0.31080	0.34560	0.24810	0.32650	0.26210	0.12660	0.40370
18	0.31590	0.20930	0.24780	0.16780	0.17430	0.19910	0.26650	0.10130	0.07120	0.26020
19	0.38270	0.26710	0.22120	0.23860	0.22820	0.17810	0.25750	0.18070	0.03500	0.41830
20	0.26400	0.19290	0.23610	0.16600	0.08460	0.13230	0.15970	0.17000	0.21360	0.36410
21	0.31880	0.21800	0.25020	0.21480	0.32050	0.18110	0.13110	0.10450	0.24370	0.03320
22	0.18010	0.16780	0.20990	0.14120	0.16880	0.12230	0.06100	0.00850	0.15840	0.00560
23	0.16620	0.12290	0.09510	0.04070	0.11640	0.16290	-0.01770	0.31300	0.18130	0.25390
24	0.09340	0.12040	0.12530	0.07030	0.14550	0.10200	0.04590	0.08920	0.21910	-0.02370
25	0.41700	0.14670	0.23180	0.30870	0.14550	0.23120	0.19130	0.17650	0.01810	0.25770
26	0.02630	-0.02570	0.00280	-0.11680	-0.15710	0.04610	0.01080	0.16360	-0.03820	0.35340
27	0.13420	0.13000	0.13220	0.01080	0.10590	0.14280	0.15110	0.27200	0.01600	0.24190
28	0.24520	0.24690	0.29370	0.34020	0.30400	0.28770	0.23620	0.11980	0.24960	0.04690
29	0.22360	0.28080	0.23860	0.32310	0.33330	0.12630	0.18550	0.02390	0.17260	0.00380
30	0.15290	0.07580	0.09850	0.02010	0.10650	0.09980	-0.03110	0.30690	0.13900	0.20170
31	0.03050	0.15550	0.14150	0.05630	0.16320	0.14870	0.12930	0.14090	0.19830	0.09170
32	0.05380	0.09660	0.01120	0.02720	0.01340	0.11600	-0.05470	0.31720	0.14040	0.16800
33	0.43010	0.19090	0.25570	0.28700	0.21460	0.25070	0.25270	0.14220	0.09300	0.34500
34	0.17670	0.05590	0.10010	0.17150	0.01360	0.17020	0.08540	0.19920	-0.01090	0.25060
35	0.34960	0.23340	0.27420	0.34310	0.28000	0.20040	0.22760	0.17120	0.21080	0.24490
36	0.16600	0.13140	0.09130	0.09740	0.02210	0.09840	0.02250	0.17440	-0.00550	0.29060
37	0.21640	0.15060	0.21270	0.19120	0.10910	0.19360	0.12390	0.18850	0.04520	0.36370
38	0.15990	0.15320	0.12310	0.15880	0.14610	0.16550	0.13740	0.06320	0.04070	0.16430
39	0.30250	0.19260	0.19200	0.11200	0.14010	0.13070	0.20370	0.23100	0.09300	0.37410
40	0.20530	0.13880	0.25540	0.14330	0.15360	0.29910	0.08020	0.15300	0.19450	0.14150
41	0.27610	0.15160	0.26020	0.21120	0.12440	0.30150	0.20040	0.18470	0.14300	0.41340
42	0.16410	0.29540	0.13530	0.16390	0.17230	0.09510	0.11960	0.09930	0.04480	0.15270
43	0.31700	0.28980	0.28950	0.26570	0.34180	0.24310	0.30920	0.06450	0.13610	0.31010
44	0.16560	0.19060	0.19520	0.03120	0.05770	0.17340	0.16680	0.11100	-0.02850	0.27600
45	0.26750	0.11270	0.07820	0.03930	0.23550	0.10120	0.05700	0.19680	0.14930	0.21950
46	0.20510	0.13590	0.08300	0.13120	0.04810	0.17990	0.08370	0.12050	0.04050	0.30190
47	0.20580	0.05490	0.14680	0.08120	0.05670	0.12340	0.14720	0.20880	0.08650	0.24160
48	0.06920	0.00700	0.02390	0.00680	-0.00290	0.14330	0.03870	0.13250	-0.01470	0.26240
49	0.10690	0.48090	0.21300	0.22180	0.32880	0.15610	0.15520	0.20150	0.25310	0.14750
50	0.07970	-0.03690	-0.06190	-0.00380	-0.00690	-0.05530	0.01300	0.02130	-0.00920	0.06720
51	0.03710	0.06670	-0.01690	-0.00180	0.11540	-0.07160	0.10530	0.03140	0.07040	0.03410
52	0.13280	0.20100	0.09610	0.18790	0.21370	0.10710	0.10980	-0.07000	0.20070	-0.03990
53	0.18220	0.13300	0.10720	0.01880	0.13380	0.14320	0.12050	0.14570	0.08590	0.37130
54	0.03990	-0.00730	-0.02740	0.00850	0.12300	-0.00570	-0.03400	-0.00140	0.11300	0.09110
55	0.06320	0.03980	0.09040	0.18180	0.23800	-0.02840	0.17710	-0.01790	0.04450	-0.00250
56	0.30100	0.22610	0.35900	0.21980	0.14360	0.37140	0.18520	0.15950	0.22880	0.16600
57	0.12490	0.09980	0.05430	-0.11260	-0.00780	0.08760	0.07540	0.17940	-0.02870	0.32510
58	-0.02720	0.01270	-0.03760	0.05410	0.05030	-0.07430	0.11910	0.01850	-0.10710	-0.04120
59	0.15580	0.05180	0.13570	-0.04840	0.09490	0.16430	0.04480	0.06550	0.08190	0.31140

V = variable or indicator.



Table 61. Kendall rank order correlation coefficients (contd.)

V	11	12	13	14	15	16	17	18	19	20
11	1.00000									
12	-0.06300	1.00000								
13	0.15850	0.20700	1.00000							
14	0.13390	0.01940	0.09800	1.00000						
15	0.22350	-0.04160	0.09870	0.37500	1.00000					
16	0.17100	0.16340	0.34590	0.12650	0.06040	1.00000				
17	0.23190	0.15420	0.23050	0.23450	0.36750	0.13190	1.00000			
18	0.17100	0.09720	0.26850	0.17460	0.30730	0.21700	0.45050	1.00000		
19	0.24390	0.13280	0.28690	0.23420	0.24610	0.24260	0.31210	0.37710	1.00000	
20	0.11940	0.16840	0.38350	0.14790	0.14380	0.41600	0.30320	0.29520	0.29840	1.00000
21	-0.04610	0.13240	0.17470	0.31770	0.13920	0.19490	0.22000	0.14880	0.19870	0.29790
22	-0.01940	0.04560	0.07980	0.34570	0.21500	0.17150	0.02690	0.07680	0.07100	0.17960
23	0.15350	0.14330	0.32370	0.15400	0.07850	0.23630	0.13710	0.13840	0.19910	0.24170
24	-0.04750	0.15130	0.16710	0.17710	0.10980	0.22110	0.11780	-0.00490	-0.00320	0.21750
25	0.22390	0.01090	0.15860	0.11070	0.28760	0.06410	0.38220	0.30530	0.30300	0.12120
26	0.30320	0.10170	0.15960	0.10830	0.07910	0.19790	0.18160	0.11920	0.19090	0.22230
27	0.08220	0.28050	0.38430	0.10380	0.04570	0.19160	0.22040	0.18050	0.31320	0.11280
28	0.02410	0.19160	0.24010	0.23360	0.13000	0.13080	0.27720	0.14980	0.29240	0.24960
29	-0.05260	0.17360	0.13630	0.14830	0.12820	0.12910	0.22770	0.05920	0.19780	0.23060
30	0.09490	0.09080	0.41620	0.06400	0.10810	0.33890	0.19310	0.17640	0.11830	0.31780
31	0.01120	0.16590	0.24220	0.12060	0.03100	0.15670	0.15080	0.00350	0.11260	0.26980
32	0.11050	0.09310	0.23260	-0.03060	-0.04110	0.23850	0.14050	0.02690	0.13140	0.20100
33	0.20280	0.06090	0.15530	0.17680	0.21860	0.18580	0.47520	0.36050	0.47850	0.19540
34	0.34570	0.01570	0.19160	0.09550	0.23580	0.12620	0.24170	0.21030	0.31070	0.07480
35	0.16130	0.23620	0.31320	0.19280	0.26620	0.18830	0.44120	0.35640	0.44010	0.31450
36	0.24080	0.06440	0.19570	0.11070	0.14320	0.18630	0.27000	0.31050	0.42090	0.20340
37	0.09900	0.19060	0.24220	0.24080	0.17720	0.27740	0.33590	0.29370	0.34930	0.32190
38	0.15410	0.10030	0.13740	0.19890	0.18160	0.05480	0.27240	0.20410	0.27620	0.12400
39	0.19110	0.06050	0.27150	0.22730	0.23910	0.21450	0.33150	0.33310	0.44520	0.26060
40	0.04720	0.01460	0.19190	0.17660	0.08200	0.30600	0.11060	0.07390	0.03350	0.25670
41	0.17840	0.14690	0.24680	0.28830	0.32730	0.34420	0.39980	0.36590	0.44520	0.33180
42	0.04450	0.28280	0.20580	0.18020	0.05150	0.17970	0.19580	0.16890	0.27330	0.20890
43	0.14100	0.18860	0.22960	0.23210	0.23480	0.16970	0.34320	0.34750	0.44180	0.26430
44	0.13790	0.12900	0.19000	0.13210	0.15880	0.16400	0.22880	0.15760	0.17010	0.21590
45	0.30660	0.06320	0.22630	0.23580	0.20250	0.11190	0.27680	0.17220	0.25020	0.16210
46	0.11990	0.05810	0.27800	0.16170	0.15570	0.35050	0.23330	0.30950	0.35510	0.29510
47	0.09450	0.07990	0.21140	0.18620	0.14710	0.17720	0.19330	0.16500	0.20190	0.30610
48	0.30360	-0.01140	0.10000	0.24460	0.21410	0.14440	0.16250	0.15020	0.22110	0.15890
49	0.02050	0.20940	0.17570	0.17350	0.10990	0.16380	0.25060	0.16000	0.23430	0.22520
50	0.15350	-0.02770	0.02500	0.01520	0.01660	0.00500	0.01610	-0.01450	0.03850	-0.00130
51	0.14930	0.06280	0.02990	0.05270	0.04460	-0.11980	0.06490	0.85900	0.10110	-0.00260
52	-0.13400	0.02840	0.11560	0.12090	0.10330	0.13270	0.09380	0.05290	0.04550	0.08170
53	0.17830	0.11770	0.32450	0.13220	0.05430	0.26670	0.22620	0.19280	0.25770	0.28900
54	0.03800	-0.02790	0.06180	0.10630	0.09080	-0.00090	0.00390	0.03510	0.09390	0.11640
55	0.10240	-0.02340	-0.07300	0.06050	0.10440	-0.33520	0.17790	0.01700	0.11580	-0.19450
56	0.00200	0.20140	0.22540	0.20680	0.11820	0.36100	0.25810	0.17690	0.22390	0.27040
57	0.22030	0.14310	0.23510	0.23980	0.08720	0.22540	0.16530	0.14510	0.25530	0.17420
58	0.10230	-0.08310	-0.11080	-0.08460	0.00860	-0.24320	-0.02250	-0.09050	-0.03340	-0.15540
59	0.13940	0.13400	0.21800	0.19440	0.05630	0.34000	0.24640	0.21380	0.23750	0.33100

V = variable or indicator

Table 61. Kendall rank order correlation coefficients (cont.)

V	21	22	23	24	25	26	27	28	29	30
21	1.00000									
22	0.33790	1.00000								
23	0.31870	0.25240	1.00000							
24	0.34000	0.26790	0.25850	1.00000						
25	0.13000	0.12400	0.16430	0.06220	1.00000					
26	-0.00290	-0.08800	0.17850	0.06360	0.05350	1.00000				
27	0.14930	0.01840	0.28620	0.03980	0.06410	0.20840	1.00000			
28	0.32480	0.20940	0.15610	0.16220	0.25140	0.01600	0.19640	1.00000		
29	0.28100	0.29360	0.13800	0.19110	0.21790	-0.08130	0.15490	0.39800	1.00000	
30	0.13860	0.09320	0.37320	0.19600	0.04730	-0.17740	0.32170	0.13490	0.04970	1.00000
31	0.19510	0.21320	0.22660	0.29380	-0.01800	-0.14680	0.17520	0.16740	0.20070	0.20950
32	0.06480	0.00760	0.15800	0.18020	0.17490	-0.13540	0.08720	0.04480	0.00200	0.17380
33	0.19310	0.10060	0.16170	0.04480	0.65880	-0.13150	0.12670	0.24250	0.21490	0.09380
34	0.02820	0.10240	0.15690	0.06230	0.46870	-0.32180	0.09240	0.12350	0.11440	0.13896
35	0.22380	0.14890	0.19960	0.07020	0.43540	-0.19780	0.15280	0.32630	0.31530	0.16300
36	0.02480	0.06890	0.19310	-0.07950	0.37550	-0.26520	0.14440	0.06140	0.08470	0.20280
37	0.25430	0.10470	0.30120	0.14150	0.22990	-0.21900	0.32300	0.18240	0.24310	0.24340
38	0.20980	0.09280	0.10240	0.15970	0.21370	-0.05030	0.17220	0.23670	0.25370	0.02330
39	0.20870	0.15050	0.25430	0.05360	0.31680	-0.24710	0.27870	0.16650	0.17800	0.12520
40	0.19450	0.20790	0.26310	0.09270	0.05380	-0.07870	0.19320	0.20770	0.04690	0.29000
41	0.23890	0.16550	0.26480	0.13590	0.39610	-0.22790	0.20190	0.21860	0.18750	0.20140
42	0.17170	0.18020	0.11900	0.15880	0.10310	-0.11620	0.11540	0.17520	0.17380	0.16150
43	0.28200	0.18000	0.17310	0.14180	0.34390	-0.10210	0.21050	0.28020	0.24630	0.03300
44	0.10630	0.14220	0.17410	-0.00360	0.10750	-0.24520	0.37290	0.15630	0.11860	0.20570
45	0.20230	0.18760	0.21390	0.11350	0.18040	-0.16730	0.11110	0.21420	0.04240	0.20440
46	0.16790	0.18230	0.27500	0.18710	0.23750	-0.15740	0.24060	0.15890	0.20810	0.31670
47	0.19880	0.17710	0.21250	0.15620	0.23280	-0.23700	0.18700	0.20170	0.12600	0.18800
48	0.07780	0.16920	0.12940	0.01180	0.22300	-0.16860	0.07420	0.09590	-0.01990	0.11220
49	0.20390	0.22540	0.21260	0.19130	0.18380	-0.06910	0.11780	0.23780	0.20540	0.12490
50	-0.09180	0.06120	-0.00140	-0.07190	0.03220	-0.02210	0.11920	-0.02580	0.04830	0.03870
51	-0.06010	-0.05600	-0.02100	-0.11040	0.06440	-0.00380	-0.02690	-0.00080	-0.05460	-0.14490
52	0.20870	0.12370	0.08600	0.13860	0.03600	-0.06630	0.02650	0.14040	0.10840	0.11770
53	0.20290	0.17740	0.33710	0.13160	0.08680	-0.24970	0.34660	0.00550	0.14850	0.23580
54	0.23240	0.09670	0.09590	0.04050	0.09630	-0.11180	0.07310	0.06680	0.14180	0.04600
55	0.01350	-0.12230	-0.15460	-0.11540	0.20370	-0.09300	-0.04370	0.12650	0.04110	-0.27320
56	0.29630	0.19350	0.15270	0.22900	0.22700	-0.11600	0.16780	0.20350	0.19470	0.21860
57	0.12170	0.10770	0.23870	0.13020	0.08300	-0.31630	0.28210	-0.05690	0.04130	0.14420
58	-0.10720	-0.05350	-0.14490	-0.20180	0.05920	-0.14100	-0.00610	0.08690	0.03550	-0.17070
59	0.16550	0.10440	0.18640	0.17670	0.08390	-0.35250	0.21860	0.12280	0.14390	0.22440

V = variable or indicator.



Table 61. Kendall rank order correlation coefficients (contd.)

V	31	32	33	34	35	36	37	38	39	40
31	1.00000									
32	0.18360	1.00000								
33	0.04940	0.17340	1.00000							
34	0.09120	0.13880	0.43480	1.00000						
35	0.16770	0.11110	0.40240	0.39020	1.00000					
36	0.10840	0.26160	0.35850	0.43150	0.38270	1.00000				
37	0.06530	0.06270	0.31600	0.24110	0.26890	0.24650	1.00000			
38	0.00620	0.02340	0.23370	0.20940	0.22250	0.16870	0.31700	1.00000		
39	0.23090	0.18260	0.34510	0.24800	0.33700	0.33060	0.30260	0.23530	1.00000	
40	0.18920	0.11780	0.06460	0.01810	0.09260	0.07230	0.14660	-0.05170	0.10430	1.00000
41	0.14700	0.19360	0.42260	0.25640	0.43680	0.30840	0.55090	0.23510	0.39600	0.19440
42	0.23510	0.15220	0.19590	0.15360	0.25120	0.25620	0.21980	0.17000	0.10370	0.07320
43	0.15020	0.03310	0.41260	0.19650	0.33930	0.18840	0.30910	0.30910	0.36300	0.08190
44	0.15020	0.08430	0.14890	0.10640	0.14930	0.13080	0.24110	0.09220	0.25370	0.36960
45	0.13620	0.04290	0.17010	0.17530	0.29210	0.12130	0.07710	0.13680	0.20920	0.18560
46	0.11030	0.16190	0.30570	0.30160	0.30330	0.32670	0.38000	0.24320	0.30810	0.14270
47	0.21450	0.18280	0.22170	0.19590	0.25880	0.16400	0.16720	0.13070	0.45210	0.14590
48	0.11560	0.10400	0.23740	0.21730	0.20100	0.28070	0.16380	0.13690	0.21030	0.11210
49	0.21060	0.20430	0.20390	0.14750	0.18670	0.19100	0.26020	0.08880	0.18570	0.16200
50	0.02640	0.05610	0.09210	0.10390	-0.00540	0.07150	0.03850	0.04030	-0.00160	-0.12230
51	-0.09570	0.03600	0.03210	0.02780	0.05040	0.03420	-0.11100	0.04470	0.06480	-0.06570
52	0.09790	0.02140	0.00250	-0.07500	0.06630	0.01820	0.12560	0.14530	0.02620	0.14670
53	0.25290	0.20440	0.17340	0.15320	0.17580	0.15820	0.27710	0.05460	0.27800	0.18290
54	0.12980	0.00220	0.12600	0.07030	0.16150	0.11760	0.09420	-0.00300	0.18940	0.04360
55	-0.06000	-0.02830	0.19200	0.10080	0.10690	-0.00700	-0.08250	0.10290	-0.00960	-0.12630
56	0.25160	0.11380	0.28510	0.14390	0.24360	0.10150	0.24770	0.16330	0.22200	0.22930
57	0.17640	0.19770	0.13230	0.17150	0.12070	0.17110	0.27850	0.05110	0.17290	0.20510
58	-0.12330	-0.10880	0.04500	0.11600	-0.01810	-0.05590	-0.12510	0.01620	-0.04980	-0.21610
59	0.14310	0.15750	0.22090	0.16170	0.20680	0.18830	0.33890	0.16900	0.19600	0.19080

V = variable or indicator.



Table 61. Kendall, rank order correlation coefficients (contd.) V = variable or indicator

V	41	42	43	44	45	46	47	48	49	50
41	1.00000									
42	0.25030	1.00000								
43	0.43510	0.27420	1.00000							
44	0.10630	0.22100	0.27090	1.00000						
45	0.19380	0.19560	0.24150	0.13330	1.00000					
46	0.43430	0.37080	0.24750	0.16920	0.21350	1.00000				
47	0.29690	0.07550	0.19060	0.21920	0.17700	0.26850	1.00000			
48	0.23970	0.09650	0.12620	0.11210	0.15950	0.19880	0.14420	1.00000		
49	0.20450	0.32550	0.24030	0.18390	0.17900	0.19010	0.17540	0.10060	1.00000	
50	0.02740	0.12640	0.06230	0.05520	0.00890	0.10100	-0.06370	0.02030	0.01800	1.00000
51	-0.05800	-0.03310	0.01120	-0.04810	0.22890	-0.03510	0.04990	0.08120	0.09380	0.02190
52	0.09520	0.07450	0.16360	0.04450	-0.02700	0.05920	-0.06200	-0.07960	0.15590	-0.08860
53	0.26080	0.26680	0.22760	0.36180	0.20530	0.27550	0.19850	0.12070	0.24950	0.07540
54	0.12170	0.07740	0.19320	0.01350	0.18550	0.04990	0.23350	0.20030	0.05490	0.05390
55	-0.00840	-0.05980	0.16190	-0.11260	0.13890	-0.14330	-0.00410	-0.08230	0.03570	0.08560
56	0.41390	0.13490	0.24080	0.08380	0.09170	0.18580	0.16950	0.10540	0.23270	-0.05650
57	0.24540	0.22950	0.12360	0.29360	0.15440	0.21270	0.18930	0.20660	0.18300	0.00280
58	-0.10290	-0.17160	-0.00740	-0.09960	-0.00180	-0.11200	-0.01330	0.01790	-0.03400	0.11100
59	0.28240	0.16180	0.16550	0.33920	0.08000	0.26550	0.24100	0.20450	0.11150	-0.07130

	51	52	53	54	55	56	57	58	59
51	1.00000								
52	-0.17260	1.00000							
53	-0.00780	0.11160	1.00000						
54	0.11360	-0.08390	0.03130	1.00000					
55	0.35490	-0.07270	-0.17490	0.12660	1.00000				
56	-0.18700	0.24980	0.22680	-0.05560	-0.15380	1.00000			
57	0.01270	0.05620	0.56020	-0.04250	-0.19380	0.21340	1.00000		
58	0.12990	-0.08800	-0.15420	0.04090	0.30370	-0.18100	-0.22370	1.00000	
59	-0.12370	0.07890	0.33870	-0.01540	-0.30070	0.28810	0.43440	-0.28620	1.00000

APPENDIX B, # 2.2

SUMMARY STATISTICS AND RAW DATA OF THE  
ACCOUNTANTS - MS/OR SPECIALISTS' INTERACTION

Table 1 →	60	Cross-classification* of the behavioural indicators (1-60) according to participants' field of specialization; that is, accounting or MS/OR.**
Table	61-a	Pearson's product moment correlation co-efficients.
Table	61-b	Eigen values.
Table	61-c	Cumulative proportion of total variance.
Table	61-d	Factor matrix before rotation.
Table	62	Kendall rank order correlation co-efficients.

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\* The numbers and labels on the left margin of every table are, respectively, the value codes and value labels corresponding to the behavioural indicator(s). The numbers and labels on the upper margin of every table are the value codes and value labels corresponding to group classification of participants. Cross-tabulations are performed excluding missing data.

\*\* Absolute frequencies (COUNT), column percentages (COL PCT) and total percentages (TOT PCT) of the entire table are presented. For further description of the structure of these tables, see Nie et al, pp. 121 - 125.

Table 1-O

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 STRONGLY DISAGREE	4 8.9 2.3	4 3.1 2.3	4 4.7		8 4.7
2 MODERATELY DISAG- REE	4 8.9 2.3	8 6.3 4.7	12 7.0		12 7.0
3 SLIGHTLY DISAGREE	2 4.4 1.2	12 9.4 7.0	14 8.1		14 8.1
4 UNDECIDED	7 15.6 4.1	15 11.8 8.7	22 12.8		22 12.8
5 SLIGHTLY AGREE	17 37.8 9.9	37 29.1 21.5	54 31.4		54 31.4
6 MODERATELY AGREE	9 20.0 5.2	35 27.6 20.3	44 25.6		44 25.6
7 STRONGLY AGREE	2 4.4 1.2	16 12.6 9.3	18 10.5		18 10.5
COLUMN TOTAL	45 26.2	127 73.8	172 100.0		172 100.0

Table 1-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 DISAGREE	10 22.2 5.0	24 18.9 14.0	34 19.8		34 19.8
2 UNDECIDED	7 15.6 4.1	15 11.0 8.7	22 12.8		22 12.8
3 AGREE	28 62.2 16.3	88 69.3 51.2	116 67.4		116 67.4
COLUMN TOTAL	45 26.2	127 73.0	172 100.0		172 100.0



Table 2-0

COUNT COL PCT TOT PCT	ACCOUNTI	MS/OR	ROW
	NG 1	3	TOTAL
1 STRONGLY AGREE	15 33.3 8.7	32 25.0 18.5	47 27.2
2 MODERATELY AGREE	13 28.9 7.5	25 19.5 14.5	38 22.0
3 SLIGHTLY AGREE	2 4.4 1.2	14 10.9 8.1	16 9.2
4 UNDECIDED	3 6.7 1.7	7 5.5 4.0	10 5.8
5 SLIGHTLY DISAGRE	3 6.7 1.7	10 7.8 5.8	13 7.5
6 MODERATELY DISAG- REE	3 6.7 1.7	15 11.7 8.7	18 10.4
7 STRONGLY DISAGREE	6 13.3 3.5	25 19.5 14.5	31 17.9
COLUMN TOTAL	45 26.0	128 74.0	173 100.0

Table 2-R

COUNT COL PCT TOT PCT	ACCOUNTI	MS/OR	ROW
	NG 1	3	TOTAL
1 AGREE	30 66.7 17.3	71 55.5 41.0	101 50.4
2 UNDECIDED	3 6.7 1.7	7 5.5 4.0	10 5.0
3 DISAGREE	12 26.7 6.9	50 39.1 28.9	62 35.0
COLUMN TOTAL	45 26.0	128 74.0	173 100.0

Table 3-0

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 DEFINITELY FALSE	1 2.2 .6	1 2.2 1.1	2 1.6 1.1	3 1.7	
2 USUALLY NOT THE CASE	2 4.4 1.1	2 4.4 1.1	13 10.1 7.5	15 8.6	
3 MORE FALSE THAN TRUE	3 20.0 5.2	9 20.0 5.2	20 15.5 11.5	29 16.7	
4 UNCERTAIN ABOUT THIS	4 15.6 4.0	7 15.6 4.0	25 19.4 14.4	32 18.4	
5 MORE TRUE THAN FALSE	5 22.2 5.7	10 22.2 5.7	37 28.7 21.3	47 27.0	
6 OFTEN TRUE	6 31.1 8.0	14 31.1 8.0	26 20.2 14.0	40 23.0	
7 DEFINITELY TRUE	7 4.4 1.1	2 4.4 1.1	6 4.7 3.4	8 4.6	
COLUMN TOTAL	45 25.9	45 25.9	129 74.1	174 100.0	

Table 3-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 FALSE	1 26.7 6.9	12 26.7 6.9	35 27.1 20.1	47 27.0	
2 UNCERTAIN ABOUT THIS	2 15.6 4.0	7 15.6 4.0	25 19.4 14.4	32 18.4	
3 TRUE	3 57.0 14.9	26 57.0 14.9	69 53.5 39.7	95 54.6	
COLUMN TOTAL	45 25.9	45 25.9	129 74.1	174 100.0	



Table 4-0

COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	3	
1 STRONGLY DISAGREE	3 6.7 1.7	1 .8 .6	4 2.3
2 MODERATELY DISAG- REE	4 8.9 2.3	4 3.1 2.3	8 4.6
3 SLIGHTLY DISAGREE	8 17.8 4.6	13 10.1 7.5	21 12.1
4 UNDECIDED	9 20.0 5.2	19 14.7 10.9	28 16.1
5 SLIGHTLY AGREE	12 26.7 6.9	45 34.9 25.9	57 32.8
6 MODERATELY AGREE	9 20.0 5.2	35 27.1 20.1	44 25.3
7 STRONGLY AGREE	9 0.0 0.0	12 9.3 6.9	12 6.9
COLUMN TOTAL	45 25.9	129 74.1	174 100.0

Table 4-R

COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	3	
1 DISAGREE	15 33.3 8.0	18 14.0 10.3	33 19.0
2 UNDECIDED	9 20.0 5.2	19 14.7 10.9	28 16.1
3 AGREE	21 46.7 12.1	92 71.3 52.9	113 64.9
COLUMN TOTAL	45 25.9	129 74.1	174 100.0



Table 5-0

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 DEFINITELY TRUE	2 4.4 1.2	26 20.5 15.1	28 16.3		
2 OFTEN TRUE	9 20.0 5.2	27 21.3 15.7	36 20.9		
3 MORE TRUE THAN FALSE	10 22.2 5.8	27 21.3 15.7	37 21.5		
4 UNCERTAIN ABOUT THIS	1 2.2 .6	6 4.7 3.5	7 4.1		
5 MORE FALSE THAN TRUE	2 4.4 1.2	11 8.7 6.4	13 7.6		
6 USUALLY NOT THE CASE	17 37.8 9.9	26 20.5 15.1	43 25.0		
7 DEFINITELY FALSE	4 8.0 2.3	4 3.1 2.3	8 4.7		
COLUMN TOTAL	45 26.2	127 73.8	172 100.0		

Table 5-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 TRUE	21 46.7 12.2	80 63.0 46.5	101 50.7		
2 UNCERTAIN ABOUT THIS	1 2.2 .6	6 4.7 3.5	7 4.1		
3 FALSE	23 51.1 13.4	41 32.3 23.8	64 37.2		
COLUMN TOTAL	45 26.2	127 73.8	172 100.0		

Table 6-0

COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	3	
1 DEFINITELY FALSE	2 4.4 1.2	3 2.4 1.8	5 2.9
2 USUALLY NOT THE CASE	6 13.3 3.5	4 3.2 2.3	10 5.8
3 MORE FALSE THAN TRUE	5 11.1 2.9	10 7.9 5.8	15 8.8
4 UNCERTAIN ABOUT THIS	5 11.1 2.9	10 7.9 5.8	15 8.8
5 MORE TRUE THAN FALSE	14 31.1 8.2	37 29.4 21.6	51 29.8
6 OFTEN TRUE	6 13.3 3.5	30 23.8 17.5	36 21.1
7 DEFINITELY TRUE	7 15.6 4.1	32 25.4 18.7	39 22.8
COLUMN TOTAL	45 26.3	126 73.7	171 100.0

Table 6-R

COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	3	
1 FALSE	13 28.9 7.6	17 13.5 9.9	30 17.5
2 UNCERTAIN ABOUT THIS	5 11.1 2.9	10 7.9 5.8	15 8.8
3 TRUE	27 60.0 15.8	99 78.6 57.9	126 73.7
COLUMN TOTAL	45 26.3	126 73.7	171 100.0

Table 7-0

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
STRONGLY DISAGREE	1 4.4 1.1	2 4.4 1.1	3 2.3 1.7	5 2.9
MODERATELY DISAGREE	2 11.1 2.9	5 11.1 2.9	2 1.6 1.1	7 4.0
SLIGHTLY DISAGREE	3 13.3 3.4	6 13.3 3.4	11 8.5 6.3	17 9.8
UNDECIDED	4 15.6 4.0	7 15.6 4.0	25 19.4 14.4	32 18.4
SLIGHTLY AGREE	5 17.8 4.6	8 17.8 4.6	28 21.7 16.1	36 20.7
MODERATELY AGREE	6 31.1 8.0	14 31.1 8.0	43 33.3 24.7	57 32.8
STRONGLY AGREE	7 6.7 1.7	3 6.7 1.7	17 13.2 9.8	20 11.5
COLUMN TOTAL	45 25.9	45 25.9	129 74.1	174 100.0

Table 7-R

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
DISAGREE	1 28.9 7.5	13 28.9 7.5	16 12.4 9.2	29 16.7
UNDECIDED	2 15.6 4.0	7 15.6 4.0	25 19.4 14.4	32 18.4
AGREE	3 55.6 14.4	25 55.6 14.4	88 60.2 50.6	113 64.9
COLUMN TOTAL	45 25.9	45 25.9	129 74.1	174 100.0



Table 8-0

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
STRONGLY AGREE	1 6 13.3 3.4	19 14.7 10.9	25 14.4	
MODERATELY AGREE	2 12 26.7 6.9	30 23.3 17.2	42 24.1	
SLIGHTLY AGREE	3 9 20.0 5.2	18 14.0 10.3	27 15.5	
UNDECIDED	4 6 13.3 3.4	16 12.4 9.2	22 12.6	
SLIGHTLY DISAGREE	5 6 13.3 3.4	15 11.6 8.6	21 12.1	
MODERATELY DISAGREE	6 5 11.1 2.9	28 21.7 16.1	33 19.0	
STRONGLY DISAGREE	7 1 2.2 .6	3 2.3 1.7	4 2.3	
COLUMN TOTAL	45 25.9	129 74.1	174 100.0	

Table 8-R

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
AGREE	1 27 60.0 15.5	67 51.9 38.5	94 54.0	
UNDECIDED	2 6 13.3 3.4	16 12.4 9.2	22 12.6	
DISAGREE	3 12 26.7 6.9	46 35.7 26.4	58 33.3	
COLUMN TOTAL	45 25.9	129 74.1	174 100.0	

Table 9-0

COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
1 DEFINITELY FALSE	1 2.2 .6	2 1.6 1.1	3 1.7
2 USUALLY NOT THE CASE	2 4.4 1.1	4 3.1 2.3	6 3.4
3 MORE FALSE THAN TRUE	6 13.3 3.4	14 10.9 8.0	20 11.5
4 UNCERTAIN ABOUT THIS	9 20.0 5.2	22 17.1 12.6	31 17.8
5 MORE TRUE THAN FALSE	16 35.6 9.2	30 23.3 17.2	46 26.4
6 OFTEN TRUE	8 17.8 4.6	40 31.0 23.0	48 27.6
7 DEFINITELY TRUE	3 6.7 1.7	17 13.2 9.8	20 11.5
COLUMN TOTAL	45 25.9	129 74.1	174 100.0

Table 9-R

COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
1 FALSE	9 20.0 5.2	20 15.0 11.5	29 16.7
2 UNCERTAIN ABOUT THIS	9 20.0 5.2	22 17.1 12.6	31 17.8
3 TRUE	27 60.0 15.5	87 67.4 50.0	114 65.5
COLUMN TOTAL	45 25.9	129 74.1	174 100.0

Table 10-0

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
STRONGLY AGREE	1 13 28.9 7.5	28 21.9 16.2	41 23.7	
MODERATELY AGREE	2 13 28.9 7.5	32 25.0 18.5	45 26.0	
SLIGHTLY AGREE	3 8 17.8 4.6	24 18.8 13.9	32 18.5	
UNDECIDED	4 1 2.2 .6	8 6.3 4.6	9 5.2	
SLIGHTLY DISAGREE	5 6 13.3 3.5	14 10.9 8.1	20 11.6	
MODERATELY DISAGREE	6 3 6.7 1.7	14 10.9 8.1	17 9.8	
STRONGLY DISAGREE	7 1 2.2 .6	8 6.3 4.6	9 5.2	
COLUMN TOTAL	45 26.0	128 74.0	173 100.0	

Table 10-R

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
AGREE	1 34 75.6 19.7	84 65.6 40.6	110 60.2	
UNDECIDED	2 1 2.2 .6	8 6.3 4.6	9 5.2	
DISAGREE	3 10 22.2 5.8	36 20.1 20.0	46 26.0	
COLUMN TOTAL	45 26.0	128 74.0	173 100.0	



Table 11-0

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 STRONGLY DISAGREE	3 7.0 1.8	22 17.2 12.9	25 14.6		
2 MODERATELY DISAG- REE	8 18.6 4.7	18 14.1 10.5	26 15.2		
3 SLIGHTLY DISAGREE	5 11.6 2.9	10 7.8 5.8	15 8.8		
4 UNDECIDED	7 16.3 4.1	18 14.1 10.5	25 14.6		
5 SLIGHTLY AGREE	7 16.3 4.1	17 13.3 9.9	24 14.0		
6 MODERATELY AGREE	10 23.3 5.8	26 20.3 15.2	36 21.1		
7 STRONGLY AGREE	3 7.0 1.8	17 13.3 9.9	20 11.7		
COLUMN TOTAL	43 25.1	128 74.9	171 100.0		

Table 11-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 DISAGREE	16 37.2 9.4	50 39.1 29.2	60 38.0		
2 UNDECIDED	7 16.3 4.1	18 14.1 10.5	25 14.6		
3 AGREE	20 46.5 11.7	60 46.9 35.1	60 46.0		
COLUMN TOTAL	43 25.1	120 74.9	171 100.0		

Table 12-0

COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	3	
1 DEFINITELY FALSE	5 11.1 2.9	10 7.8 5.8	15 8.7
2 USUALLY NOT THE CASE	12 26.7 6.9	22 17.2 12.7	34 19.7
3 MORE FALSE THAN TRUE	8 17.8 4.6	14 10.9 8.1	22 12.7
4 UNCERTAIN ABOUT THIS	5 11.1 2.9	13 10.2 7.5	18 10.4
5 MORE TRUE THAN FALSE	7 15.6 4.0	27 21.1 15.6	34 19.7
6 OFTEN TRUE	6 13.3 3.8	18 14.1 10.4	24 13.9
7 DEFINITELY TRUE	2 4.4 1.2	24 18.8 13.9	26 15.0
COLUMN TOTAL	45 26.0	120 74.0	173 100.0

Table 12-R

COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	3	
1 FALSE	28 55.6 14.5	46 35.9 20.6	71 41.0
2 UNCERTAIN ABOUT THIS	5 11.1 2.9	13 10.2 7.0	18 10.4
3 TRUE	15 33.3 8.7	69 53.9 39.9	84 48.0
COLUMN TOTAL	45 26.0	120 74.0	173 100.0

Table 13-0

	COUNT COL PCT TOT PCT	ACCOUNTING		ROW TOTAL
		1	3	
1 DEFINITELY FALSE	0 0.0 0.0	5 3.9 2.9	5 2.9	5 2.9
2 USUALLY NOT THE CASE	3 7.0 1.8	7 5.5 4.1	10 5.8	10 5.8
3 MORE FALSE THAN TRUE	8 18.6 4.7	18 14.1 10.5	26 15.2	26 15.2
4 UNCERTAIN ABOUT THIS	8 18.6 4.7	20 15.6 11.7	28 16.4	28 16.4
5 MORE TRUE THAN FALSE	19 44.2 11.1	35 27.3 20.5	54 31.6	54 31.6
6 OFTEN TRUE	4 9.3 2.3	29 22.7 17.0	33 19.3	33 19.3
7 DEFINITELY TRUE	1 2.3 .6	14 10.9 0.2	15 8.8	15 8.8
COLUMN TOTAL	43 25.1	120 74.9	171 100.0	171 100.0

Table 13-R

	COUNT COL PCT TOT PCT	ACCOUNTING		ROW TOTAL
		1	3	
1 FALSE	11 25.6 6.4	30 23.4 17.5	41 24.0	41 24.0
2 UNCERTAIN ABOUT THIS	8 18.6 4.7	20 15.6 11.7	20 10.4	20 10.4
3 TRUE	24 55.8 14.0	70 60.9 45.6	102 59.6	102 59.6
COLUMN TOTAL	43 25.1	120 74.9	171 100.0	171 100.0



Table 14-0

	COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
		1	3	
2 MODERATELY DISAG- REE	1 2.3 .6	2 1.6 1.2	3 1.8	
3 SLIGHTLY DISAGREE	1 2.3 .6	1 .8 .6	2 1.2	
4 UNDECIDED	5 11.6 2.9	2 1.6 1.2	7 4.1	
5 SLIGHTLY AGREE	7 16.3 4.1	17 13.3 9.9	24 14.0	
6 MODERATELY AGREE	19 44.2 11.1	42 32.8 24.6	61 35.7	
7 STRONGLY AGREE	17 23.3 5.8	64 50.0 37.4	74 43.3	
COLUMN TOTAL	43 25.1	128 74.9	171 100.0	

Table 14-R

	COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
		1	3	
1 DISAGREE	2 4.7 1.2	3 2.3 1.8	5 2.9	
2 UNDECIDED	5 11.6 2.9	2 1.6 1.2	7 4.1	
3 AGREE	36 83.7 21.1	123 96.1 71.9	159 93.0	
COLUMN TOTAL	43 25.1	128 74.9	171 100.0	

Table 15-0

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
STRONGLY DISAGREE	1 3 7.0 1.8	3 7.0 1.8	9 7.0 5.3	12 7.0	
MODERATELY DISAGREE	2 6 14.0 3.5	6 14.0 3.5	17 13.3 9.9	23 13.5	
SLIGHTLY DISAGREE	3 2 4.7 1.2	2 4.7 1.2	11 8.6 6.4	13 7.6	
UNDECIDED	4 5 11.6 2.9	5 11.6 2.9	15 11.7 8.8	20 11.7	
SLIGHTLY AGREE	5 12 27.9 7.0	12 27.9 7.0	37 28.9 21.6	49 28.7	
MODERATELY AGREE	6 12 27.9 7.0	12 27.9 7.0	28 21.9 16.4	40 23.4	
STRONGLY AGREE	7 3 7.0 1.8	3 7.0 1.8	11 8.6 6.4	14 8.2	
COLUMN TOTAL	43 25.1	43 25.1	128 74.9	171 100.0	

Table 15-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
DISAGREE	1 11 25.6 6.4	11 25.6 6.4	37 28.9 21.6	40 28.1	
UNDECIDED	2 5 11.6 2.9	5 11.6 2.9	15 11.7 8.8	20 11.7	
AGREE	3 27 62.0 15.0	27 62.0 15.0	76 59.4 44.4	103 60.2	
COLUMN TOTAL	43 25.1	43 25.1	128 74.9	171 100.0	

Table 16-0

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 STRONGLY AGREE	6 13.6 3.5	25 19.5 14.5	31 18.0		
2 MODERATELY AGREE	8 18.2 4.7	23 18.0 13.4	31 18.0		
3 SLIGHTLY AGREE	13 29.5 7.6	25 19.5 14.5	38 22.1		
4 UNDECIDED	4 9.1 2.3	9 7.0 5.2	13 7.6		
5 SLIGHTLY DISAGREE	9 20.5 5.2	19 14.8 11.0	28 16.3		
6 MODERATELY DISAGREE	4 9.1 2.3	22 17.2 12.8	26 15.1		
7 STRONGLY DISAGREE	0 0.0 0.0	5 3.9 2.9	5 2.9		
COLUMN TOTAL	44 25.6	128 74.4	172 100.0		

Table 16-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 AGREE	27 61.4 15.7	73 57.0 42.4	100 50.1		
2 UNDECIDED	4 9.1 2.3	9 7.0 5.2	13 7.6		
3 DISAGREE	13 29.5 7.6	46 35.9 26.7	59 34.3		
COLUMN TOTAL	44 25.6	128 74.4	172 100.0		



Table 17-0

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
DEFINITELY FALSE	1 1 2.3 .6	1 2.3 .6	2 1.6 1.2	3 1.7	
USUALLY NOT THE CASE	2 2 9.1 2.3	4 9.1 2.3	12 9.4 7.0	16 9.3	
MORE FALSE THAN TRUE	3 3 22.7 5.8	10 22.7 5.8	13 10.2 7.6	23 13.4	
UNCERTAIN ABOUT THIS	4 4 22.7 5.8	10 22.7 5.8	31 24.2 18.0	41 23.8	
MORE TRUE THAN FALSE	5 5 31.8 8.1	14 31.8 8.1	37 28.9 21.5	51 29.7	
OFTEN TRUE	6 6 11.4 2.9	5 11.4 2.9	16 12.5 9.3	21 12.2	
DEFINITELY TRUE	7 7 0.0 0.0	0 0.0 0.0	17 13.3 9.9	17 9.9	
COLUMN TOTAL	44 25.6	44 25.6	128 74.4	172 100.0	

Table 17-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
FALSE	1 1 34.1 0.7	15 34.1 0.7	27 21.1 15.7	42 24.4	
UNCERTAIN ABOUT THIS	2 2 22.7 5.0	10 22.7 5.0	31 24.2 18.0	41 23.8	
TRUE	3 3 43.2 11.0	19 43.2 11.0	70 54.7 40.7	89 51.7	
COLUMN TOTAL	44 25.6	44 25.6	128 74.4	172 100.0	

Table 18-O

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
STRONGLY AGREE	1 4 9.1 2.3	14 11.0 8.2	18 10.5		
MODERATELY AGREE	2 13 29.5 7.6	31 24.4 18.1	44 25.7		
SLIGHTLY AGREE	3 15 34.1 8.8	28 22.0 16.4	43 25.1		
UNDECIDED	4 4 9.1 2.3	8 6.3 4.7	12 7.0		
SLIGHTLY DISAGREE	5 5 11.4 2.9	16 12.6 9.4	21 12.3		
MODERATELY DISAGREE	6 2 4.5 1.2	22 17.3 12.9	24 14.0		
STRONGLY DISAGREE	7 1 2.3 .6	8 6.3 4.7	9 5.3		
COLUMN TOTAL	44 25.7	127 74.3	171 100.0		

Table 18-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
AGREE	1 32 72.7 18.7	73 57.5 42.7	105 61.4		
UNDECIDED	2 4 9.1 2.3	8 6.3 4.7	12 7.0		
DISAGREE	3 8 18.2 4.7	46 36.2 26.9	54 31.6		
COLUMN TOTAL	44 25.7	127 74.3	171 100.0		

Table 19-0

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
STRONGLY DISAGREE	1 2.3 .6	1 14.8 11.0	19 11.0	20 11.6
MODERATELY DISAGREE	2 18.2 4.7	8 16.4 12.2	21 12.2	29 16.9
SLIGHTLY DISAGREE	3 11.4 2.9	5 16.4 12.2	21 12.2	26 15.1
UNDECIDED	4 13.1 3.5	6 13.3 9.9	17 9.9	23 13.4
SLIGHTLY AGREE	5 34.1 8.7	15 21.9 16.3	28 16.3	43 25.0
MODERATELY AGREE	6 15.9 4.1	7 14.1 10.5	18 10.5	25 14.5
STRONGLY AGREE	7 4.5 1.2	2 3.1 2.3	4 2.3	6 3.5
COLUMN TOTAL	44 25.6	128 74.4	172 100.0	

Table 19-R

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
DISAGREE	1 31.0 0.1	14 47.7 35.5	01 35.5	75 43.0
UNDECIDED	2 13.6 3.5	6 13.3 9.9	17 9.9	23 13.4
AGREE	3 54.5 14.0	24 39.1 29.1	50 29.1	74 43.0
COLUMN TOTAL	44 25.6	128 74.4	172 100.0	



Table 20-0

COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	3	
1 STRONGLY AGREE	5 11.4 2.9	10 7.8 5.8	15 8.7
2 MODERATELY AGREE	7 15.9 4.0	31 24.0 17.9	38 22.0
3 SLIGHTLY AGREE	10 22.7 5.8	40 31.0 23.1	50 28.9
4 UNDECIDED	1 2.3 .6	6 4.7 3.5	7 4.0
5 SLIGHTLY DISAGREE	7 15.9 4.0	10 7.8 5.8	17 9.8
6 MODERATELY DISAG- REE	7 15.9 4.0	16 12.4 9.2	23 13.3
7 STRONGLY DISAGREE	7 15.9 4.0	16 12.4 9.2	23 13.3
COLUMN TOTAL	44 25.4	129 74.6	173 100.0

Table 20-R

COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	3	
1 AGREE	22 50.0 12.7	01 62.0 40.8	103 59.5
2 UNDECIDED	1 2.3 .6	6 4.7 3.5	7 4.0
3 DISAGREE	21 47.7 12.1	42 32.6 24.3	03 30.4
COLUMN TOTAL	44 25.4	129 74.6	173 100.0

Table 21-O

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT	1	3	
STRONGLY DISAGREE	1 11.4 2.9	5 11.4 2.9	6 4.7 3.5	11 6.4
MODERATELY DISAGREE	2 9.1 2.3	4 9.1 2.3	10 7.8 5.8	14 8.1
SLIGHTLY DISAGREE	3 20.5 5.2	9 20.5 5.2	21 16.3 12.1	30 17.3
UNDECIDED	4 11.4 2.9	5 11.4 2.9	16 12.4 9.2	21 12.1
SLIGHTLY AGREE	5 34.1 8.7	15 34.1 8.7	39 30.2 22.5	54 31.2
MODERATELY AGREE	6 9.1 2.3	4 9.1 2.3	32 24.8 18.5	36 20.8
STRONGLY AGREE	7 4.5 1.2	2 4.5 1.2	5 3.9 2.9	7 4.0
COLUMN TOTAL		44 25.4	129 74.6	173 100.0

Table 21-R

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT	1	3	
DISAGREE	1 40.9 10.4	10 40.9 10.4	37 28.7 21.4	55 31.8
UNDECIDED	2 11.4 2.9	5 11.4 2.9	16 12.4 9.2	21 12.1
AGREE	3 47.7 12.1	21 47.7 12.1	76 58.9 43.9	97 56.1
COLUMN TOTAL		44 25.4	129 74.6	173 100.0

Table 22-0

	COUNT	ACCOUNTING	MS/OR	ROW
	COL TOT	PCT PCT	1	3
STRONGLY AGREE	1	6 13.6 3.5	13 10.1 7.5	19 11.0
MODERATELY AGREE	2	13 29.5 7.5	20 15.5 11.6	33 19.1
SLIGHTLY AGREE	3	5 11.4 2.9	16 12.4 9.2	21 12.1
UNDECIDED	4	6 13.6 3.5	11 8.5 6.4	17 9.8
SLIGHTLY DISAGREE	5	7 15.9 4.0	14 10.9 8.1	21 12.1
MODERATELY DISAGREE	6	4 9.1 2.3	25 19.4 14.5	29 16.8
STRONGLY DISAGREE	7	3 6.8 1.7	30 23.3 17.3	33 19.1
COLUMN TOTAL		44 25.4	129 74.6	173 100.0

Table 22-R

	COUNT	ACCOUNTING	MS/OR	ROW
	COL TOT	PCT PCT	1	3
AGREE	1	24 54.5 13.9	49 38.0 20.3	73 42.2
UNDECIDED	2	6 13.6 3.9	11 8.5 6.4	17 9.0
DISAGREE	3	14 31.8 8.1	69 53.5 39.9	83 40.0
COLUMN TOTAL		44 25.4	129 74.6	173 100.0



Table 23-0

	COUNT	ACCOUNTING		MS/OR	ROW TOTAL
		COL TOT	PCT PCT		
		1	3		
STRONGLY DISAGREE	1	6	6	12	
		13.6	4.7	7.0	
		3.5	3.5		
MODERATELY DISAGREE	2	9	6	15	
		20.5	4.7	8.7	
		5.2	3.5		
SLIGHTLY DISAGREE	3	6	11	17	
		13.6	8.6	9.9	
		3.5	6.4		
UNDECIDED	4	3	7	10	
		6.8	5.5	5.8	
		1.7	4.1		
SLIGHTLY AGREE	5	6	20	26	
		13.6	15.6	15.1	
		3.5	11.6		
MODERATELY AGREE	6	12	41	53	
		27.3	32.0	30.8	
		7.0	23.8		
STRONGLY AGREE	7	2	37	39	
		4.5	28.9	22.7	
		1.2	21.5		
COLUMN TOTAL		44	128	172	
		25.6	74.4	100.0	

Table 23-R

	COUNT	ACCOUNTING		MS/OR	ROW TOTAL
		COL TOT	PCT PCT		
		1	3		
DISAGREE	1	21	23	44	
		47.7	18.0	25.0	
		12.2	13.4		
UNDECIDED	2	3	7	10	
		6.8	5.5	5.0	
		1.7	4.1		
AGREE	3	20	90	110	
		45.5	76.6	68.6	
		11.6	57.8		
COLUMN TOTAL		44	120	172	
		25.6	74.4	100.0	

Table 24-O

COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
1 DEFINITELY TRUE	2 4.5 1.2	8 6.2 4.6	10 5.8
2 OFTEN TRUE	14 31.8 8.1	27 20.9 15.6	41 23.7
3 MORE TRUE THAN F FALSE	9 20.5 5.2	23 17.8 13.3	32 10.5
4 UNCERTAIN ABOUT THIS	5 11.4 2.9	16 12.4 9.2	21 12.1
5 MORE FALSE THAN TRUE	8 18.2 4.6	19 14.7 11.0	27 15.6
6 USUALLY NOT THE CASE	5 11.4 2.9	21 16.3 12.1	26 15.0
7 DEFINITELY FALSE	1 2.3 .6	15 11.6 8.7	16 9.2
COLUMN TOTAL	44 25.4	129 74.6	173 100.0

Table 24-R

COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
1 TRUE	25 56.8 14.5	50 45.0 33.5	83 40.0
2 UNCERTAIN ABOUT THIS	5 11.4 2.9	16 12.4 9.2	21 12.1
3 FALSE	14 31.0 8.1	55 42.0 31.0	69 39.9
COLUMN TOTAL	44 25.4	129 74.6	173 100.0



Table 25-0

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
STRONGLY AGREE	1 15.9 4.0	7 15.9 4.0	16 12.4 9.2	23 13.3
MODERATELY AGREE	2 15.9 4.0	7 15.9 4.0	23 17.8 13.3	30 17.3
SLIGHTLY AGREE	3 25.0 6.4	11 25.0 6.4	20 15.5 11.6	31 17.9
UNDECIDED	4 13.6 3.5	6 13.6 3.5	4 3.1 2.3	10 5.0
SLIGHTLY DISAGREE	5 11.4 2.9	5 11.4 2.9	13 10.1 7.5	18 10.4
MODERATELY DISAGREE	6 13.6 3.5	6 13.6 3.5	25 19.4 14.5	31 17.9
STRONGLY DISAGREE	7 4.5 1.2	2 4.5 1.2	28 21.7 16.2	30 17.3
COLUMN TOTAL	44 25.4	44 25.4	129 74.6	173 100.0

Table 25-R

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
AGREE	1 50.0 14.5	25 50.0 14.5	59 45.7 34.1	84 40.6
UNDECIDED	2 13.6 3.5	6 13.6 3.5	4 3.1 2.3	10 5.0
DISAGREE	3 20.5 7.5	13 20.5 7.5	66 51.2 30.2	79 40.7
COLUMN TOTAL	44 25.4	44 25.4	129 74.6	173 100.0



Table 26-0

	COUNT COL PCT TOT PCT	ACCOUNTING		ROW TOTAL
		1	3	
1 DEFINITELY TRUE	14 31.8 8.1	13 10.1 7.5	27 15.6	
2 OFTEN TRUE	11 25.0 6.4	35 27.1 20.2	46 26.6	
3 MORE TRUE THAN F FALSE	10 22.7 5.8	32 24.8 18.5	42 24.3	
4 UNCERTAIN ABOUT THIS	3 6.8 1.7	16 12.4 9.2	19 11.0	
5 MORE FALSE THAN TRUE	0 0.0 0.0	12 9.3 6.9	12 6.9	
6 USUALLY NOT THE CASE	5 11.4 2.9	19 14.7 11.0	24 13.9	
7 DEFINITELY FALSE	1 2.3 .6	2 1.6 1.2	3 1.7	
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	

Table 26-R

	COUNT COL PCT TOT PCT	ACCOUNTING		ROW TOTAL
		1	3	
1 TRUE	35 79.5 20.2	00 62.0 46.2	115 66.0	
2 UNCERTAIN ABOUT THIS	3 6.8 1.7	16 12.4 9.2	19 11.0	
3 FALSE	6 13.6 3.5	33 25.6 19.1	39 22.5	
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	

Table 27-0

COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
1 DEFINITELY FALSE	0 0.0 0.0	2 1.6 1.2	2 1.2
2 USUALLY NOT THE CASE	3 6.7 1.7	4 3.1 2.3	7 4.0
3 MORE FALSE THAN TRUE	2 4.4 1.2	12 9.4 6.9	14 8.1
4 UNCERTAIN ABOUT THIS	1 2.2 .6	10 7.0 5.0	11 6.4
5 MORE TRUE THAN FALSE	11 24.4 6.4	34 26.6 19.7	45 26.0
6 OFTEN TRUE	17 37.8 9.8	32 25.0 18.5	49 28.3
7 DEFINITELY TRUE	11 24.4 6.4	34 26.6 19.7	45 26.0
COLUMN TOTAL	45 26.0	128 74.0	173 100.0

Table 27-R

COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
1 FALSE	5 11.1 2.9	10 14.1 10.4	15 13.3
2 UNCERTAIN ABOUT THIS	1 2.2 .6	10 7.0 5.8	11 6.4
3 TRUE	39 86.7 22.5	100 70.1 57.8	139 80.3
COLUMN TOTAL	45 26.0	128 74.0	173 100.0



Table 27-0

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT			
	1	1	3	
DEFINITELY FALSE	0 0.0 0.0	2 1.6 1.2	2 1.2	2 1.2
USUALLY NOT THE CASE	3 6.7 1.7	4 3.1 2.3	7 4.0	7 4.0
MORE FALSE THAN TRUE	2 4.4 1.2	12 9.4 6.9	14 8.1	14 8.1
UNCERTAIN ABOUT THIS	1 2.2 .6	10 7.0 5.0	11 6.4	11 6.4
MORE TRUE THAN FALSE	11 24.4 6.4	34 26.6 19.7	45 26.0	45 26.0
OFTEN TRUE	17 37.8 9.8	32 25.0 18.5	49 28.3	49 28.3
DEFINITELY TRUE	11 24.4 6.4	34 26.6 19.7	45 26.0	45 26.0
COLUMN TOTAL	45 26.0	128 74.0	173 100.0	173 100.0

Table 27-R

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT			
	1	1	3	
FALSE	5 11.1 2.0	18 14.1 10.4	23 13.3	23 13.3
UNCERTAIN ABOUT THIS	1 2.2 .6	10 7.0 5.8	11 6.4	11 6.4
TRUE	39 86.7 22.5	100 70.1 57.8	139 80.3	139 80.3
COLUMN TOTAL	45 26.0	128 74.0	173 100.0	173 100.0



Table 28-0

	COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR		ROW TOTAL
			1	3	
1 DEFINITELY TRUE	7 15.6 4.0	6 4.7 3.5	13 7.5		
2 OFTEN TRUE	12 26.7 6.9	38 29.7 22.0	50 28.9		
3 MORE TRUE THAN F FALSE	14 31.1 8.1	28 21.9 16.2	42 24.3		
4 UNCERTAIN ABOUT THIS	7 15.6 4.0	6 4.7 3.5	13 7.5		
5 MORE FALSE THAN TRUE	1 2.2 .6	12 9.4 6.9	13 7.5		
6 USUALLY NOT THE CASE	4 8.9 2.3	32 25.0 18.5	36 20.8		
7 DEFINITELY FALSE	0 0.0 0.0	6 4.7 3.5	6 3.5		
COLUMN TOTAL	45 26.0	128 74.0	173 100.0		

Table 28-R

	COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR		ROW TOTAL
			1	3	
1 TRUE	33 73.3 19.1	72 56.3 41.0	105 60.7		
2 UNCERTAIN ABOUT THIS	7 15.6 4.0	6 4.7 3.5	13 7.5		
3 FALSE	5 11.1 2.9	50 39.1 28.9	55 31.0		
COLUMN TOTAL	45 26.0	128 74.0	173 100.0		

Table 29-0

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT	1	3	
STRONGLY DISAGREE	1 2.2 .6	1 2.2 .6	4 3.1 2.3	5 2.9
MODERATELY DISAGREE	2 11.1 2.9	5 11.1 2.9	10 7.0 5.0	15 8.7
SLIGHTLY DISAGREE	3 20.0 5.2	9 20.0 5.2	16 12.5 9.2	25 14.5
UNDECIDED	4 24.4 6.4	11 24.4 6.4	23 18.0 13.3	34 19.7
SLIGHTLY AGREE	5 20.0 5.2	9 20.0 5.2	27 21.1 15.0	36 20.8
MODERATELY AGREE	6 20.0 5.2	9 20.0 5.2	33 25.8 19.1	42 24.3
STRONGLY AGREE	7 2.2 .6	1 2.2 .6	15 11.7 8.7	16 9.2
COLUMN TOTAL		45 26.0	128 74.0	173 100.0

Table 29-R

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT	1	3	
DISAGREE	1 33.3 8.7	15 33.3 8.7	30 23.4 17.3	45 26.0
UNDECIDED	2 24.4 6.4	11 24.4 6.4	23 18.0 13.3	34 19.7
AGREE	3 42.2 11.0	19 42.2 11.0	75 58.6 43.4	94 54.3
COLUMN TOTAL		45 26.0	120 74.0	173 100.0



Table 30-0

COUNTY COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	3	
1 STRONGLY AGREE	4 8.9 2.3	6 4.7 3.5	10 5.8
2 MODERATELY AGREE	7 15.6 4.0	28 21.9 16.2	35 20.2
3 SLIGHTLY AGREE	16 35.6 9.2	32 25.0 18.5	48 27.7
4 UNDECIDED	2 4.4 1.2	13 10.2 7.5	15 8.7
5 SLIGHTLY DISAGREE	6 13.3 3.5	17 13.3 9.8	23 13.3
6 MODERATELY DISAG- REE	7 15.6 4.0	20 15.6 11.6	27 15.6
7 STRONGLY DISAGREE	3 6.7 1.7	12 9.4 6.9	15 8.7
COLUMN TOTAL	45 26.0	128 74.0	173 100.0

Table 30-R

COUNTY COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	3	
1 AGREE	27 60.0 15.6	66 51.6 30.2	93 53.0
2 UNDECIDED	2 4.4 1.2	13 10.2 7.5	15 8.7
3 DISAGREE	16 35.6 9.2	49 38.3 20.3	65 37.6
COLUMN TOTAL	45 26.0	128 74.0	173 100.0



Table 31-0

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT	1	3	
STRONGLY AGREE	1 2.2 .6	1 2.2 .6	3 2.3 1.7	4 2.3
MODERATELY AGREE	2 13.3 3.5	6 13.3 3.5	14 10.9 8.1	20 11.6
SLIGHTLY AGREE	3 28.9 7.5	13 28.9 7.5	22 17.2 12.7	35 20.2
UNDECIDED	4 2.2 .6	1 2.2 .6	12 9.4 6.9	13 7.5
SLIGHTLY DISAGREE	5 33.3 8.7	15 33.3 8.7	36 28.1 20.8	51 29.5
MODERATELY DISAGREE	6 8.9 2.3	4 8.9 2.3	20 21.9 16.2	32 18.5
STRONGLY DISAGREE	7 11.1 2.9	5 11.1 2.9	13 10.2 7.5	18 10.4
COLUMN TOTAL	45 26.0	45 26.0	128 74.0	173 100.0

Table 31-R

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT	1	3	
AGREE	1 44.4 11.0	20 44.4 11.0	39 30.5 22.5	59 34.1
UNDECIDED	2 2.2 .6	1 2.2 .6	12 9.4 6.9	13 7.5
DISAGREE	3 53.3 13.9	24 53.3 13.9	77 60.2 44.5	101 50.4
COLUMN TOTAL	45 26.0	45 26.0	120 74.0	173 100.0

Table 32-0

COUNTY COL PCT TOT PCT	ACCOUNTING	MSIOR	ROW
	1	3	TOTAL
1 STRONGLY AGREE	2 4.4 1.2	9 7.0 5.2	11 6.4
2 MODERATELY AGREE	7 15.6 4.0	23 18.0 13.3	30 17.3
3 SLIGHTLY AGREE	16 35.6 9.2	33 25.8 19.1	49 28.3
4 UNDECIDED	2 4.4 1.2	18 14.1 10.4	20 11.6
5 SLIGHTLY DISAGREE	8 17.8 4.6	12 9.4 6.9	20 11.6
6 MODERATELY DISAG- REE	3 6.7 1.7	25 19.5 14.5	28 16.2
7 STRONGLY DISAGREE	7 15.6 4.0	8 6.3 4.6	15 8.7
COLUMN TOTAL	45 26.0	120 74.0	173 100.0

Table 32-R

COUNTY COL PCT TOT PCT	ACCOUNTING	MSIOR	ROW
	1	3	TOTAL
1 AGREE	25 55.6 14.5	65 50.0 37.6	90 52.0
2 UNDECIDED	2 4.4 1.2	18 14.1 10.4	20 11.6
3 DISAGREE	18 40.0 10.4	45 35.2 26.0	63 36.4
COLUMN TOTAL	45 26.0	120 74.0	173 100.0

Table 33-0

	COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
		1	3	
USUALLY NOT THE CASE	2 2.2 .6	1 2.2 .6	1 .8 .6	2 1.2
MORE FALSE THAN TRUE	3 11.1 2.9	5 11.1 2.9	5 3.9 2.9	10 5.8
UNCERTAIN ABOUT THIS	4 35.6 9.2	16 35.6 9.2	12 9.4 6.9	28 16.2
MORE TRUE THAN FALSE	5 26.7 6.9	12 26.7 6.9	38 29.7 22.0	50 28.9
OFTEN TRUE	6 17.8 4.6	8 17.8 4.6	45 35.2 26.0	53 30.6
DEFINITELY TRUE	7 6.7 1.7	3 6.7 1.7	27 21.1 15.6	30 17.3
COLUMN TOTAL	45 26.0	45 26.0	128 74.0	173 100.0

Table 33-R

	COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
		1	3	
FALSE	1 13.3 3.5	6 13.3 3.5	6 4.7 3.5	12 6.9
UNCERTAIN ABOUT THIS	2 35.6 9.2	16 35.6 9.2	12 9.4 6.9	28 16.2
TRUE	3 51.1 13.3	23 51.1 13.3	110 85.9 63.6	133 76.9
COLUMN TOTAL	45 26.0	45 26.0	128 74.0	173 100.0



Table 34-0

	COUNT		ACCOUNTING	MS/OR	ROW TOTAL
	COL TOT	PCT PCT			
			1	3	
STRONGLY DISAGREE	1		1 2.2 .6	7 5.4 4.0	8 4.6
MODERATELY DISAGREE	2		2 4.4 1.1	9 7.0 5.2	11 6.3
SLIGHTLY DISAGREE	3		4 8.9 2.3	5 3.9 2.9	9 5.2
UNDECIDED	4		2 4.4 1.1	17 13.2 9.8	19 10.9
SLIGHTLY AGREE	5		12 26.7 6.9	34 26.4 19.5	46 26.4
MODERATELY AGREE	6		16 35.6 9.2	36 27.9 20.7	52 29.9
STRONGLY AGREE	7		8 17.8 4.6	21 16.3 12.1	29 16.7
COLUMN TOTAL			45 25.9	129 74.1	174 100.0

Table 34-R

	COUNT		ACCOUNTING	MS/OR	ROW TOTAL
	COL TOT	PCT PCT			
			1	3	
DISAGREE	1		7 15.6 4.0	21 16.3 12.1	20 10.1
UNDECIDED	2		2 4.4 1.1	17 13.2 9.8	19 10.9
AGREE	3		36 80.0 20.7	91 70.8 52.3	127 73.0
COLUMN TOTAL			45 25.9	129 74.1	174 100.0

Table 35-0

	COUNT		ACCOUNTING	MS/OR	ROW TOTAL
	COL TOT	PCT PCT			
	1	3			
STRONGLY DISAGREE	3 6.7 1.7	6 4.7 3.4	9 5.2		
MODERATELY DISAGREE	2 4.4 1.1	5 3.9 2.9	7 4.0		
SLIGHTLY DISAGREE	2 4.4 1.1	11 8.5 6.3	13 7.5		
UNDECIDED	24 53.3 13.8	17 13.2 9.8	41 23.6		
SLIGHTLY AGREE	10 22.2 5.7	21 16.3 12.1	31 17.8		
MODERATELY AGREE	3 6.7 1.7	40 31.0 23.0	43 24.7		
STRONGLY AGREE	1 2.2 .6	29 22.5 16.7	30 17.2		
COLUMN TOTAL	45 25.9	129 74.1	174 100.0		

Table 35-R

	COUNT		ACCOUNTING	MS/OR	ROW TOTAL
	COL TOT	PCT PCT			
	1	3			
DISAGREE	7 15.6 4.0	22 17.1 12.6	29 16.7		
UNDECIDED	24 53.3 13.8	17 13.2 9.8	41 23.6		
AGREE	14 31.1 8.0	90 69.8 51.7	104 59.8		
COLUMN TOTAL	45 25.9	129 74.1	174 100.0		

Table 36-0

	COUNT		ACCOUNTING	MS/OR	ROW TOTAL
	COL	PCT			
			1	3	
DEFINITELY FALSE	1		1 2.2 .6	8 6.2 4.6	9 5.2
USUALLY NOT THE CASE	2		4 8.9 2.3	17 13.2 9.8	21 12.1
MORE FALSE THAN TRUE	3		7 15.6 4.0	23 17.8 13.2	30 17.2
UNCERTAIN ABOUT THIS	4		17 37.8 9.8	26 20.2 14.9	43 24.7
MORE TRUE THAN FALSE	5		12 26.7 6.9	32 24.8 18.4	44 25.3
OFTEN TRUE	6		3 6.7 1.7	17 13.2 9.8	20 11.5
DEFINITELY TRUE	7		1 2.2 .6	6 4.7 3.4	7 4.0
COLUMN TOTAL			45 25.9	129 74.1	174 100.0

Table 36-R

	COUNT		ACCOUNTING	MS/OR	ROW TOTAL
	COL	PCT			
			1	3	
FALSE	1		12 26.7 6.9	48 37.2 27.6	60 34.5
UNCERTAIN ABOUT THIS	2		17 37.8 9.8	26 20.2 14.9	43 24.7
TRUE	3		16 35.6 9.2	55 42.6 31.6	71 40.0
COLUMN TOTAL			45 25.9	129 74.1	174 100.0



Table 37-0

	COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
		1	3	
STRONGLY DISAGREE	1 4.4	2 4.4 1.1	13 10.1 7.5	15 8.6
MODERATELY DISAGREE	2 5.7	10 22.2 5.7	22 17.1 12.6	32 18.4
SLIGHTLY DISAGREE	3 7.5	13 20.9 7.5	27 20.9 15.5	40 23.0
UNDECIDED	4 4.0	7 15.6 4.0	13 10.1 7.5	20 11.5
SLIGHTLY AGREE	5 3.4	6 13.3 3.4	23 17.8 13.2	29 16.7
MODERATELY AGREE	6 2.9	5 11.1 2.9	21 16.3 12.1	26 14.9
STRONGLY AGREE	7 1.1	2 4.4 1.1	10 7.8 5.7	12 6.9
COLUMN TOTAL		45 25.9	129 74.1	174 100.0

Table 37-R

	COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
		1	3	
DISAGREE	1 14.4	25 55.6 14.4	62 40.1 35.6	87 50.0
UNDECIDED	2 4.0	7 15.6 4.0	13 10.1 7.5	20 11.5
AGREE	3 7.5	13 20.9 7.5	54 41.0 31.0	67 30.5
COLUMN TOTAL		45 25.9	129 74.1	174 100.0

Table 38-0

COUNT		I	I	ACCOUNTING	MS/OR	ROW TOTAL
COL	PCT					
				1	3	
1	STRONGLY AGREE	6	13.3	3.4	32	21.0
2	MODERATELY AGREE	14	31.1	8.0	40	31.0
3	SLIGHTLY AGREE	12	26.7	6.9	22	19.5
4	UNDECIDED	2	4.4	1.1	4	3.4
5	SLIGHTLY DISAGREE	6	13.3	3.4	13	10.9
6	MODERATELY DISAGREE	1	2.2	.6	12	7.5
7	STRONGLY DISAGREE	4	8.9	2.3	6	5.7
COLUMN TOTAL		45	25.9		129	174
					74.1	100.0

Table 38-R

COUNT		I	I	ACCOUNTING	MS/OR	ROW TOTAL
COL	PCT					
				1	3	
1	AGREE	32	71.1	18.4	94	72.4
2	UNDECIDED	2	4.4	1.1	4	3.4
3	DISAGREE	11	24.4	6.3	31	24.1
COLUMN TOTAL		45	25.9		129	174
					74.1	100.0

Table 39-0

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
DEFINITELY TRUE	1 17.8 4.6	8 17.8 4.6	22 17.1 12.6	30 17.2	
OFTEN TRUE	2 24.4 6.3	11 24.4 6.3	38 29.5 21.8	49 28.2	
MORE TRUE THAN F FALSE	3 33.3 8.6	15 33.3 8.6	29 22.5 16.7	44 25.3	
UNCERTAIN ABOUT THIS	4 11.1 2.9	5 11.1 2.9	10 7.8 5.7	15 8.6	
MORE FALSE THAN TRUE	5 11.1 2.9	5 11.1 2.9	15 11.6 8.6	20 11.5	
USUALLY NOT THE CASE	6 2.2 .6	1 2.2 .6	12 9.3 6.9	13 7.5	
DEFINITELY FALSE	7 0.0 0.0	0 0.0 0.0	3 2.3 1.7	3 1.7	
COLUMN TOTAL	45 25.9	45 25.9	129 74.1	174 100.0	

Table 39-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
TRUE	1 70.6 19.5	34 70.6 19.5	89 60.0 51.1	123 70.7	
UNCERTAIN ABOUT THIS	2 11.1 2.9	5 11.1 2.9	10 7.0 5.7	15 8.6	
FALSE	3 13.3 3.4	6 13.3 3.4	30 23.3 17.2	36 20.7	
COLUMN TOTAL	45 25.9	45 25.9	129 74.1	174 100.0	



Table 40-0

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
STRONGLY AGREE	1 18 40.0 10.3	31 24.0 17.8	49 28.2	
MODERATELY AGREE	2 11 24.4 6.3	39 30.2 22.4	50 28.7	
SLIGHTLY AGREE	3 9 20.0 5.2	36 27.9 20.7	45 25.9	
UNDECIDED	4 3 6.7 1.7	14 10.9 8.0	17 9.8	
SLIGHTLY DISAGREE	5 2 4.4 1.1	5 3.9 2.9	7 4.0	
MODERATELY DISAGREE	6 2 4.4 1.1	4 3.1 2.3	6 3.4	
COLUMN TOTAL	45 25.9	129 74.1	174 100.0	

Table 40-R

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
AGREE	1 30 84.4 21.0	106 82.2 60.9	144 82.0	
UNDECIDED	2 3 6.7 1.7	14 10.9 8.0	17 9.8	
DISAGREE	3 4 8.0 2.3	9 7.0 5.2	13 7.5	
COLUMN TOTAL	45 25.9	129 74.1	174 100.0	

Table 41-0

COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
	1	3		
1 STRONGLY AGREE	8 18.2 4.7	7 5.5 4.1		15 8.7
2 MODERATELY AGREE	7 15.9 4.1	22 17.2 12.8		29 16.9
3 SLIGHTLY AGREE	11 25.0 6.4	24 18.8 14.0		35 20.3
4 UNDECIDED	7 15.9 4.1	7 5.5 4.1		14 8.1
5 SLIGHTLY DISAGREE	2 4.5 1.2	17 13.3 9.9		19 11.0
6 MODERATELY DISAGREE REF	9 20.5 5.2	26 20.3 15.1		35 20.3
7 STRONGLY DISAGREE	0 0.0 0.0	25 19.5 14.5		25 14.5
COLUMN TOTAL	44 25.6	128 74.4		172 100.0

Table 41-R

COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
	1	3		
1 AGREE	20 59.1 15.1	53 41.4 30.8		79 45.9
2 UNDECIDED	7 15.9 4.1	7 5.5 4.1		14 8.1
3 DISAGREE	11 25.0 6.4	60 53.1 39.5		79 45.9
COLUMN TOTAL	44 25.0	128 74.4		172 100.0

Table 42-0

COUNT	COL TOT	PCT PCT	I ING	ACCOUNTI ING	MS/OR		ROW TOTAL
					3	I	
1				10	20	I	30
STRONGLY AGREE				22.7	15.5	I	17.3
				5.8	11.6	I	
2				14	53	I	67
MODERATELY AGREE				31.8	41.1	I	38.7
				8.1	30.6	I	
3				11	24	I	35
SLIGHTLY AGREE				25.0	18.6	I	20.2
				6.4	13.9	I	
4				3	4	I	7
UNDECIDED				6.8	3.1	I	4.0
				1.7	2.3	I	
5				4	15	I	19
SLIGHTLY DISAGREE				9.1	11.6	I	11.0
				2.3	8.7	I	
6				1	11	I	12
MODERATELY DISAGREE				2.3	8.5	I	6.9
REE				.6	6.4	I	
7				1	2	I	3
STRONGLY DISAGREE				2.3	1.6	I	1.7
				.6	1.2	I	
COLUMN TOTAL				44	129		173
				25.4	74.6		100.0

Table 42-R

COUNT	COL TOT	PCT PCT	I ING	ACCOUNTI ING	MS/OR		ROW TOTAL
					3	I	
1				35	97	I	132
AGREE				79.5	75.2	I	70.3
				20.2	56.1	I	
2				3	4	I	7
UNDECIDED				6.0	3.1	I	4.0
				1.7	2.3	I	
3				6	20	I	34
DISAGREE				13.6	21.7	I	19.7
				3.5	16.2	I	
COLUMN TOTAL				44	129		173
TOTAL				25.4	74.6		100.0



Table 43-0

	COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	1	3	
STRONGLY DISAGREE	4 9.1 2.3	9 7.0 5.2	13 7.5	
MODERATELY DISAGREE	4 9.1 2.3	19 14.7 11.0	23 13.3	
SLIGHTLY DISAGREE	7 15.9 4.0	19 14.7 11.0	26 15.0	
UNDECIDED	6 13.6 3.5	19 14.7 11.0	25 14.5	
SLIGHTLY AGREE	13 29.5 7.5	36 27.9 20.8	49 28.3	
MODERATELY AGREE	9 20.5 5.2	19 14.7 11.0	28 16.2	
STRONGLY AGREE	1 2.3 .6	8 6.2 4.6	9 5.2	
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	

Table 43-R

	COUNT COL PCT TOT PCT	ACCOUNTING	MS/OR	ROW TOTAL
	1	1	3	
DISAGREE	15 34.1 8.7	47 36.4 27.2	62 35.8	
UNDECIDED	6 13.6 3.5	19 14.7 11.0	25 14.5	
AGREE	23 52.3 13.3	63 48.0 36.4	86 49.7	
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	

Table 44-0

	COUNT		ACCOUNTING	MS/OR		ROW TOTAL
	COL TOT	PCT PCT		1	3	
STRONGLY DISAGREE	1		2 4.5 1.2	1 .8 .6	3 1.7	
MODERATELY DISAGREE	2		1 2.3 .6	1 .8 .6	2 1.2	
SLIGHTLY DISAGREE	3		5 11.4 2.9	8 6.2 4.6	13 7.5	
UNDECIDED	4		12 27.3 6.9	12 9.3 6.9	24 13.9	
SLIGHTLY AGREE	5		13 29.5 7.5	42 32.6 24.3	55 31.8	
MODERATELY AGREE	6		11 25.0 6.4	57 44.2 32.9	68 39.3	
STRONGLY AGREE	7		0 0.0 0.0	8 6.2 4.6	8 4.6	
COLUMN TOTAL			44 25.4	129 74.6	173 100.0	

Table 44-R

	COUNT		ACCOUNTING	MS/OR		ROW TOTAL
	COL TOT	PCT PCT		1	3	
DISAGREE	1		8 10.2 4.6	10 7.0 5.0	18 10.4	
UNDECIDED	2		12 27.3 6.9	12 9.3 6.9	24 13.9	
AGREE	3		24 54.5 13.0	107 82.9 61.8	131 75.7	
COLUMN TOTAL			44 25.4	129 74.6	173 100.0	



Table 45-0

COUNT	COL PCT TOT PCT	ACCOUNTING NO	MS/OR	ROW TOTAL
		1	3	
1		1	7	8
DEFINITELY FALSE	2.3 .6	5.7 4.0	4.6	
2		2	17	19
USUALLY NOT THE CASE	4.5 1.2	13.2 9.0	11.0	
3		8	14	22
MORE FALSE THAN TRUE	18.2 4.6	10.0 8.1	12.7	
4		9	60	69
UNCERTAIN ABOUT THIS	20.5 5.2	46.5 34.7	39.9	
5		17	17	34
MORE TRUE THAN FALSE	30.6 9.8	13.2 9.8	19.7	
6		6	13	19
OFTEN TRUE	13.6 3.5	10.1 7.5	11.0	
7		1	1	2
DEFINITELY TRUE	2.3 .6	.8 .6	1.2	
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	

Table 45-R

COUNT	COL PCT TOT PCT	ACCOUNTING NO	MS/OR	ROW TOTAL
		1	3	
1		11	30	49
FALSE	25.0 0.4	20.0 22.0	20.3	
2		9	60	69
UNCERTAIN ABOUT THIS	20.5 5.2	46.5 34.7	39.9	
3		24	31	65
TRUE	54.0 13.0	24.0 17.0	31.0	
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	



Table 46-0

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
DEFINITELY FALSE	1 2.3 .6	1 14 8.1	15 0.7	
USUALLY NOT THE CASE	2 13.6 3.5	6 21 16.3 12.1	27 15.6	
MORE FALSE THAN TRUE	3 11.4 2.9	5 13 10.1 7.5	18 10.4	
UNCERTAIN ABOUT THIS	4 11.4 2.9	5 14 10.9 8.1	19 11.0	
MORE TRUE THAN FALSE	5 25.0 6.4	11 26 20.2 15.0	37 21.4	
OFTEN TRUE	6 22.7 5.8	10 28 21.7 16.2	38 22.0	
DEFINITELY TRUE	7 13.6 3.5	6 13 10.1 7.5	19 11.0	
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	

Table 46-R

	COUNT COL PCT TOT PCT	ACCOUNTING 1	MS/OR 3	ROW TOTAL
FALSE	1 27.3 6.9	12 40 37.2 27.7	60 34.7	
UNCERTAIN ABOUT THIS	2 11.4 2.9	5 14 10.9 0.1	19 11.0	
TRUE	3 61.4 15.6	27 67 51.9 30.7	94 54.3	
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	

Table 47-O

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT			
STRONGLY DISAGREE	1 2.3 .6	1 0.0 0.0	0 0.0 0.0	1 .6
MODERATELY DISAGREE	2 0.0 0.0	0 0.0 0.0	2 1.6 1.2	2 1.2
SLIGHTLY DISAGREE	3 2.3 .6	1 2.3 .6	3 2.3 1.7	4 2.3
UNDECIDED	4 4.5 1.2	2 4.5 1.2	7 5.4 4.0	9 5.2
SLIGHTLY AGREE	5 18.2 4.6	0 18.2 4.6	39 30.2 22.5	47 27.2
MODERATELY AGREE	6 31.8 8.1	14 31.8 8.1	41 31.8 23.7	55 31.8
STRONGLY AGREE	7 40.9 10.4	18 40.9 10.4	37 20.7 21.4	55 31.8
COLUMN TOTAL	44 25.4	44 25.4	129 74.6	173 100.0

Table 47-R

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT			
DISAGREE	1 4.5 1.2	2 4.5 1.2	5 3.9 2.9	7 4.0
UNDECIDED	2 4.5 1.2	2 4.5 1.2	7 5.4 4.0	9 5.2
AGREE	3 90.9 23.1	40 90.9 23.1	117 90.7 67.6	157 90.0
COLUMN TOTAL	44 25.4	44 25.4	129 74.6	173 100.0



Table 48-O

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
STRONGLY AGREE	1 7 15.9 4.0	14 10.9 8.1	21 12.1		
MODERATELY AGREE	2 15 34.1 8.7	20 15.5 11.6	35 20.2		
SLIGHTLY AGREE	3 8 18.2 4.6	24 18.6 13.9	32 18.5		
UNDECIDED	4 3 6.8 1.7	10 7.8 5.8	13 7.5		
SLIGHTLY DISAGREE	5 4 9.1 2.3	25 19.4 14.5	29 16.8		
MODERATELY DISAGREE	6 6 13.6 3.5	17 13.2 9.8	23 13.3		
STRONGLY DISAGREE	7 1 2.3 .6	19 14.7 11.0	20 11.6		
COLUMN TOTAL	44 25.4	129 74.6	173 100.0		

Table 48-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
AGREE	1 30 60.2 17.3	58 45.0 33.5	88 50.9		
UNDECIDED	2 3 6.0 1.7	10 7.8 5.8	13 7.5		
DISAGREE	3 11 20.0 6.4	61 47.3 35.3	72 61.0		
COLUMN TOTAL	44 25.4	129 74.6	173 100.0		



Table 49-0

	COUNT		ACCOUNTING	MS/OR	ROW TOTAL
	COL TOT	PCT PCT			
STRONGLY AGREE	1	4	9.1 2.3	9 7.0 5.2	13 7.5
MODERATELY AGREE	2	14	31.8 8.1	21 16.3 12.1	35 20.2
SLIGHTLY AGREE	3	5	11.4 2.9	31 24.0 17.9	36 20.8
UNDECIDED	4	11	25.0 6.4	4 3.1 2.3	15 8.7
SLIGHTLY DISAGREE	5	4	9.1 2.3	7 5.4 4.0	11 6.4
MODERATELY DISAGREE	6	5	11.4 2.9	24 18.6 13.9	29 16.8
STRONGLY DISAGREE	7	1	2.3 .0	33 25.6 19.1	34 19.7
COLUMN TOTAL		44	25.4	129 74.6	173 100.0

Table 49-R

	COUNT		ACCOUNTING	MS/OR	ROW TOTAL
	COL TOT	PCT PCT			
AGREE	1	23	52.3 13.3	61 47.3 35.3	84 40.0
UNDECIDED	2	11	25.0 6.4	4 3.1 2.3	15 8.7
DISAGREE	3	10	22.7 5.0	64 49.0 37.0	74 42.0
COLUMN TOTAL		44	25.4	129 74.6	173 100.0

Table 50-0

COUNT	COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1	STRONGLY AGREE	5 11.4 2.9	31 24.0 17.9		36 20.8
2	MODERATELY AGREE	11 25.0 6.4	37 28.7 21.4		48 27.7
3	SLIGHTLY AGREE	10 22.7 5.8	30 23.3 17.3		40 23.1
4	UNDECIDED	11 25.0 6.4	7 5.4 4.0		18 10.4
5	SLIGHTLY DISAGREE	3 6.8 1.7	10 7.8 5.8		13 7.5
6	MODERATELY DISAG- REE	3 6.8 1.7	8 6.2 4.6		11 6.4
7	STRONGLY DISAGREE	1 2.3 .6	6 4.7 3.5		7 4.0
	COLUMN TOTAL	44 25.4	129 74.6		173 100.0

Table 50-R

COUNT	COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1	AGREE	20 59.1 15.0	98 76.0 56.6		124 71.7
2	UNDECIDED	11 25.0 6.4	7 5.4 4.0		18 10.4
3	DISAGREE	7 16.9 4.0	24 18.6 13.9		31 17.9
	COLUMN TOTAL	44 25.4	129 74.6		173 100.0



Table 51-0

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT			
	1	7	1	8
STRONGLY DISAGREE	15.9 4.0	.8 .6		4.6
	2	13	18	31
MODERATELY DISAGREE	29.5 7.5	14.0 10.4		17.9
	3	9	13	22
SLIGHTLY DISAGREE	20.5 5.2	10.1 7.5		12.7
	4	7	17	24
UNDECIDED	15.9 4.0	13.2 9.8		13.9
	5	5	33	38
SLIGHTLY AGREE	11.4 2.9	25.6 19.1		22.0
	6	2	35	37
MODERATELY AGREE	4.5 1.2	27.1 20.2		21.4
	7	1	12	13
STRONGLY AGREE	2.3 .6	9.3 6.9		7.5
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	

Table 51-R

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT			
	1	20	32	52
DISAGREE	65.9 10.0	24.0 10.5		35.3
	2	7	17	24
UNDECIDED	15.9 4.0	13.2 9.0		13.0
	3	8	80	88
AGREE	10.2 4.0	62.0 46.2		50.0
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	



Table 52-0

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT	1	3	
DEFINITELY TRUE	1 9.3 2.3	4 9.3 2.3	8 6.2 4.7	12 7.0
OFTEN TRUE	2 16.3 4.1	7 16.3 4.1	27 20.9 15.7	34 19.8
MORE TRUE THAN FALSE	3 34.9 8.7	15 34.9 8.7	36 27.9 20.9	51 29.7
UNCERTAIN ABOUT THIS	4 23.3 5.8	10 23.3 5.8	12 9.3 7.0	22 12.8
MORE FALSE THAN TRUE	5 14.0 3.5	6 14.0 3.5	27 20.9 15.7	33 19.2
USUALLY NOT THE CASE	6 2.3 .6	1 2.3 .6	17 13.2 9.9	10 10.5
DEFINITELY FALSE	7 0.0 0.0	0 0.0 0.0	2 1.6 1.2	2 1.2
COLUMN TOTAL	43 25.0	43 25.0	129 75.0	172 100.0

Table 52-R

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT TOT PCT	1	3	
TRUE	1 60.5 15.1	26 60.5 15.1	71 55.0 41.3	97 56.4
UNCERTAIN ABOUT THIS	2 23.3 5.0	10 23.3 5.0	12 9.3 7.0	22 12.0
FALSE	3 10.3 4.1	7 10.3 4.1	46 35.7 26.7	53 30.8
COLUMN TOTAL	43 25.0	43 25.0	129 75.0	172 100.0

Table 53-0

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 DEFINITELY FALSE	0 0.0 0.0	1 .8 .6	1 .6	1 .6	1 .6
2 USUALLY NOT THE CASE	3 6.8 1.7	1 .8 .6	1 .6	4 2.3	4 2.3
3 MORE FALSE THAN TRUE	2 4.5 1.2	5 3.9 2.9	7 4.8	7 4.8	7 4.8
4 UNCERTAIN ABOUT THIS	9 20.5 5.2	11 8.5 6.4	20 11.6	20 11.6	20 11.6
5 MORE TRUE THAN FALSE	15 34.1 8.7	31 24.0 17.9	46 26.6	46 26.6	46 26.6
6 OFTEN TRUE	12 27.3 6.9	35 27.1 20.2	47 27.2	47 27.2	47 27.2
7 DEFINITELY TRUE	3 6.8 1.7	45 34.9 26.0	48 27.7	48 27.7	48 27.7
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	173 100.0	173 100.0

Table 53-R

	COUNT COL PCT TOT PCT	ACCOUNTING		MS/OR	ROW TOTAL
		1	3		
1 FALSE	5 11.4 2.9	7 5.4 4.0	12 6.9	12 6.9	12 6.9
2 UNCERTAIN ABOUT THIS	9 20.5 5.2	11 8.5 6.4	20 11.6	20 11.6	20 11.6
3 TRUE	30 60.2 17.3	111 80.0 60.2	141 81.5	141 81.5	141 81.5
COLUMN TOTAL	44 25.4	129 74.6	173 100.0	173 100.0	173 100.0



Table 54-0

COUNTY	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
TOT PCT	NO			
	1	9	13	22
STRONGLY AGREE	20.5	10.2	12.0	
	5.2	7.6		
	2	13	21	34
MODERATELY AGREE	29.5	16.4	19.0	
	7.6	12.2		
	3	8	33	41
SLIGHTLY AGREE	10.2	26.0	23.8	
	4.7	19.2		
	4	2	15	17
UNDECIDED	4.5	11.7	9.9	
	1.2	8.7		
	5	5	14	19
SLIGHTLY DISAGREE	11.4	10.9	11.0	
	2.9	8.1		
	6	6	22	28
MODERATELY DISAGREE	13.6	17.2	16.3	
REE	3.5	12.8		
	7	1	10	11
STRONGLY DISAGREE	2.3	7.0	6.4	
	.6	5.0		
COLUMN TOTAL	44	120	172	
TOTAL	25.6	74.4	100.0	

Table 54-R

COUNTY	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
TOT PCT	NO			
	1	30	67	97
AGREE	60.2	62.0	66.4	
	17.4	39.0		
	2	2	15	17
UNDECIDED	4.0	11.7	9.9	
	1.2	8.7		
	3	12	46	60
DISAGREE	27.3	30.0	33.7	
	7.0	20.7		
COLUMN TOTAL	44	120	172	
TOTAL	25.6	74.4	100.0	



Table 55-0

COUNTY	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
TOT PCT	NG			
	1		3	
1	7	12	19	
DEFINITELY TRUE	10.9	9.3	11.0	
	4.0	6.9		
2	14	37	51	
OFTEN TRUE	31.0	20.7	29.5	
	0.1	21.4		
3	17	48	65	
MORE TRUE THAN F	30.6	37.2	37.6	
FALSE	9.0	27.7		
4	3	10	13	
UNCERTAIN ABOUT	6.0	7.0	7.5	
THIS	1.7	5.0		
5	1	12	13	
MORE FALSE THAN	2.3	9.3	7.5	
TRUE	.6	6.9		
6	2	9	11	
USUALLY NOT THE	4.5	7.0	6.4	
CASE	1.2	5.2		
7	0	1	1	
DEFINITELY FALSE	0.0	.0	.6	
	0.0	.6		
COLUMN	44	129	173	
TOTAL	25.4	74.6	100.0	

Table 55-R

COUNTY	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
TOT PCT	NG			
	1		3	
1	30	97	130	
TRUE	60.4	75.2	70.0	
	22.0	50.1		
2	3	10	13	
UNCERTAIN ABOUT	6.0	7.0	7.5	
THIS	1.7	5.0		
3	3	22	25	
FALSE	6.0	17.1	14.0	
	1.7	12.7		
COLUMN	44	129	173	
TOTAL	25.4	74.6	100.0	



Table 56-O

COUNT	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
TOT PCT				
		1	3	
1		1	6	7
DEFINITELY FALSE	2.3	4.7	4.1	
	.6	3.5		
2		7	23	30
USUALLY NOT THE	15.9	18.1	17.5	
CASE	4.1	13.5		
3		5	17	22
MORE FALSE THAN	11.4	13.4	12.9	
TRUE	2.9	9.9		
4		2	35	37
UNCERTAIN ABOUT	4.5	27.6	21.0	
THIS	1.2	20.5		
5		15	20	43
MORE TRUE THAN	34.1	22.0	25.1	
FALSG	8.8	10.4		
6		12	14	26
OFTEN TRUE	27.3	11.0	15.2	
	7.0	8.2		
7		2	4	6
DEFINITELY TRUE	4.5	3.1	3.5	
	1.2	2.3		
COLUMN TOTAL	44	127	171	
	25.7	74.3	100.0	

Table 56-R

COUNT	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
TOT PCT				
		1	3	
1		13	46	59
FALSE	29.0	36.2	34.0	
	7.6	26.9		
2		2	35	37
UNCERTAIN ABOUT	4.0	27.0	21.0	
THIS	1.2	20.5		
3		29	46	75
TRUE	65.9	36.2	43.0	
	17.0	26.9		
COLUMN TOTAL	44	127	171	
	25.7	74.3	100.0	



Table 57-O

COUNT	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
TOT PCT				
		1	3	
1		0	3	3
DEFINITELY FALSE	0.0	0.0	2.3	1.7
		0.0	1.7	
2		1	5	6
USUALLY NOT THE CASE	2.3	2.3	3.0	3.6
		.6	2.9	
3		1	6	7
MORE FALSE THAN TRUE	2.3	2.3	4.7	4.1
		.6	3.5	
4		4	18	22
UNCERTAIN ABOUT THIS	9.1	9.1	14.1	12.0
		2.3	10.5	
5		3	31	34
MORE TRUE THAN FALSE	6.0	6.0	24.2	19.0
		1.7	18.0	
6		8	22	30
OFTEN TRUE	18.2	18.2	17.2	17.4
		4.7	12.0	
7		27	43	70
DEFINITELY TRUE	61.4	61.4	33.6	40.7
		15.7	25.0	
COLUMN TOTAL		44	120	172
		25.6	74.4	100.0

Table 57-R

COUNT	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
TOT PCT				
		1	3	
1		2	14	16
FALSE	4.5	4.5	10.2	9.2
		1.2	0.1	
2		4	10	14
UNCERTAIN ABOUT THIS	9.1	9.1	14.1	12.0
		2.3	10.5	
3		30	90	120
TRUE	65.4	65.4	25.0	77.0
		22.1	55.0	
COLUMN TOTAL		44	120	172
		25.6	74.4	100.0



Table 58-0

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
	TOT PCT	ING		TOTAL
		1	3	
1	1	10	11	
DEFINITELY TRUE	2.3	7.0	6.4	
	.6	5.0		
2	8	27	35	
OFTEN TRUE	10.2	21.1	20.3	
	4.7	15.7		
3	9	32	41	
MORE TRUE THAN F	20.5	25.0	23.0	
FALSE	5.2	10.6		
4	7	8	15	
UNCERTAIN ABOUT	15.9	6.3	0.7	
THIS	4.1	4.7		
5	10	21	31	
MORE FALSE THAN	22.7	16.4	10.0	
TRUE	5.8	12.2		
6	6	14	20	
USUALLY NOT THE	13.6	10.0	11.0	
CASE	3.5	0.1		
7	3	16	19	
DEFINITELY FALSE	6.8	12.3	11.0	
	1.7	9.3		
COLUMN TOTAL	44	128	172	
	25.6	74.4	100.0	

Table 58-R

	COUNT	ACCOUNTING	MS/OR	ROW TOTAL
	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
	TOT PCT	ING		TOTAL
		1	3	
1	10	69	07	
TRUE	40.9	53.0	00.0	
	10.5	40.1		
2	7	8	15	
UNCERTAIN ABOUT	10.9	6.3	0.7	
THIS	4.1	4.7		
3	19	51	70	
FALSE	43.2	39.0	40.7	
	11.0	29.7		
COLUMN TOTAL	44	120	172	
	25.0	74.4	100.0	



Table 59-0

COUNT	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
1	0.0	0.0	0.0	0.0
DEFINITELY FALSE	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
MORE FALSE THAN TRUE	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0
UNCERTAIN ABOUT THIS	0.0	0.0	0.0	0.0
5	18.2	4.6	8.5	11.0
MORE TRUE THAN FALSE	4.6	4.6	6.4	11.0
6	11.4	2.9	14.7	13.9
OFTEN TRUE	2.9	2.9	11.0	13.9
7	70.5	17.9	72.1	71.7
DEFINITELY TRUE	17.9	17.9	63.8	71.7
COLUMN TOTAL	44	25.4	129	173
			74.6	100.0

Table 59-R

COUNT	COL PCT	ACCOUNTING	MS/OR	ROW TOTAL
1	0.0	0.0	0.0	0.0
FALSE	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0
UNCERTAIN ABOUT THIS	0.0	0.0	0.0	0.0
3	100.0	20.4	123	107
TRUE	20.4	20.4	71.1	107
COLUMN TOTAL	44	25.4	129	173
			74.6	100.0



Table 60-0

COUNTY	ACCOUNTING	MS/OR	ROW TOTAL
COL PCT	TOT PCT		
	1	3	
1	3	6	9
STRONGLY DISAGREE	6.0	4.7	5.2
	1.7	3.5	
2	1	5	6
MODERATELY DISAGREE	2.3	3.9	3.5
	.6	2.9	
3	1	9	10
SLIGHTLY DISAGREE	2.3	7.0	5.0
	.6	5.2	
4	0	17	17
UNDECIDED	0.0	13.3	9.9
	0.0	9.9	
5	13	42	55
SLIGHTLY AGREE	29.5	32.0	32.0
	7.6	24.4	
6	14	40	54
MODERATELY AGREE	31.8	31.3	31.4
	8.1	23.3	
7	12	9	21
STRONGLY AGREE	27.3	7.0	12.2
	7.0	5.2	
COLUMN TOTAL	44	120	172
	25.6	74.4	100.0

Table 60-R

COUNTY	ACCOUNTING	MS/OR	ROW TOTAL
COL PCT	TOT PCT		
	1	3	
1	5	20	25
DISAGREE	11.4	15.0	14.0
	2.9	11.0	
2	0	17	17
UNDECIDED	0.0	13.3	9.9
	0.0	9.9	
3	30	91	120
AGREE	60.0	71.1	75.0
	22.7	52.9	
COLUMN TOTAL	44	120	172
TOTAL	25.6	74.4	100.0



Table 61 - a. Pearson's product moment correlation coefficient

V	1	2	3	4	5	6	7	8	9	10
1	1.00000									
2	0.16720	1.00000								
3	0.06760	-0.14400	1.00000							
4	0.30970	0.14360	0.14420	1.00000						
5	-0.01980	0.03020	0.04470	-0.08390	1.00000					
6	0.29240	0.26830	0.24010	0.36330	-0.00390	1.00000				
7	0.13690	0.21920	0.16230	0.32430	0.01860	0.46770	1.00000			
8	0.20940	0.09230	0.32900	0.24350	0.07220	0.12380	0.15840	1.00000		
9	0.18390	0.01190	0.38240	0.20860	0.14630	0.16390	0.19250	0.62140	1.00000	
10	0.00240	0.07990	0.45330	0.02330	0.11950	0.23190	0.17290	0.23070	0.26820	1.00000
11	0.25730	0.06710	0.06760	0.35940	0.07410	0.22890	0.12910	0.11920	0.22640	-0.06600
12	0.19630	0.33500	0.07950	0.20700	0.17430	0.23620	0.20460	0.33860	0.28690	0.16640
13	0.14350	0.00500	0.46400	0.18610	0.12110	0.20200	0.22920	0.38160	0.43900	0.42690
14	0.36320	0.24620	0.11500	0.46360	0.00330	0.43480	0.41050	0.18130	0.30790	0.11800
15	0.22740	-0.00540	0.42420	0.18740	0.19820	0.26640	0.25180	0.43320	0.37250	0.37450
16	0.09590	0.09570	0.46960	0.12860	0.10770	0.24910	0.20360	0.38980	0.28900	0.53690
17	0.26760	0.07610	0.29960	0.25790	0.06890	0.08980	0.10800	0.50250	0.54760	0.19600
18	0.12660	0.22690	0.35470	0.06990	0.20250	0.17520	0.20000	0.84550	0.38640	0.40500
19	0.10870	0.17560	0.37630	0.07370	0.20070	0.19660	0.20820	0.26390	0.26680	0.39400
20	-0.05720	0.01970	0.36130	-0.04080	0.26420	0.03750	0.10670	0.25150	0.21990	0.32280
21	0.06010	0.01120	0.48740	0.12390	0.16580	0.26670	0.32390	0.36590	0.42790	0.38430
22	0.10320	0.25330	-0.01040	0.21940	0.00890	0.21290	0.18740	0.08040	0.02890	-0.06380
23	0.31370	0.30600	0.08460	0.39370	0.00000	0.57360	0.41820	0.19630	0.22390	0.13180
24	0.17650	0.07060	0.01780	0.11590	0.06050	0.20320	0.05380	0.01260	-0.09780	0.11468
25	0.17290	0.27130	0.14250	0.21160	0.11420	0.26380	0.23530	0.29520	0.20210	0.25390
26	0.09420	0.09890	0.08370	0.06600	0.07660	0.10700	0.04900	0.09330	-0.01670	0.10860
27	0.15790	-0.03140	0.30270	0.10990	0.17480	0.20680	0.08740	0.26610	0.26770	0.25690
28	0.01730	0.08870	-0.03130	0.17170	0.12520	-0.08490	-0.01920	0.00780	0.02090	-0.00100
29	0.36450	0.13380	0.43040	0.38750	0.13250	0.28760	0.21700	0.54520	0.53990	0.35660
30	0.05980	-0.00310	0.19170	0.02160	0.09940	0.06180	0.06700	0.01910	0.13220	0.09140
31	0.12890	0.02640	0.51360	0.07470	0.15390	0.26450	0.28690	0.30480	0.36700	0.48400
32	-0.05350	-0.00290	0.24070	-0.07930	0.05170	0.07340	-0.04950	0.00200	0.11630	0.22480
33	0.33930	0.19040	0.14680	0.39060	0.00210	0.41940	0.33020	0.18910	0.29940	0.11530
34	0.32510	0.06450	0.28570	0.17300	0.14750	0.21940	0.13510	0.26380	0.16160	0.26790
35	0.36770	0.12800	-0.00550	0.47820	-0.03550	0.43010	0.19820	0.12180	0.14350	0.07690
36	0.15830	0.15020	0.22420	0.21550	0.27060	0.29200	0.32730	0.44100	0.30680	0.25260
37	0.07000	0.18030	0.16500	0.03570	0.14630	0.08340	0.08790	0.37670	0.22000	0.22800
38	0.09310	0.18730	0.23210	0.06420	-0.08230	0.09600	0.09660	0.25750	0.04200	0.20690
39	0.20440	0.13760	0.11850	0.24310	0.12690	0.29320	0.30190	0.13130	0.04110	0.22450
40	-0.04350	0.11670	0.12430	0.03940	0.15700	-0.08430	-0.06020	0.35500	0.12400	0.15040
41	0.11760	0.19850	0.18290	0.25510	0.07390	0.49230	0.36841	0.11830	0.16410	0.16800
42	0.29960	0.19380	0.16670	0.28840	0.06840	0.31220	0.27380	0.10890	0.08110	0.18210
43	0.25080	0.07690	0.36840	0.23340	-0.00510	0.21030	0.23220	0.36070	0.26610	0.28090
44	0.31560	0.15740	0.11890	0.43960	-0.01130	0.34370	0.37150	0.17660	0.24080	0.18170
45	0.08460	-0.00300	0.28980	0.09940	0.24010	0.09950	0.22090	0.13720	0.13530	0.22760
46	0.11800	0.00880	0.12570	0.10770	0.17180	0.01630	0.08850	0.28220	0.13750	0.17970
47	0.06810	-0.01550	0.06360	-0.01430	0.13170	0.02190	0.03450	-0.03060	0.20200	0.10580
48	0.19300	0.13210	0.26500	0.22280	0.03800	0.15300	0.16430	0.28550	0.01700	0.22460
49	-0.02680	0.05990	0.09330	0.13560	0.12270	0.20950	0.13230	-0.02000	0.04910	0.15860
50	0.15060	0.12570	-0.03860	0.26610	0.15990	0.10190	0.10060	0.03950	-0.03670	0.02820
51	0.27340	0.18110	0.12830	0.41240	-0.03980	0.38510	0.37050	0.23000	0.20151	0.16300
52	0.17590	0.06450	0.06970	0.23970	0.25120	0.03020	0.02740	0.13600	0.03640	0.06370
53	0.26780	0.18750	0.08750	0.29000	0.05170	0.18980	0.24840	0.07610	0.16670	0.02710
54	-0.05940	0.08370	-0.01050	0.10970	0.08920	-0.09740	0.09170	0.25300	0.16640	0.17190
55	-0.02340	0.19040	0.01670	0.12510	-0.00160	0.01570	0.15950	0.25870	0.02770	0.01600
56	0.17550	0.07270	0.14070	0.11610	0.10160	0.11750	0.18330	0.16640	0.13000	0.16930
57	-0.03820	-0.01300	0.05180	-0.14670	0.07800	-0.00300	-0.05070	-0.00260	0.08890	0.18560
58	-0.01420	0.01180	0.24500	-0.01100	0.12760	-0.00660	0.03750	0.26610	0.03600	0.18640
59	0.20130	0.09070	0.06730	0.20020	-0.02340	0.21970	0.14370	0.09410	0.14190	0.07620
60	0.16060	0.09150	0.26600	0.16000	0.18400	0.23660	0.22320	0.20460	0.22160	0.20530

V = Variable or indicator

# Appendix B # 2.2

## Table 61- r. Pearson's product moment correlation coefficient (contd)

V	11	12	13	14	15	16	17	18	19	20
11	1.00000									
12	0.19690	1.00000								
13	-0.00450	0.28890	1.00000							
14	0.31830	0.20320	0.13950	1.00000						
15	0.13790	0.19550	0.44860	0.23390	1.00000					
16	0.04470	0.23640	0.42170	0.15390	0.34480	1.00000				
17	0.19440	0.24540	0.38520	0.21660	0.40780	0.29580	1.00000			
18	-0.03310	0.37690	0.38580	0.10420	0.44430	0.48780	0.34080	1.00000		
19	0.10950	0.19250	0.35270	0.18130	0.44370	0.44060	0.30190	0.31530	1.00000	
20	-0.03340	0.16090	0.35270	-0.07020	0.30660	0.31590	0.26150	0.22650	0.46090	1.00000
21	0.00880	0.30340	0.53980	0.16730	0.52530	0.46930	0.40210	0.43040	0.40590	0.43400
22	0.16930	0.14720	-0.00150	0.27130	-0.02380	-0.04110	0.02960	0.20430	0.07790	-0.07250
23	0.28810	0.36810	0.17100	0.49390	0.19770	0.13730	0.22280	0.19130	0.18120	0.04640
24	-0.06470	0.01860	0.01650	0.14030	0.05390	0.03200	-0.05750	0.06450	0.04110	0.03800
25	0.07110	0.13610	0.19160	0.21310	0.24400	0.13370	0.23070	0.27640	0.24710	0.13440
26	-0.09030	0.16170	0.16960	0.00660	0.10300	0.02880	0.11150	0.20090	0.11840	0.00890
27	0.16860	0.12290	0.27660	0.14180	0.27690	0.14150	0.25700	0.21340	0.36050	0.20110
28	0.09740	0.16740	0.02910	0.07290	-0.00080	0.11030	-0.02030	0.08940	0.03900	0.01600
29	0.26260	0.30610	0.50900	0.36200	0.62350	0.45270	0.59240	0.63400	0.44660	0.26040
30	0.06350	0.10340	0.10720	0.05940	0.08670	0.11830	0.09940	0.13190	0.12100	0.27360
31	0.06050	0.12020	0.44060	0.16830	0.48280	0.41290	0.30350	0.37930	0.40810	0.44010
32	-0.02410	0.00290	0.12040	-0.07470	0.13490	0.09690	0.08680	-0.00910	0.20010	0.31070
33	0.21040	0.22340	0.27070	0.46410	0.31260	0.14630	0.26880	0.21040	0.00230	0.16370
34	0.11110	0.18000	0.31410	0.24200	0.46090	0.30420	0.26460	0.17300	0.33820	0.13870
35	0.28760	0.19260	0.06420	0.44830	0.10320	0.03760	0.12780	0.06840	-0.03550	-0.10120
36	0.19390	0.34550	0.41540	0.20750	0.41210	0.31250	0.47700	0.35590	0.35580	0.10500
37	0.06340	0.21110	0.28260	0.09130	0.23750	0.24310	0.36380	0.37920	0.22770	0.16350
38	0.00670	0.03700	0.15300	0.07700	0.29210	0.27810	0.11370	0.25940	0.24790	0.24020
39	0.13050	0.26390	0.12910	0.22630	0.17690	0.22210	-0.01100	0.21130	0.13690	0.06410
40	-0.10580	0.15550	0.15710	-0.08200	0.14220	0.25410	0.29250	0.34630	0.19820	0.22150
41	0.19430	0.14940	0.10080	0.40020	0.12360	0.09350	0.14650	0.10020	0.19440	0.10540
42	0.16330	0.21030	0.13210	0.21910	0.20140	0.18940	0.02620	0.22910	0.22200	0.00670
43	0.15040	0.16890	0.38470	0.22440	0.56610	0.40330	0.36360	0.34020	0.34690	0.13470
44	0.25860	0.22690	0.36410	0.42570	0.21420	0.13600	0.18630	0.10330	0.10840	-0.01440
45	0.10810	0.09730	0.30520	0.08570	0.33720	0.24070	0.17640	0.21060	0.49720	0.27930
46	0.00820	0.16270	0.26010	-0.00580	0.26470	0.19410	0.18310	0.15650	0.00710	0.01940
47	0.16670	0.10360	0.24730	0.02410	0.09020	0.00630	0.02900	-0.03100	0.09440	0.00630
48	-0.03160	0.04530	0.23300	0.15530	0.30030	0.31910	0.11330	0.20240	0.24800	0.18020
49	0.11220	0.16130	0.09360	0.25140	0.18380	0.19880	-0.02970	0.09250	0.06490	0.13430
50	0.06900	-0.06710	-0.02210	0.10390	0.01240	-0.17680	-0.00490	-0.04320	0.00000	-0.00870
51	0.23060	0.19790	0.25590	0.42170	0.21990	0.09360	0.27060	0.14790	0.00720	0.07700
52	0.16670	0.02680	0.12710	0.12570	0.11180	0.15160	0.13300	0.08970	0.03070	0.11910
53	0.23400	0.16630	0.14600	0.40130	0.16720	0.04260	0.15770	0.10380	0.10590	0.03440
54	-0.09110	0.16950	0.18320	0.02530	0.10870	0.10090	0.13950	0.25000	0.03740	0.23690
55	-0.10550	0.13810	0.02190	-0.00850	-0.02810	0.09160	0.13280	0.26210	0.02880	0.13700
56	0.11180	0.10240	0.12820	0.04160	0.28640	0.13010	0.19390	0.23280	0.10360	0.06770
57	0.08660	0.03840	-0.03100	-0.07350	0.02760	0.07160	-0.03870	-0.00460	0.06000	-0.00570
58	-0.17280	0.08070	0.26150	-0.03600	0.22700	0.28540	0.12200	0.13280	0.00200	0.21290
59	0.17310	0.19890	0.18700	0.13730	0.11890	-0.01700	0.14150	0.06970	0.04780	-0.03480
60	0.23630	0.28240	0.24860	0.16220	0.40330	0.24830	0.26630	0.16680	0.33470	0.09320

V = variable or indicator



Table 61-a. Pearson product moment correlation coefficients (contd)

V	21	22	23	24	25	26	27	28	29	30
21	1.00000									
22	0.05900	1.00000								
23	0.18630	0.26260	1.00000							
24	0.09140	0.32980	0.09080	1.00000						
25	0.26450	0.22430	0.35080	0.19790	1.00000					
26	0.11910	0.18180	0.10390	0.22450	0.19530	1.00000				
27	0.19930	0.08440	0.08790	0.07590	0.13090	0.08620	1.00000			
28	-0.06490	0.17330	0.07540	0.08280	-0.02070	0.30290	0.06450	1.00000		
29	0.54280	0.02110	0.33800	-0.00950	0.32370	0.13920	0.42790	0.08220	1.00000	
30	0.11530	0.13680	0.06650	-0.00110	0.00030	0.07520	0.08590	0.10650	0.12890	1.00000
31	0.57940	0.00580	0.19560	0.11180	0.28880	0.18270	0.35490	0.05340	0.50350	0.14630
32	0.12810	-0.02760	-0.04210	0.16950	0.13510	0.509450	0.23510	0.13880	0.04210	0.09270
33	0.26990	0.33500	0.45980	0.20530	0.23330	0.14300	0.12780	0.08800	0.20960	0.04250
34	0.21730	-0.07350	0.15010	0.10270	0.17760	0.14620	0.29980	-0.10550	0.39760	0.02550
35	0.00090	0.27230	0.42970	0.19850	0.18010	0.15780	0.17770	0.22390	0.35420	0.14130
36	0.34860	0.05490	0.29570	-0.03870	0.34070	0.12200	0.36790	0.08880	0.52960	0.18560
37	0.30820	0.08310	0.02209	0.00890	0.13980	0.11480	0.23170	0.16790	0.20130	0.05680
38	0.15560	-0.01420	0.10440	0.07920	0.09520	-0.05000	0.06920	-0.03400	0.23130	0.05170
39	0.08630	0.22980	0.31240	0.18990	0.27680	0.16660	0.09780	0.17420	0.12240	0.06410
40	0.14970	-0.03240	0.04010	0.02990	0.29370	0.10470	0.07350	0.09380	0.19660	0.11880
41	0.23110	0.28070	0.44870	0.22640	0.34540	0.10260	0.06890	0.11920	0.16320	0.10470
42	0.09450	0.23950	0.33120	0.16390	0.38370	0.11640	0.05680	0.13750	0.19020	0.02810
43	0.41150	0.04130	0.20670	0.10200	0.26770	0.03850	0.15300	-0.03840	0.40130	0.05990
44	0.20860	0.18050	0.32970	0.01350	0.16410	0.10100	0.20890	0.10380	0.34960	0.06540
45	0.31260	-0.01510	0.06520	0.03930	0.07710	0.11270	0.45680	0.10020	0.35700	0.00860
46	0.18210	-0.26890	-0.02740	-0.20980	0.04380	-0.07980	0.22600	-0.05690	0.28230	0.14520
47	0.23220	-0.14630	-0.05560	-0.07010	-0.03950	-0.16070	0.24600	-0.11230	0.26060	-0.00100
48	0.23500	0.12880	0.10800	0.26670	0.31950	0.15060	0.15890	0.13620	0.24670	0.02690
49	0.16340	0.21020	0.17560	0.20240	0.13470	0.06490	0.04140	0.34830	0.09310	0.08110
50	-0.09460	0.18000	0.10960	0.11240	0.34760	0.18730	0.03330	0.04470	0.11190	-0.03600
51	0.26790	0.23700	0.43370	0.11600	0.30810	0.14050	0.09530	0.08390	0.20810	0.12820
52	0.09030	0.23310	0.10710	0.13890	0.20490	0.26900	0.17580	0.51180	0.21220	0.11780
53	0.20570	0.26430	0.38090	0.10320	0.21800	0.16620	0.05630	0.05810	0.20090	0.14670
54	0.17310	0.09410	0.06110	0.11670	0.17950	0.13150	-0.04130	0.22030	0.10620	0.20920
55	0.21920	0.14100	0.02900	0.10900	0.26950	0.18190	-0.02040	0.16170	0.09200	0.03480
56	0.16490	-0.00360	0.03340	-0.04050	0.02360	0.01140	0.24300	-0.05930	0.25700	-0.03020
57	-0.11120	-0.24590	-0.16590	-0.15930	-0.08600	-0.18330	0.01030	-0.18890	-0.01330	0.04250
58	0.19590	0.20340	-0.06630	0.09070	0.13600	0.05380	0.24300	0.07120	0.14380	-0.00020
59	0.11430	0.15100	0.15470	0.02680	0.03930	0.06890	0.24420	0.08790	0.14730	0.03200
60	0.27250	0.03110	0.11100	0.07360	0.02040	0.00820	0.32540	-0.08410	0.11360	0.01080

V = variable  
or indicator



Table 61-a. Pearson's product moment correlation coefficients (contd.)

V	31	32	33	34	35	36	37	38	39	40
31	1.00000									
32	0.29560	1.00000								
33	0.33610	0.06060	1.00000							
34	0.30660	0.20870	0.22380	1.00000						
35	0.08380	-0.01930	0.35310	0.15590	1.00000					
36	0.33790	0.06780	0.26440	0.36010	0.26850	1.00000				
37	0.23680	0.10900	0.11600	0.06620	0.08990	0.43990	1.00000			
38	0.38470	0.08250	0.12040	0.12410	0.00250	0.12180	0.13220	1.00000		
39	0.22250	0.02420	0.22950	0.16710	0.20230	0.22990	0.06730	0.23070	1.00000	
40	0.21110	0.10630	-0.01670	0.08760	0.01980	0.26080	0.44110	0.23940	0.03250	1.00000
41	0.17600	0.02820	0.36240	0.15170	0.32860	0.32730	0.17360	0.03200	0.21670	0.11660
42	0.16620	0.01920	0.24740	0.11590	0.22520	0.19520	0.11130	0.18240	0.52550	0.10620
43	0.39210	-0.03330	0.29540	0.51390	0.09370	0.46090	0.22200	0.39830	0.21330	0.16140
44	0.23600	-0.06320	0.35400	0.13090	0.40720	0.36370	0.24660	0.09040	0.13470	0.03800
45	0.38190	0.22010	0.11650	0.32120	0.08950	0.32600	0.15040	0.18920	0.17110	0.05810
46	0.13110	-0.02990	-0.08280	0.22890	-0.06910	0.22790	0.18200	0.02980	0.04880	0.17580
47	0.16750	0.05790	0.07060	0.12130	0.03660	0.08090	-0.02630	-0.08540	-0.07400	-0.19990
48	0.30680	0.09360	0.21540	0.47020	0.05910	0.23500	0.01260	0.24830	0.23050	0.14140
49	0.13740	0.20140	0.21020	-0.00040	0.18640	0.16830	0.09880	0.07440	0.20580	0.08560
50	-0.03400	-0.10680	0.18630	0.06920	0.13570	0.21550	0.08840	-0.06190	0.23990	0.07720
51	0.10630	-0.13460	0.46760	0.11590	0.30850	0.29260	0.20800	0.00050	0.27010	0.01240
52	0.18830	0.12780	0.12080	0.07010	0.25300	0.19420	0.21380	0.01430	0.24870	0.20200
53	0.22350	-0.09670	0.49810	0.16500	0.25400	0.21070	0.03330	-0.02270	0.21490	-0.06810
54	0.20810	0.19080	0.08150	0.00000	0.02790	0.20960	0.29140	0.12250	0.02850	0.41100
55	0.09700	-0.06170	-0.01060	-0.05810	-0.00790	0.23720	0.28660	-0.01620	-0.02730	0.36210
56	0.20790	0.04280	0.16950	0.16890	0.14380	0.19910	0.22290	0.17330	0.13000	0.10310
57	0.03900	0.03760	-0.12990	-0.01760	-0.06040	0.00920	-0.06160	0.05620	-0.13610	-0.00920
58	0.29730	0.17660	-0.06460	0.30340	-0.10590	0.14250	0.13200	0.20680	0.12170	0.16130
59	0.17850	0.03140	0.13950	0.10370	0.26120	0.18550	-0.03770	0.06660	0.07390	-0.13050
60	0.33700	0.17430	0.18100	0.64290	0.02740	0.32760	0.15740	0.14730	0.02030	0.00890

V = variable  
or  
indicator.

Table 61-a. Pearson's product moment correlation coefficients (cont'd) V = variable or indicator

V	41	42	43	44	45	46	47	48	49	50
41	1.00000									
42	0.26250	1.00000								
43	0.12770	0.22020	1.00000							
44	0.27180	0.15460	0.26590	1.00000						
45	0.03270	0.16960	0.32740	0.18060	1.00000					
46	-0.03370	0.03100	0.15020	0.12060	0.26250	1.00000				
47	-0.05960	-0.06960	-0.00590	0.11990	0.15980	0.29390	1.00000			
48	0.18670	0.12630	0.49910	0.13130	0.27200	0.05520	-0.08640	1.00000		
49	0.30190	0.12830	0.20580	0.15220	0.03570	-0.19570	-0.11180	0.26120	1.00000	
50	0.26360	0.38330	0.07480	0.09280	0.09600	0.09160	-0.02730	0.07750	-0.03960	1.00000
51	0.39090	0.28800	0.21130	0.44450	0.10760	0.05460	0.03580	0.15550	0.09560	0.17530
52	0.20750	0.22130	0.15910	0.19850	0.17680	-0.03530	-0.02820	0.20060	0.27750	0.21700
53	0.25620	0.14220	0.23490	0.33430	0.07700	-0.12010	0.09590	0.18280	0.14360	0.13750
54	0.15310	-0.01700	0.11730	0.13310	0.06420	-0.05070	-0.15990	0.22990	0.27820	0.04140
55	0.19240	0.08140	0.19630	0.05980	0.05950	-0.05690	-0.30510	0.18180	0.13770	0.13600
56	0.03540	0.07220	0.23030	0.13890	0.20890	0.15760	0.03150	0.00010	0.09010	0.03600
57	-0.05420	-0.05620	-0.10420	-0.12600	-0.05950	0.22430	0.16030	-0.26350	-0.15400	0.06060
58	-0.01240	0.10780	0.22890	0.02760	0.27180	0.33650	0.08430	0.38420	0.03360	0.00390
59	0.19390	0.06850	0.16290	0.18690	0.11930	0.02330	0.12260	0.10470	0.13480	-0.03030
60	0.15050	-0.02400	0.29000	0.19430	0.27380	0.23380	0.12490	0.10260	0.00460	-0.05060

V	51	52	53	54	55	56	57	58	59	60
51	1.00000									
52	0.09870	1.00000								
53	0.41710	0.16630	1.00000							
54	0.03720	0.23380	0.00170	1.00000						
55	0.20190	0.15070	0.03930	0.33130	1.00000					
56	0.02610	-0.00290	-0.03460	0.02810	0.00960	1.00000				
57	-0.25350	-0.20950	-0.16220	-0.14440	-0.23000	0.22610	1.00000			
58	0.07070	0.11490	-0.08540	0.18090	0.20770	0.04160	-0.13720	1.00000		
59	0.08550	0.06820	0.12560	0.08460	0.01430	0.14830	0.10800	0.01070	1.00000	
60	0.10750	-0.05410	0.00950	0.00180	-0.01100	0.35330	0.17760	0.15120	0.21710	1.00000



Table 61-b

Eigen values<sup>Ⓜ</sup>

Factor #	Eigen value	Factor #	Eigen value
1	11.60	10	1.43
2	4.88	11	1.34
3	3.35	12	1.29
4	2.40	13	1.21
5	2.09	14	1.12
6	2.04	15	1.10
7	1.86	16	1.06
8	1.65	17	1.03
9	1.50	18	1.02

Table 61-c

Cumulative proportion of total variance<sup>Ⓜ</sup>

Factor #	Cumulative proportion of total variance	Factor #	Cumulative proportion of total variance
1	.19	10	.55
2	.27	11	.57
3	.33	12	.59
4	.37	13	.61
5	.40	14	.63
6	.44	15	.65
7	.47	16	.67
8	.50	17	.68
9	.52	18	.70

<sup>Ⓜ</sup> These values are computed on the basis of table 61-a above (that is on the basis of Pearson's product moment correlation coefficients).





Table 61-d. (cont.)  
Factor matrix before rotation.

VARIABLE	FACTOR							
	11	12	13	14	15	16	17	18
1	0.17531	-0.12988	-0.09430	-0.06151	0.07000	0.07314	-0.06139	0.08267
2	0.29645	0.11058	-0.19502	0.12849	0.17252	0.14738	-0.31530	-0.02448
3	-0.07396	-0.21723	0.12307	0.11890	-0.07040	-0.00321	0.24000	0.00102
4	-0.15199	-0.11479	-0.11597	0.11250	0.01749	0.07212	0.03348	-0.03445
5	0.13141	0.39255	-0.03773	-0.13310	-0.13720	-0.20440	0.05645	0.17215
6	-0.06245	-0.16783	-0.02739	0.06230	-0.19045	0.12957	0.11439	0.01528
7	-0.22465	0.11995	0.16198	0.02630	0.05514	0.13161	0.03432	-0.02784
8	0.10714	-0.08797	-0.06370	0.10913	0.02818	-0.15882	0.09782	0.01903
9	0.03309	-0.11459	-0.09652	0.07769	0.00587	-0.21828	0.06213	-0.12066
10	-0.07599	-0.29261	-0.10882	-0.11848	-0.08408	-0.00117	-0.00766	-0.05879
11	-0.08072	0.24217	-0.02954	0.28235	0.00697	-0.17789	0.02344	0.04519
12	0.43459	0.14184	-0.19510	-0.01512	0.05690	0.09745	0.04648	-0.03063
13	0.05155	-0.14161	-0.03519	-0.16487	0.02813	0.07259	-0.00005	-0.06086
14	-0.06931	0.04390	-0.11858	0.08096	-0.14334	-0.07072	-0.13204	0.12741
15	0.01992	0.15832	0.04562	-0.11457	-0.16962	-0.04572	0.04362	-0.02007
16	0.04230	0.06864	-0.11166	0.05139	-0.23949	0.08069	0.07912	0.10991
17	0.07982	-0.06589	-0.01442	0.12599	-0.03586	-0.04103	-0.01174	-0.05333
18	0.33707	-0.03017	0.17641	-0.06019	0.00891	-0.06803	0.06408	0.04902
19	0.11459	0.16190	0.05475	0.29222	-0.00604	0.20324	-0.10661	-0.08293
20	-0.05516	0.10955	-0.09830	0.06972	0.17103	0.06064	-0.09031	0.01178
21	0.03746	0.03574	0.11181	-0.06302	-0.08336	-0.06529	0.02255	-0.13902
22	0.27637	-0.07055	0.25858	0.23032	0.12811	-0.37301	0.03064	0.22248
23	0.03807	0.03707	-0.14513	0.11868	0.00440	0.12869	-0.01970	-0.07030
24	0.21528	-0.20751	-0.00546	-0.15550	-0.20196	-0.20900	-0.05586	0.14127
25	-0.00308	-0.10748	-0.17626	0.04131	0.02143	-0.17486	-0.02349	-0.25722
26	0.36706	-0.20386	0.19938	-0.28202	-0.09485	0.33903	0.09864	-0.10656
27	0.04012	-0.19871	0.18478	0.23925	0.05662	-0.03884	0.00092	0.01580
28	0.05316	0.05169	-0.02874	0.05571	-0.07275	0.13985	0.00602	-0.10440
29	0.06853	-0.03965	-0.05340	0.03342	0.01856	0.02571	-0.01683	-0.07932
30	-0.05860	0.03626	-0.04285	-0.03121	0.36297	0.21124	0.26270	0.56160
31	-0.07324	-0.10830	0.09435	-0.13452	0.13786	-0.01893	-0.13154	-0.10071
32	-0.03242	-0.23908	-0.20038	0.19019	-0.09443	0.07270	-0.20410	-0.15737
33	0.07029	0.04536	0.12690	-0.25123	-0.00538	-0.13119	-0.23933	0.02193
34	0.13196	0.14675	-0.23579	-0.11348	-0.14497	0.13329	0.08882	0.14464
35	-0.03606	-0.27807	-0.07014	-0.09723	-0.05466	0.10533	0.02666	0.12001
36	-0.13994	0.18445	0.00269	-0.03129	0.01342	0.07756	0.14346	0.00382
37	-0.13889	-0.08761	0.24868	0.01317	-0.22323	-0.02431	-0.23884	0.13028
38	-0.14576	-0.01109	0.06127	0.01207	0.34596	-0.03672	-0.30162	0.05070
39	0.06768	0.05049	0.11480	-0.01735	0.08043	-0.05660	0.05175	0.00842
40	-0.11157	-0.07919	-0.10893	-0.05407	-0.03445	0.06076	-0.14668	0.11710
41	-0.29010	0.00827	-0.12668	-0.00843	-0.10449	-0.04456	0.17015	0.07721
42	0.01622	-0.08577	0.10303	0.12310	0.06546	-0.05649	0.06050	-0.10321
43	-0.10048	0.28236	0.04705	-0.11586	0.07734	-0.02438	0.08320	-0.08666
44	-0.25108	-0.09205	0.04839	-0.09019	0.02693	0.17479	-0.23468	0.08832
45	-0.09960	0.15338	0.25619	0.17376	0.17025	0.22026	-0.06458	-0.01905
46	-0.10223	-0.04620	-0.18258	-0.01975	-0.04956	0.00940	-0.00578	0.07715
47	0.09423	-0.04693	-0.18814	-0.10943	0.14798	-0.16795	-0.23880	-0.01170
48	-0.00302	0.18511	-0.24375	-0.03064	0.09419	0.00656	0.07435	-0.02926
49	-0.19655	0.22146	-0.12349	-0.11267	-0.20513	-0.19307	0.03687	-0.19142
50	-0.21080	-0.04537	0.03759	-0.17556	0.07698	-0.06227	0.06219	-0.09615
51	-0.10616	-0.06898	0.10457	0.07089	-0.06698	0.02930	-0.00367	0.13118
52	-0.08434	0.04825	-0.01511	-0.00200	-0.04509	-0.06328	-0.03077	-0.03913
53	0.11906	0.23017	0.07651	-0.20773	0.12845	-0.03445	-0.12356	0.05008
54	-0.20762	-0.00532	-0.20774	-0.20856	0.20270	-0.05776	-0.10326	0.01762
55	-0.12491	0.04516	0.12484	0.11724	0.04097	0.07729	0.19372	-0.10658
56	-0.10446	0.03675	0.42283	-0.22525	-0.01502	-0.07302	-0.10951	-0.04726
57	-0.09536	-0.10984	-0.13325	-0.25409	0.08180	-0.09037	0.11357	0.06182
58	-0.04032	-0.17470	-0.10441	0.17178	0.11186	-0.24711	0.04310	0.25795
59	0.06129	-0.14927	-0.01624	-0.14317	0.41847	-0.08679	0.35051	-0.31460
60	0.00892	0.14032	0.10913	0.01619	-0.14004	-0.01095	0.06221	0.10965



Table 62. Kendall rank order correlation coefficients

V	1	2	3	4	5	6	7	8	9	10
1	1.00000									
2	0.10370	1.00000								
3	0.11190	-0.07950	1.00000							
4	0.42890	0.12050	0.13420	1.00000						
5	0.01700	0.02370	0.01360	-0.05930	1.00000					
6	0.25730	0.20170	0.21980	0.33570	-0.02920	1.00000				
7	0.15390	0.16170	0.12040	0.32540	-0.00520	0.41900	1.00000			
8	0.10830	0.06440	0.29050	0.17820	0.05690	0.09320	0.09680	1.00000		
9	0.17720	0.00570	0.32210	0.16540	0.10540	0.15120	0.10880	0.38370	1.00000	
10	0.04200	0.06240	0.36070	0.03730	0.07630	0.21030	0.14260	0.30550	0.21400	1.00000
11	0.21550	0.06340	0.02250	0.28270	0.03670	0.19910	0.15350	0.11630	0.18440	-0.05750
12	0.15720	0.26720	0.06920	0.16540	0.15700	0.15870	0.13240	0.28310	0.23500	0.16650
13	0.14670	-0.01710	0.37820	0.19740	0.10180	0.18930	0.19390	0.31690	0.40800	0.35240
14	0.34120	0.20030	0.07700	0.39100	0.00660	0.41190	0.33870	0.10190	0.21130	0.07330
15	0.20450	-0.02410	0.35150	0.17280	0.15840	0.23900	0.24940	0.34860	0.33170	0.32930
16	0.00960	0.05240	0.39120	0.09100	0.08390	0.20270	0.14790	0.30090	0.27600	0.47830
17	0.24360	0.05640	0.25180	0.18870	0.03080	0.10540	0.11560	0.42500	0.40070	0.18230
18	0.15430	0.16300	0.31620	0.03440	0.15690	0.12950	0.13720	0.43720	0.35740	0.35170
19	0.16010	0.15670	0.29500	0.07870	0.15620	0.17960	0.18450	0.21200	0.22480	0.33180
20	-0.00090	-0.00270	0.29910	-0.03090	0.18970	0.04280	0.09260	0.19840	0.17230	0.28130
21	0.10810	0.08900	0.39130	0.11750	0.14030	0.23710	0.24110	0.29460	0.38750	0.36410
22	0.11880	0.21590	-0.00620	0.17780	-0.00960	0.18620	0.17040	0.05770	0.04110	-0.04800
23	0.24320	0.29970	0.06330	0.29840	-0.01410	0.50680	0.35220	0.16440	0.19860	0.15660
24	0.17430	0.06080	0.01200	0.10200	0.03020	0.14370	0.04100	0.00980	-0.06430	0.09660
25	0.17540	0.22110	0.11870	0.16900	0.07900	0.19830	0.17130	0.16340	0.14320	0.21070
26	0.07200	0.10520	0.04920	0.04470	0.05800	0.03680	0.03870	0.21010	0.02900	0.08100
27	0.17660	-0.02090	0.20150	0.11500	0.11790	0.19110	0.04270	0.08200	0.18090	0.19370
28	0.02830	0.05740	-0.05080	0.11360	0.04470	-0.08850	-0.00950	0.35730	0.00120	-0.01700
29	0.34160	0.10580	0.34850	0.29390	0.11620	0.25350	0.20000	0.29780	0.31450	0.31320
30	0.07540	-0.00530	0.14780	0.01980	0.07550	0.04750	0.04500	0.20290	0.11680	0.04980
31	0.16900	0.02520	0.39980	0.08190	0.11300	0.22780	0.23300	0.13160	0.31110	0.43530
32	-0.02510	0.01240	0.15810	-0.03560	0.01070	0.02680	-0.04490	0.28840	0.04900	0.17710
33	0.32170	0.15910	0.09640	0.30080	-0.01620	0.38090	0.28330	0.22830	0.10320	0.08790
34	0.26560	0.05590	0.23270	0.17080	0.12570	0.18250	0.15030	0.06920	0.12330	0.21650
35	0.31400	0.13850	0.00570	0.39800	-0.03000	0.40450	0.21680	0.22010	0.19070	0.07540
36	0.17030	0.13210	0.15020	0.18340	0.20390	0.22930	0.24650	-0.00480	0.33910	0.21830
37	0.06890	0.08170	0.09230	0.02450	0.10030	0.06800	0.04920	0.45740	0.10050	0.18720
38	0.02430	0.05080	0.17490	-0.00660	-0.07120	0.03810	0.06750	0.03350	0.07670	0.22820
39	0.17750	0.12310	0.07440	0.17730	0.09610	0.21540	0.22200	0.27780	-0.00600	0.24350
40	-0.03980	0.12050	0.10250	-0.01530	0.12090	-0.11170	-0.08370	0.00080	0.10030	0.12640
41	0.14680	0.18950	0.07710	0.22830	0.04640	0.40540	0.29410	0.10030	0.11210	0.13070
42	0.23350	0.12190	0.11240	0.24190	0.04300	0.23960	0.22170	0.11430	0.09530	0.18270
43	0.22210	0.04580	0.29230	0.16420	-0.00490	0.15640	0.20420	0.30780	0.29370	0.28090
44	0.29000	0.12700	0.05600	0.37340	0.02890	0.32450	0.35970	0.12020	0.21940	0.15260
45	0.11660	0.02360	0.19340	0.06470	0.17670	0.10600	0.17190	0.08840	0.00230	0.14350
46	0.04360	-0.00660	0.12200	0.05750	0.17730	0.02320	0.06470	0.23100	0.14440	0.16460
47	0.04540	-0.03480	0.04300	0.02290	0.17190	0.04340	0.07370	-0.01630	0.17070	0.08590
48	0.14270	0.10700	0.17130	0.17380	0.03600	0.09510	0.09310	0.23520	0.05440	0.20820
49	0.00450	0.06240	0.04960	0.11520	0.08230	0.17850	0.09620	-0.02430	0.04830	0.10780
50	0.12890	0.11140	-0.02750	0.20860	0.10080	0.08440	0.06790	0.06650	-0.04730	-0.01180
51	0.25280	0.13960	0.08090	0.31590	-0.05260	0.33530	0.30960	0.19860	0.22790	0.12990
52	0.15710	0.01290	0.03360	0.17720	0.19500	0.02160	0.00700	0.09770	0.09130	0.00450
53	0.27450	0.08070	0.08480	0.21450	0.02130	0.18910	0.21470	0.08830	0.13430	0.06410
54	-0.02400	0.05610	-0.01260	0.11570	0.06970	-0.09690	0.04120	0.19120	0.11010	0.15570
55	-0.01360	0.15820	0.01030	0.10010	0.01040	-0.04550	0.07670	0.19670	0.01700	0.00460
56	0.16630	0.03370	0.12730	0.04290	0.08480	0.06440	0.15940	0.08670	0.12310	0.11780
57	-0.02960	0.00780	0.05260	-0.08910	0.05380	0.02730	-0.00580	0.01100	0.04890	0.09910
58	-0.02410	0.00040	0.20150	0.00530	0.11540	-0.03210	0.02130	0.24680	0.02390	0.30070
59	0.15000	0.07670	0.03360	0.25170	-0.02590	0.19670	0.11920	0.07530	0.18390	0.04960
60	0.17390	0.05070	0.20680	0.12320	0.13810	0.14870	0.18540	0.17650	0.19750	0.15210

V = variable or indicator.



Table 62. Kendall rank order correlation coefficients (contd)

V	11	12	13	14	15	16	17	18	19	20
11	1.00000									
12	0.14980	1.00000								
13	0.01930	0.25780	1.00000							
14	0.30020	0.14480	0.08810	1.00000						
15	0.14480	0.13610	0.36910	0.19700	1.00000					
16	0.05730	0.18840	0.32630	0.09110	0.46330	1.00000				
17	0.15700	0.21580	0.35620	0.17950	0.36070	0.22580	1.00000			
18	-0.01520	0.30340	0.29480	0.05850	0.35200	0.40420	0.25410	1.00000		
19	0.10020	0.18980	0.28050	0.13260	0.37210	0.35720	0.22820	0.25690	1.00000	
20	-0.04390	0.14220	0.29160	-0.07690	0.26390	0.26440	0.18350	0.16210	0.34500	1.00000
21	0.00980	0.26880	0.48530	0.14010	0.40480	0.37600	0.35590	0.37000	0.33940	0.17720
22	0.14930	0.10760	-0.01810	0.28100	-0.01400	-0.05770	0.01410	0.15120	0.04490	-0.06180
23	0.24170	0.30020	0.18610	0.42060	0.18130	0.09850	0.18540	0.16160	0.19340	0.04410
24	-0.04100	0.00880	0.00610	0.16800	0.03920	0.00680	-0.05410	0.03470	0.05200	0.03620
25	0.06280	0.13680	0.16940	0.15640	0.20470	0.11050	0.18000	0.22640	0.22820	0.12160
26	-0.06350	0.13860	0.11000	0.03760	0.05800	0.00640	0.11090	0.16050	0.08360	0.06730
27	0.13620	0.14980	0.24170	0.05730	0.25520	0.10650	0.21810	0.19410	0.27090	0.16160
28	0.07220	0.13550	0.01860	0.07970	0.00880	0.09830	-0.04880	0.04870	0.02200	0.00880
29	0.19130	0.25860	0.45680	0.24990	0.53540	0.34780	0.50250	0.36420	0.37620	0.22340
30	0.01540	0.09190	0.09060	0.09200	0.07670	0.10900	0.07240	0.11630	0.10330	0.21190
31	0.04310	0.09570	0.37000	0.19260	0.41250	0.35740	0.26870	0.35080	0.34380	0.37730
32	-0.00500	-0.00110	0.08620	-0.07700	0.07640	0.07840	0.05560	-0.00630	0.25760	0.24100
33	0.18520	0.17310	0.23250	0.44580	0.25900	0.10950	0.23640	0.14160	0.07230	0.12010
34	0.10290	0.13120	0.25960	0.20040	0.37480	0.25010	0.23120	0.15410	0.30070	0.12580
35	0.20020	0.14830	0.07370	0.44280	0.10180	0.02540	0.11840	0.04420	-0.02020	-0.11790
36	0.15310	0.29770	0.37630	0.17040	0.32990	0.27960	0.37820	0.30000	0.27520	0.16470
37	0.02050	0.20110	0.21660	0.06660	0.19350	0.19630	0.27340	0.30450	0.16070	0.07700
38	-0.00140	0.00490	0.08450	-0.00220	0.21310	0.21680	0.07760	0.18810	0.17610	0.20790
39	0.10990	0.17480	0.08060	0.13710	0.16380	0.21180	-0.01800	0.19480	0.11300	0.05670
40	-0.09770	0.12680	0.12050	-0.17750	0.06460	0.20050	0.18800	0.29360	0.07280	0.13960
41	0.15790	0.11270	0.09560	0.39840	0.11130	0.07690	0.11980	0.06620	0.19040	0.12730
42	0.13850	0.16000	0.08940	0.15980	0.17470	0.20700	0.02340	0.20890	0.19550	0.04150
43	0.11260	0.15010	0.31980	0.16400	0.46900	0.31900	0.31380	0.27590	0.24880	0.14010
44	0.22290	0.19520	0.28370	0.38580	0.18870	0.11060	0.18750	0.11050	0.07590	-0.03820
45	0.07960	0.04470	0.24730	0.06000	0.28710	0.19310	0.12350	0.18090	0.35100	0.20570
46	0.01780	0.13480	0.23180	-0.04850	0.23800	0.16720	0.17830	0.14870	0.08280	0.02790
47	0.15290	0.09020	0.20600	0.02140	0.08490	-0.00420	0.06790	-0.05590	0.10320	0.08940
48	-0.03350	0.03980	0.17680	0.09440	0.23950	0.25740	0.09260	0.17210	0.20700	0.16360
49	0.07900	0.12140	0.09630	0.23610	0.13110	0.16840	-0.03180	0.05150	0.04570	0.07390
50	0.05060	-0.03140	-0.03370	0.08140	-0.00170	-0.13360	-0.01680	-0.04830	0.00250	-0.00960
51	0.17300	0.16080	0.22620	0.37950	0.22890	0.07910	0.22150	0.12380	0.07540	0.01420
52	0.13290	0.04020	0.09900	0.11600	0.08920	0.12220	0.07390	0.05210	0.00460	0.07650
53	0.22240	0.12670	0.12730	0.44560	0.15250	0.06160	0.13940	0.08960	0.07740	0.04990
54	-0.08910	0.13430	0.13920	-0.00330	0.06180	0.08050	0.09050	0.17700	0.01870	0.16570
55	-0.09940	0.09840	-0.00560	-0.06650	-0.05950	0.06240	0.03930	0.21090	-0.00080	0.09130
56	0.08140	0.07160	0.11610	0.04480	0.25440	0.06880	0.14710	0.17100	0.14810	0.02510
57	0.09230	0.04670	0.00670	-0.02040	0.05290	0.04290	-0.03010	-0.01160	0.07680	0.00250
58	-0.15530	0.01460	0.21420	-0.03470	0.19470	0.25520	0.12560	0.15590	0.08000	0.17160
59	0.16420	0.17500	0.15130	0.17180	0.14730	-0.02530	0.16760	0.04750	0.04970	-0.05520
60	0.17070	0.12170	0.22100	0.12610	0.32980	0.18380	0.27330	0.13510	0.27820	0.06620

V = variable or indicator

Table 62 - Kendall rank order correlation coefficients (contd.)

V	21	22	23	24	25	26	27	28	29	30
21	1.00000									
22	0.04590	1.00000								
23	0.16380	0.24690	1.00000							
24	0.06670	0.25140	0.08240	1.00000						
25	0.22780	0.19480	0.30650	0.14920	1.00000					
26	0.09000	0.12430	0.06770	0.17840	0.16640	1.00000				
27	0.16200	0.08390	0.13100	0.05130	0.06460	0.05810	1.00000			
28	-0.03780	0.12340	0.03840	0.05540	-0.02700	0.28770	0.02780	1.00000		
29	0.48660	0.02150	0.28480	0.01170	0.26300	0.08790	0.38180	0.03310	1.00000	
30	0.12920	0.12470	0.05060	0.00480	0.00290	0.09040	0.08360	0.10060	0.09430	1.00000
31	0.49810	0.01500	0.17860	0.08390	0.23230	0.12670	0.30440	0.04440	0.44700	0.13490
32	0.05870	-0.01850	-0.05860	0.13310	0.11180	0.09020	0.16400	0.11410	0.03480	0.08810
33	0.22710	0.26560	0.43470	0.14360	0.20850	0.05760	0.11440	0.03750	0.24310	0.03120
34	0.14810	-0.04960	0.16550	0.17460	0.17200	0.12580	0.23660	-0.06020	0.35530	0.02330
35	0.03380	0.20870	0.36110	0.14900	0.15050	0.11240	0.16360	0.16880	0.28000	0.01170
36	0.30390	0.05420	0.23210	-0.01080	0.25850	0.13060	0.28620	0.05390	0.44110	0.13740
37	0.23370	0.06970	0.04540	0.00950	0.09630	0.11420	0.16440	0.10600	0.20680	0.02830
38	0.11380	-0.03980	0.03320	0.04060	0.05040	-0.06250	0.03190	0.00270	0.14040	0.04910
39	0.04440	0.19720	0.21580	0.15360	0.20860	0.10690	0.07580	0.12860	0.08150	0.05440
40	0.07340	-0.06010	0.00290	-0.00080	0.23410	0.17320	0.00150	0.07210	0.11920	0.08380
41	0.16740	0.24310	0.40400	0.16710	0.28170	0.10970	0.05490	0.07830	0.13700	0.12710
42	0.05670	0.19340	0.23770	0.15220	0.33080	0.11090	0.06220	0.13730	0.14460	0.03470
43	0.32760	0.03200	0.16840	0.09430	0.23270	0.02210	0.12710	-0.02530	0.41420	0.05660
44	0.18040	0.15470	0.33520	0.00530	0.14280	0.07930	0.15430	0.09070	0.28550	0.01470
45	0.26230	-0.00620	0.07970	0.03540	0.03930	0.07040	0.33930	0.07080	0.28860	0.08010
46	0.18810	-0.20840	-0.01240	-0.19790	0.06590	-0.04210	0.18340	-0.03720	0.25060	-0.11360
47	0.19850	-0.10830	0.00180	-0.05480	-0.03460	-0.15070	0.19470	-0.10390	0.20140	-0.01120
48	0.17840	0.09500	0.12510	0.20430	0.24510	0.12310	0.11860	0.11310	0.21360	0.02470
49	0.13060	0.16200	0.16110	0.17460	0.12040	0.07060	0.01870	0.29330	0.04120	0.04280
50	-0.11340	0.08760	0.17870	0.08000	0.27000	0.12720	-0.00970	0.06400	0.05700	-0.06380
51	0.24550	0.20010	0.39950	0.09140	0.23140	0.11670	0.06940	0.03810	0.24230	0.10340
52	0.06610	0.18480	0.09020	0.12730	0.14480	0.11670	0.10390	0.39970	0.14040	0.09730
53	0.17420	0.18640	0.30270	0.09360	0.20640	0.10740	0.06370	0.00910	0.24440	0.09170
54	0.16270	0.08790	0.05830	0.11800	0.12330	0.13820	-0.10200	0.17020	0.09910	0.14270
55	0.13010	0.09770	0.01420	0.10890	0.20680	0.18600	-0.06970	0.07930	0.04570	0.00530
56	0.12870	-0.01640	0.03550	-0.03840	0.00370	-0.01000	0.22190	-0.07030	0.18220	-0.01700
57	-0.03660	-0.15190	-0.10500	-0.11330	-0.03320	-0.14370	0.05910	-0.11280	0.00540	0.01430
58	0.17160	-0.14230	-0.06370	0.09130	0.12310	0.04730	0.13770	0.05930	0.17400	-0.00640
59	0.12440	0.12450	0.13150	0.03810	0.03210	0.02440	0.27490	0.01680	0.18620	0.05470
60	0.10360	0.06270	0.07400	0.06540	0.06770	-0.01720	0.28010	-0.09360	0.24840	0.02350

V = variable or indicator.



Table 62 - Kendall rank order correlation coefficients (contd.)

V	31	32	33	34	35	36	37	38	39	40
31	1.00000									
32	0.20870	1.00000								
33	0.26420	0.07250	1.00000							
34	0.26130	0.14610	0.17980	1.00000						
35	0.12040	0.01420	0.29240	0.13040	1.00000					
36	0.30010	0.03940	0.24630	0.31270	0.21320	1.00000				
37	0.17820	0.05510	0.08860	0.05920	0.07750	0.34280	1.00000			
38	0.32430	0.04180	0.04620	0.07630	-0.04650	0.09010	0.08720	1.00000		
39	0.15990	-0.00560	0.14540	0.10670	0.10640	0.18470	0.05630	0.23980	1.00000	
40	0.15710	0.05540	-0.04830	0.05920	-0.02560	0.18460	0.34510	0.18960	0.07800	1.00000
41	0.14990	0.00820	0.30530	0.13710	0.30260	0.24670	0.13940	0.03460	0.17180	0.08730
42	0.12170	0.02740	0.17940	0.09740	0.15010	0.17460	0.09920	0.14670	0.45140	0.14260
43	0.33360	-0.02900	0.25360	0.62650	0.06330	0.40080	0.17200	0.31050	0.17720	0.11680
44	0.20080	-0.06570	0.33520	0.11100	0.35700	0.35300	0.17880	-0.01510	0.05850	-0.01750
45	0.27300	0.14480	0.08320	0.30030	0.06740	0.25070	0.07180	0.10910	0.10280	-0.00620
46	0.12720	-0.04580	-0.04760	0.17940	-0.06270	0.19790	0.16240	0.05140	0.06050	0.15680
47	0.10390	0.09180	0.02170	0.11100	0.04600	0.10490	-0.03770	-0.10370	-0.06280	-0.22010
48	0.25610	0.07340	0.16300	0.38510	0.03600	0.20860	0.01940	0.19860	0.22170	0.13610
49	0.11720	0.13760	0.16310	0.02740	0.17600	0.11600	0.06540	0.05030	0.14940	0.05100
50	-0.03380	-0.05860	0.14050	0.06190	0.08340	0.13840	0.07580	-0.02600	0.21180	0.10470
51	0.07080	-0.13700	0.40160	0.10850	0.25130	0.22530	0.15420	0.00290	0.16630	-0.00610
52	0.14350	0.08780	0.08690	0.07350	0.20510	0.11850	0.13090	-0.00750	0.20400	0.16410
53	0.22210	-0.06870	0.44280	0.15220	0.25600	0.19990	0.03670	-0.04070	0.13560	-0.10200
54	0.16240	0.14690	0.07530	-0.00130	0.03740	0.15220	0.23960	0.07530	0.04550	0.33050
55	0.03570	-0.05330	-0.02230	-0.06030	-0.02320	0.15880	0.19480	0.01820	0.02660	0.32750
56	0.19250	0.02840	0.14110	0.15020	0.09060	0.13300	0.16000	0.12070	0.11540	0.04830
57	0.00860	0.06860	-0.05490	0.05520	-0.00900	0.02670	-0.02400	0.05910	-0.07010	-0.04010
58	0.23300	0.10290	-0.03580	0.23890	-0.07810	0.15400	0.10480	0.17000	0.14120	0.17760
59	0.14390	0.03470	0.10510	0.15340	0.24880	0.20620	-0.04990	-0.03320	0.07590	-0.18890
60	0.29400	0.12300	0.15870	0.40390	0.03170	0.25980	0.13000	0.08860	0.02280	-0.02010



Table 62 - Kendall rank order correlation coefficients (cont'd) v = variable or indicator.

V	41	42	43	44	45	46	47	48	49	50
41	1.00000									
42	0.25160	1.00000								
43	0.12430	0.19450	1.00000							
44	0.25680	0.12750	0.19630	1.00000						
45	0.02930	0.12340	0.25670	0.16690	1.00000					
46	-0.01060	0.00770	0.12930	0.10160	0.21030	1.00000				
47	-0.03490	-0.10650	0.01390	0.09670	0.16060	0.23870	1.00000			
48	0.16100	0.13610	0.38020	0.07690	0.18210	0.04750	0.05310	1.00000		
49	0.22990	0.10090	0.18750	0.14570	0.02860	-0.11990	0.08070	0.22370	1.00000	
50	0.21330	0.30180	0.05230	0.05440	0.03560	0.05890	0.03720	0.09020	-0.04430	1.00000
51	0.33120	0.22510	0.20570	0.39050	0.07830	0.06240	0.04160	0.12880	0.05720	0.11330
52	0.15820	0.19500	0.09670	0.13440	0.10750	-0.01750	0.00670	0.15830	0.22460	0.19670
53	0.22060	0.13670	0.19050	0.34190	0.02570	-0.06320	0.08190	0.13770	0.10870	0.08280
54	0.12670	0.03850	0.10440	0.11060	-0.00780	-0.03010	-0.13490	0.19840	0.22780	0.04200
55	0.14720	0.15220	0.13960	0.01800	0.00220	-0.03290	-0.30690	0.15850	0.06240	0.15410
56	0.00650	0.05520	0.18040	0.08740	0.17760	0.13910	0.01370	-0.01950	0.05180	0.06180
57	-0.06370	-0.04140	-0.02560	-0.06360	0.00030	0.19060	0.13510	-0.17830	-0.09250	0.05050
58	-0.01220	0.09300	0.19790	0.00430	0.20480	0.28240	0.02420	0.32410	0.03960	-0.00540
59	0.18220	0.04930	0.14370	0.18520	0.08390	0.04720	0.15190	0.06190	0.12030	-0.05530
60	0.09700	-0.01600	0.26600	0.15140	0.22170	0.18520	0.15100	0.09010	-0.03910	0.04470
V	51	52	53	54	55	56	57	58	59	60
51	1.00000									
52	0.05140	1.00000								
53	0.34140	0.13820	1.00000							
54	0.05140	0.16310	0.01540	1.00000						
55	0.13290	0.10360	-0.00130	-0.00130	1.00000					
56	0.03010	-0.03420	-0.03910	-0.00640	-0.03450	1.00000				
57	-0.17470	-0.16410	-0.08470	-0.08270	-0.16700	0.23290	1.00000			
58	0.05600	0.08020	-0.03770	0.13790	0.20360	0.03900	-0.10890	1.00000		
59	0.06010	-0.00700	0.06610	0.02970	-0.04260	0.12420	0.17150	0.00520	1.00000	
60	0.06710	-0.05060	0.01170	-0.02730	-0.06590	0.32370	0.24230	0.11930	0.24870	1.00000

APPENDIX B, # 3.

DOCUMENTARY AND DESIGN

Appendix B, #3.1.

PERSONAL AND ORGANIZATIONAL

BACKGROUND INFORMATION

(ABRIDGED)



SECTION A

"Some Background Information"

For purposes of statistical manipulation and analysis, the following are some background information about yourself. They are intended to describe some of the characteristics of your responsibilities in your present organization.

1. Position in the organization:
2. Area of specialization:
3. The person(s) - or managerial level - you have to report to:
4. The person(s) - or managerial level - reporting to you:
5. Number of years with this organization:
6. Number of years in the present job - if different from above:
7. Age:
8. Length of experience - in the above-mentioned area of specialization - in the present organization as well as any previous others:
9. Physical location of your office (particularly in relation to the organization's headquarters.)
10. Qualifications - if any - (beyond 'Ordinary' Level or its equivalent):
11. Type of experience prior to joining the present organization (industrial, commercial, governmental, consultancy, etc.):
12. Membership of professional societies:

How relevant to your job do you consider education and/or training in accounting topics? (EDP and MS/OR specialists only)

- (i) Not relevant at all
- (ii) Relevant to a very little extent
- (iii) Relevant to a small extent
- (iv) Relevant to some extent
- (v) Relevant to a considerable extent
- (vi) Relevant to a very great extent
- (vii) Relevant to an extreme extent

If you consider education and/or training in accounting topics are relevant to your job, have you attended any of such courses, and what is your impression to - and the implications of - such experience? (EDP and MS/OR specialists only)

What kinds of communication are there between you and accountants in your present organization? (EDP and MS/OR specialists only)

How relevant to your job do you consider education and/or training in Electronic Data Processing (E.D.P.) and Management Science (M.S.) or Operational Research (O.R.)? (Accountants only)

Have you had any training in the E.D.P. field (formally or through experience) recently? If yes, what kinds of experience and/or courses of training have you attended (indicating the type: appreciation, intermediate, or advanced; the duration, and the category of the course - whether management, programming languages, and/or application packaged programme courses)? (Accountants only)

What ideas do you have about MS/OR concepts and methodology?  
If some, please explain the main source of acquiring that  
information. (Accountants only)

What kinds of communication between you and E.D.P. and MS/OR  
specialists in your present organization? (Accountants only)

- a. between you and E.D.P. specialists.
- b. between you and MS/OR specialists.

Appendix B, #3.2.

ACCOUNTANTS - DP SPECIALISTS' INTERACTION

(SPECIMEN)



For  
Office  
use only

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SECTION B

ATTITUDINAL ASPECTS OF COMMUNICATION  
 BETWEEN  
 ELECTRONIC DATA PROCESSING (E.D.P.) SPECIALISTS  
 AND  
 \*  
ACCOUNTANTS

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

\* For the purposes of this appendix, bracketed indicator numbers are added - these numbers were not provided in the original document.

"ATTITUDINAL ASPECTS OF COMMUNICATION BETWEEN E.D.P. SPECIALISTS AND ACCOUNTANTS"

The following set of statements represents different points of view regarding "Accountants - E.D.P. specialists' understanding" in your present organization. They are designed to explore opinions and views. There are no 'right' or 'wrong' answers. Two modes of responses are to be used. One of them is to indicate your degree of agreement or disagreement with some statements - where you might strongly, moderately or slightly agree with some of these statements, strongly, moderately or slightly disagree with some others, and probably uncertain about others. The other mode of response is to indicate whether the statement is true or false. For each of the following statements please indicate your own opinion and experience by circling the number describing your choice, as applies to the "majority" of people or cases that you have met, not to the exceptional or extreme cases.

I feel that the majority of accountants in this organization are developing an appreciation of benefits of E.D.P. systems. (Indicator#1)	For office use only														
<table border="0"> <tr> <td>Strongly agree</td> <td>Moderately agree</td> <td>Slightly agree</td> <td>Undecided</td> <td>Slightly disagree</td> <td>Moderately disagree</td> <td>Strongly disagree</td> </tr> <tr> <td>(7)</td> <td>(6)</td> <td>(5)</td> <td>(4)</td> <td>(3)</td> <td>(2)</td> <td>(1)</td> </tr> </table>	Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	(7)	(6)	(5)	(4)	(3)	(2)	(1)	10
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree									
(7)	(6)	(5)	(4)	(3)	(2)	(1)									
I feel that many of our accountants <u>like</u> to make the job appear more difficult than it is. (Indicator#2)															
<table border="0"> <tr> <td>Strongly agree</td> <td>Moderately agree</td> <td>Slightly agree</td> <td>Undecided</td> <td>Slightly disagree</td> <td>Moderately disagree</td> <td>Strongly disagree</td> </tr> <tr> <td>(1)</td> <td>(2)</td> <td>(3)</td> <td>(4)</td> <td>(5)</td> <td>(6)</td> <td>(7)</td> </tr> </table>	Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	(1)	(2)	(3)	(4)	(5)	(6)	(7)	11
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree									
(1)	(2)	(3)	(4)	(5)	(6)	(7)									
As yet our accountants have not played a key role as originators in improving E.D.P. systems development and implementation. (Indicator#3)															
<table border="0"> <tr> <td>Strongly agree</td> <td>Moderately agree</td> <td>Slightly agree</td> <td>Undecided</td> <td>Slightly disagree</td> <td>Moderately disagree</td> <td>Strongly disagree</td> </tr> <tr> <td>(1)</td> <td>(2)</td> <td>(3)</td> <td>(4)</td> <td>(5)</td> <td>(6)</td> <td>(7)</td> </tr> </table>	Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	(1)	(2)	(3)	(4)	(5)	(6)	(7)	12
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree									
(1)	(2)	(3)	(4)	(5)	(6)	(7)									
I feel that more and more of our accountants are getting to appreciate what the computer can - and <u>cannot</u> - do for them. (Indicator#4)															
<table border="0"> <tr> <td>Strongly agree</td> <td>Moderately agree</td> <td>Slightly agree</td> <td>Undecided</td> <td>slightly disagree</td> <td>Moderately disagree</td> <td>Strongly disagree</td> </tr> <tr> <td>(7)</td> <td>(6)</td> <td>(5)</td> <td>(4)</td> <td>(3)</td> <td>(2)</td> <td>(1)</td> </tr> </table>	Strongly agree	Moderately agree	Slightly agree	Undecided	slightly disagree	Moderately disagree	Strongly disagree	(7)	(6)	(5)	(4)	(3)	(2)	(1)	13
Strongly agree	Moderately agree	Slightly agree	Undecided	slightly disagree	Moderately disagree	Strongly disagree									
(7)	(6)	(5)	(4)	(3)	(2)	(1)									
Accountants show flexibility in undertaking change in accounting systems necessitated by considerations involved in the computerization processes. (Indicator#5)															
<table border="0"> <tr> <td>Strongly agree</td> <td>Moderately agree</td> <td>Slightly agree</td> <td>Undecided</td> <td>Slightly disagree</td> <td>Moderately disagree</td> <td>Strongly disagree</td> </tr> <tr> <td>(7)</td> <td>(6)</td> <td>(5)</td> <td>(4)</td> <td>(3)</td> <td>(2)</td> <td>(1)</td> </tr> </table>	Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	(7)	(6)	(5)	(4)	(3)	(2)	(1)	14
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree									
(7)	(6)	(5)	(4)	(3)	(2)	(1)									

<p>Participation of accountants in checking the validity of computer-based accounting applications is <u>inadequate</u>. (Indicator #6)</p>							15
Strongly agree (1)	Moderately agree (2)	Slightly agree (3)	Undecided (4)	Slightly disagree (5)	Moderately disagree (6)	Strongly disagree (7)	
<p>E.D.P. specialists find an attentive audience amongst accountants. (Indicator #7)</p>							16
Definitely true (7)	Often true (6)	More true than false (5)	Uncertain about this (4)	More false than true (3)	Usually the case (2)	Not definitely false (1)	
<p>A considerable number of E.D.P. specialists are looked upon as outsiders' whose loyalty is to D.P. rather than their organizations. (Indicator #8)</p>							17
Strongly agree (1)	Moderately agree (2)	Slightly agree (3)	Undecided (4)	Slightly disagree (5)	Moderately disagree (6)	Strongly disagree (7)	
<p>If accountants were more explicitly clear in defining their exact needs and requirements in the computerization of their systems than the case now, more progress would be achieved. (Indicator #9)</p>							18
Strongly agree (1)	Moderately agree (2)	Slightly agree (3)	Undecided (4)	Slightly disagree (5)	Moderately disagree (6)	Strongly disagree (7)	
<p>E.D.P. specialists in this organization have <u>smoothly</u> contributed to the design of computer-based accounting applications. (Indicator #10)</p>							19
Definitely true (7)	Often true (6)	More true than false (5)	Uncertain about this (4)	More false than true (3)	Usually the case (2)	Not definitely false (1)	
<p>Many systems analysts are interested in acquiring knowledge about the business and how it works. (Indicator #11)</p>							20
Strongly agree (7)	Moderately agree (6)	Slightly agree (5)	Undecided (4)	Slightly disagree (3)	Moderately disagree (2)	Strongly disagree (1)	
<p>I do perceive <u>some</u> sort of 'professional jealousies' between D.P. specialists and accountants. (Indicator #12)</p>							21
Strongly agree (1)	Moderately agree (2)	Slightly agree (3)	Undecided (4)	Slightly disagree (5)	Moderately disagree (6)	Strongly disagree (7)	



							For Office use only
<p>I feel that E.D.P. specialists tend to <u>lack</u> credibility with accountants because of the nature of their training. (Indicator #13)</p> <p>Definitely true    Often true    More true than false    Uncertain about this    More false than true    Usually not the case    Definitely false</p> <p>(1)            (2)            (3)            (4)            (5)            (6)            (7)</p>							22
<p>Senior management of user divisions (or depts.) show a reasonable amount of involvement in the E.D.P. area. (Indicator #14)</p> <p>Definitely true    Often true    More true than false    Uncertain about this    More false than true    Usually not the case    Definitely false</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>							23
<p>Regarding computer-based systems for managerial planning and control purposes there is a growing realization on the part of senior managers of what is '<u>possible</u>' as opposed to what is '<u>ideal</u>'. (Indicator #15)</p> <p>Strongly agree    Moderately agree    Slightly agree    Undecided    Slightly disagree    Moderately disagree    Strongly disagree</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>							24
<p><u>Far greater 'liaison'</u> between D.P. specialists and accountants is needed. (Indicator #16)</p> <p>Strongly agree    Moderately agree    Slightly agree    Undecided    Slightly disagree    Moderately disagree    Strongly disagree</p> <p>(1)            (2)            (3)            (4)            (5)            (6)            (7)</p>							25
<p>There is a '<u>healthy organizational environment</u>' that enables constructive progress discussion between D.P. specialists and accountants. (Indicator #17)</p> <p>Definitely true    Often true    More true than false    Uncertain about this    More false than true    Usually not the case    Definitely false</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>							26
<p>'E.D.P. - Accounting' interaction is based on friendly attitudes. (Indicator #18)</p> <p>Definitely true    Often true    More true than false    Uncertain about this    More false than true    Usually not the case    Definitely false</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>							27
<p>Confidence and trust are major characteristics of the <u>present</u> pattern of working relationships between D.P. specialists and accountants. (Indicator #19)</p> <p>Definitely true    Often true    More true than false    Uncertain about this    More false than true    Usually not the case    Definitely false</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>							28

Appendix B, # 3.2.

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<p>I would say that there is a <u>lack</u> of understanding on the part of D.P. specialists and accountants of each others' functions. (Indicator # 20)</p>							<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">29</div>
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<p>Majority of senior managers of user divisions or departments find it difficult to specify their requirements of computer-based systems. (Indicator #21)</p>							<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">30</div>
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<p>Senior management of user functions knows little or nothing about the mechanism of computer-based systems. (Indicator #22)</p>							<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">31</div>
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<p>E.D.P. 'professional' training is <u>not</u> adequate enough to enable E.D.P. specialists to integrate themselves in organizations they join. (Indicator #23)</p>							<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">32</div>
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<p>Given the state of the art in the computer-based application areas of financial modelling, <u>far</u> greater effort is needed to enable management to perceive which direction the business is moving towards. (Indicator #24)</p>							<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">33</div>
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<p><u>Present</u> D.P.-accounting' relationship is progressing. (Indicator #25)</p>							<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">34</div>
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
<p>Majority of E.D.P. specialists accept responsibility for the end product of their work. (Indicator #26)</p>							<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">35</div>
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	



Appendix B, #3.2.

I have the feeling that many D.P. specialists adopt the 'know-all' Attitude. (Indicator#27)

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Definitely true (1) Often true (2) More true than false (3) Uncertain about this (4) More false than true (5) Usually the case (6) not false (7) Definitely false

36

Many accountants in this organization believe their work is finished once they have defined what they want. (Indicator#28)

Definitely true (1) Often true (2) More true than false (3) Uncertain about this (4) More false than true (5) Usually the case (6) not false (7) Definitely false

37

I have the feeling that accountants tend to consider the computer as an 'accounting machine' rather than a 'management' or 'company-wide' tool. (Indicator#29)

Strongly agree (1) Moderately agree (2) Slightly agree (3) Undecided (4) Slightly disagree (5) Moderately disagree (6) Strongly disagree (7)

38

I feel that many D.P. specialists do not have enough 'knowledge' about accounting systems. (Indicator#30)

Strongly agree (1) Moderately agree (2) Slightly agree (3) Undecided (4) Slightly disagree (5) Moderately disagree (6) Strongly disagree (7)

39

I feel that little has been done in the areas of applying the 'exception principle' where mass computer print-out could be summarized. (Indicator#31)

Strongly agree (1) Moderately agree (2) Slightly agree (3) Undecided (4) Slightly disagree (5) Moderately disagree (6) Strongly disagree (7)

40

Senior management of user divisions (or depts.) are frustrated in not being able to exercise effective control over their D.P. activities. (Indicator#32)

Strongly agree (1) Moderately agree (2) Slightly agree (3) Undecided (4) Slightly disagree (5) Moderately disagree (6) Strongly disagree (7)

41

Present relations between E.D.P. specialists and accountants in my organization could be described as 'a promising one'. (Indicator#33)

Strongly agree (7) Moderately agree (6) Slightly agree (5) Undecided (4) Slightly disagree (3) Moderately disagree (2) Strongly disagree (1)

42



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There is a growing understanding on the part of E.D.P. specialists of what is required from them to user divisions or depts. (Indicator #34)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	43
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
On both functions (D.P. and accounting) there is a reasonable amount of appreciation of the other's problems. (Indicator #35)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	44
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
As far as providing good E.D.P. service is concerned, the image of D.P. specialists has improved over the last three years. (Indicator #36)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	45
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
I think there is <u>sufficient</u> link between E.D.P. specialists and other user functions in my organization. (Indicator #37)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	46
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
There is <u>no</u> explicit statement defining objectives of E.D.P. service in my organization. (Indicator #38)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	47
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Although E.D.P. function in my organization is relatively young (compared with accountancy), I think it has reached a 'professional status'. (Indicator #39)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	48
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
Terminology used in each function (E.D.P. and accounting) may contribute to <u>misunderstanding</u> . (Indicator #40)							
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	49
(1)	(2)	(3)	(4)	(5)	(6)	(7)	

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There is enough mutual consultation between E.D.P. specialists and accountants, when problems arose. (Indicator #41)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(7)	(6)	(5)	(4)	(3)	(2)	(1)

50

Many E.D.P. specialists have the feeling that accountants tend to exaggerate (or overemphasize) the significance of their accounting practices. (Indicator #42)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

51

Accountants are prepared to listen to suggestions put forward by E.D.P. specialists. (Indicator #43)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(7)	(6)	(5)	(4)	(3)	(2)	(1)

52

In general I would say E.D.P. specialists like to make the job more complicated. (Indicator #44)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

53

Many programmers are interested in acquiring knowledge about the business and how it works. (Indicator #45)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(7)	(6)	(5)	(4)	(3)	(2)	(1)

54

Regarding the image of E.D.P. specialists in my organization, not enough improvement has been made as much as I would like to have seen. (Indicator #46)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

55

I feel that E.D.P. has not yet established its own characteristics as a 'profession'. (Indicator #47)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(6)

56



								For office use onl
Many E.D.P. Specialists are encouraging accountants to audit computer-based accounting applications. (Indicator #48)								57
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		
In explaining accounting systems I think many of our accountants do add complexity to the job. (Indicator #49)								58
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
I think the practical advantages of the policy of charging users for computing services outnumber its disadvantages. (Indicator #50)								59
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		
A young accountant should be transferred to D.P. function for a period of 2 - 3 years, to look after computer-based accounting applications. (Indicator #51)								60
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		
Regarding computer-based accounting applications, I think accountants expect too much too soon. (Indicator #52)								61
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
There is a tendency amongst D.P. specialists to think that 'computerization' is the answer to problems they look at. (Indicator #53)								62
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
The E.D.P. 'professionalization' issue is being given serious attention by majority of E.D.P. specialists (Indicator #54)								63
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		



							For Office use only
D.P. 'know-how' will increase by taking in accountants to training as D.P. specialists. (Indicator #55)							64
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
Accountants do <u>not</u> get involved 'enough' in the design of computer-based systems related to their work. (Indicator #56)							65
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
E.D.P. specialists tend to 'oversell' the expected benefits to be gained from using E.D.P. systems. (Indicator #57)							66
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
It is <u>desirable</u> that computerization of accounting applications is 'seconded' by accountant who is well trained in E.D.P. (Indicator #58)							67
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
E.D.P. specialists design of computer-based accounting applications <u>falls short of</u> accountants' expectations regarding accounting requirements for internal checks. (Indicator #59)							68
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	

Appendix B, # 3.3

ACCOUNTANTS - MS/OR SPECIALISTS' INTERACTION

(SPECIMEN)

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SECTION B

ATTITUDINAL ASPECTS OF COMMUNICATION  
BETWEEN  
MANAGEMENT SCIENCE/OPERATIONAL RESEARCH (MS/OR) SPECIALISTS  
AND  
ACCOUNTANTS \*

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

\* For the purposes of this appendix, bracketed indicator numbers are added. These numbers were not provided in the original document.



ATTITUDINAL ASPECTS OF COMMUNICATION BETWEEN MANAGEMENT SCIENCE/OPERATIONAL RESEARCH SPECIALISTS AND ACCOUNTANTS

The following set of statements represents different points of view regarding "Accountants - MS/OR specialists understanding" in your present organization. They are designed to explore opinions and views. There are no 'right' or 'wrong' answers.

Two modes of responses are to be used. One of them is to indicate your degree of agreement or disagreement with some statements - where you might strongly, moderately or slightly agree with some of these statements, strongly moderately or slightly disagree with some others, and probably uncertain about others. The other mode of response is to indicate whether the statement is true or false.

For each of the following statements please indicate your own opinion and experience by circling the number describing your choice, as applies to the "majority" of people or cases that you have met, not to the exceptional or extreme cases.

As far as providing good service to users, the image of MS/OR specialists has improved over the last three years. (Indicator #1)	For Office use only
<p>Strongly agree    Moderately agree    Slightly agree    Undecided    Slightly disagree    Moderately disagree    Strongly disagree</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>	10
There is <u>no</u> explicit statement defining objectives of MS/OR function in my organization. (Indicator #2)	
<p>Strongly agree    Moderately agree    Slightly agree    Undecided    Slightly disagree    Moderately disagree    Strongly disagree</p> <p>(1)            (2)            (3)            (4)            (5)            (6)            (7)</p>	11
MS/OR specialists find an attentive audience amongst accountants. (Indicator #3)	
<p>Definitely true    Often true    More true than false    Uncertain about this    More false than true    Usually not the case    Definitely false</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>	12
MS/OR specialists' ability to 'sell' their ideas and methodology to user functions is improving. (Indicator #4)	
<p>Strongly agree    Moderately agree    Slightly agree    Undecided    Slightly disagree    Moderately disagree    Strongly disagree</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>	13
I feel that confusion exists between 'management science/operational research (MS/OR)' on the one hand, and 'data processing' on the other (Indicator #5)	
<p>Definitely true    Often true    More true than false    Uncertain about this    More false than true    Usually not the case    Definitely false</p> <p>(1)            (2)            (3)            (4)            (5)            (6)            (7)</p>	14

<p>Top management of this organization is backing MS/OR activities. (Indicator# 6)</p> <p>Definitely true    Often true    More true than false    Uncertain about this    More false than true    Usually not the case    Definitely false</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>	<p>For Offi Use o</p> <p>15</p>
<p>Regarding MS/OR expected achievements, I think there is a growing realization on the part of senior managers of what is '<u>possible</u>' as opposed to what is '<u>ideal</u>'. (Indicator# 7)</p> <p>Strongly agree    Moderately agree    Slightly agree    Undecided    Slightly disagree    Moderately disagree    Strongly disagree</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>	<p>16</p>
<p><u>Present</u> 'MS/OR - accounting' relationship is <u>not</u> progressing as it should be. (Indicator# 8)</p> <p>Strongly agree    Moderately agree    Slightly agree    Undecided    Slightly disagree    Moderately disagree    Strongly disagree</p> <p>(1)            (2)            (3)            (4)            (5)            (6)            (7)</p>	<p>17</p>
<p>I think 'MS/OR - accounting' interaction is based on friendly attitudes. (Indicator# 9)</p> <p>Definitely true    Often true    More true than false    Uncertain about this    More false than true    Usually not the case    Definitely false</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>	<p>18</p>
<p>My feeling is that many accountants do <u>not</u> bother with MS/OR type of projects. (Indicator# 10)</p> <p>Strongly agree    Moderately agree    Slightly agree    Undecided    Slightly disagree    Moderately disagree    Strongly disagree</p> <p>(1)            (2)            (3)            (4)            (5)            (6)            (7)</p>	<p>19</p>
<p>Although MS/OR discipline is relatively young (compared with accountancy) I think it has reached a '<u>professional status</u>'. (Indicator# 11)</p> <p>Strongly agree    Moderately agree    Slightly agree    Undecided    Slightly disagree    Moderately disagree    Strongly disagree</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>	<p>20</p>
<p>Organizational '<u>roles</u>' of both functions - MS/OR and accounting - are clear enough. (Indicator# 12)</p> <p>Definitely true    Often true    More true than false    Uncertain about this    More false than true    Usually not the case    Definitely false</p> <p>(7)            (6)            (5)            (4)            (3)            (2)            (1)</p>	<p>21</p>



							For Office Use only
Top management of this organization is backing MS/OR activities. (Indicator # 6)							15
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
Regarding MS/OR expected achievements, I think there is a growing realization on the part of senior managers of what is ' <u>possible</u> ' as opposed to what is ' <u>ideal</u> '. (Indicator # 7)							16
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
<u>Present</u> 'MS/OR - accounting' relationship is <u>not</u> progressing as it should be. (Indicator # 8)							17
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
I think 'MS/OR - accounting' interaction is based on friendly attitudes. (Indicator # 9)							18
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
My feeling is that many accountants do <u>not</u> bother with MS/OR type of projects. (Indicator # 10)							19
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Although MS/OR discipline is relatively young (compared with accountancy) I think it has reached a ' <u>professional status</u> '. (Indicator # 11)							20
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
Organizational 'roles' of both functions - MS/OR and accounting - are clear enough. (Indicator # 12)							21
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	



							For Office use only
Both parties (accountants and MS/OR specialists) show interest in securing and maintaining worthwhile relationships. (Indicator # 13)							
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	22
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
MS/OR function contributes to the organization. (Indicator # 14)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	23
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
I feel that more and more of our accountants are getting to appreciate what MS/OR can - <u>and cannot</u> - do for them. (Indicator # 15)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	24
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
<u>Not</u> many accountants are aware of the benefits of MS/OR function. (Indicator # 16)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	25
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Confidence and trust are major characteristics of the present pattern of working relationship between MS/OR specialists and accountants. (Indicator # 17)							
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	26
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
I would say that there is a <u>lack</u> of understanding on the part of MS/OR specialists and accountants of each other's function. (Indicator # 18)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	27
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
As necessary, accountants have shown willingness to change established 'work patterns' for implementing MS/OR projects. (Indicator # 19)							
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	28
(7)	(6)	(5)	(4)	(3)	(2)	(1)	



								For Offic. use only
Both parties (accountants and MS/OR specialists) show interest in securing and maintaining worthwhile relationships. (Indicator # 13)								22
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		
MS/OR function contributes to the organization. (Indicator # 14)								23
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		
I feel that more and more of our accountants are getting to appreciate what MS/OR can - <u>and cannot</u> - do for them. (Indicator # 15)								24
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		
<u>Not many accountants are aware of the benefits of MS/OR function.</u> (Indicator # 16)								25
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
Confidence and trust are major characteristics of the present pattern of working relationship between MS/OR specialists and accountants. (Indicator # 17)								26
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		
I would say that there is a <u>lack</u> of understanding on the part of MS/OR specialists and accountants of each other's function. (Indicator # 18)								27
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
As necessary, accountants have shown willingness to change established 'work patterns' for implementing MS/OR projects. (Indicator # 19)								28
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		

On the whole, accountants are inclined to think that they 'know all the answers'. (Indicator # 20)

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Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

29

On both functions, there is a reasonable amount of appreciation of the others problems. (Indicator #21)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(7)	(6)	(5)	(4)	(3)	(2)	(1)

30

With regard to MS/OR projects, senior management of user divisions (or depts.) are reluctant to act upon suggestions which do not have the accountants' blessing. (Indicator #22)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

31

I think MS/OR has established its position as an integral part of the service functions in this organization. (Indicator #23)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(7)	(6)	(5)	(4)	(3)	(2)	(1)

32

Unless the MS/OR user is convinced that a project is immediately cost-saving it would be difficult for the proposals to gain acceptance. (Indicator #24)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false
(1)	(2)	(3)	(4)	(5)	(6)	(7)

33

There is insufficient link between MS/OR function and other analytical functions (such as corporate planning, computing facilities, etc.) in my organization. (Indicator #25)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

34

Terminology used in each function (MS/OR and accounting) may contribute to misunderstanding. (Indicator #26)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false
(1)	(2)	(3)	(4)	(5)	(6)	(7)

35



Whenever required accountants are prepared to provide the cost and financial data needed for MS/OR projects. (Indicator #27)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false
(7)	(6)	(5)	(4)	(3)	(2)	(1)

36

There is a tendency amongst many MS/OR specialists towards excessive theoretical (particularly mathematical) models at the expense of practicality. (Indicator #28)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false
(1)	(2)	(3)	(4)	(5)	(6)	(7)

37

Present relations between MS/OR specialists and accountants could be described as a promising one. (Indicator #29)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(7)	(6)	(5)	(4)	(3)	(2)	(1)

38

I do perceive some sort of 'professional jealousies' between MS/OR specialists and accountants. (Indicator #30)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

39

On the whole, accountants take a negative interest in MS/OR projects. (Indicator #31)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

40

I feel that many of our accountants like to make the job appear more difficult than it is. (Indicator #32)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

41

Senior management of user functions have found that MS/OR function is helpful in assisting in the solution of the complex business problems. (Indicator #33)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false
(7)	(6)	(5)	(4)	(3)	(2)	(1)

42

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<p>More and more accountants in my organization are getting to be more interested in the areas of forecasting and financial modelling. (Indicator #34)</p>							43
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
<p>On the whole, I would say that successful MS/OR projects <u>outnumber</u> the unsuccessful work. (Indicator #35)</p>							44
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
<p>There has been a '<u>healthy organizational environment</u>' which enables constructive progress discussions between MS/OR specialists and accountants. (Indicator #36)</p>							45
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
<p>There is <u>enough</u> mutual consultation between MS/OR specialists and accountants when problems arise. (Indicator #37)</p>							46
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(7)	(6)	(5)	(4)	(3)	(2)	(1)	
<p>As yet the accountant has <u>not</u> played a key role as a sponsor in the identification of possible MS/OR applications. (Indicator #38)</p>							47
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<p>Majority of senior managers of user divisions (or depts.) find it difficult to identify future MS/OR applications. (Indicator #39)</p>							48
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<p><u>Greater</u> 'liaison' (as distinct from integration) between MS/OR specialists and accountants is needed. (Indicator #40)</p>							49
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	

Appendix B, # 3.3.

I feel that MS/OR function in my organization is too remote from decision-making and problem solving. (Indicator #41)

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Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

50

Senior management of user divisions (or depts.) are not fully aware of what MS/OR can - and cannot - offer. (Indicator #42)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(1)	(2)	(3)	(4)	(5)	(6)	(7)

51

There is an increasing use of MS/OR services by accountants. (Indicator #43)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(7)	(6)	(5)	(4)	(3)	(2)	(1)

52

There is a growing understanding on the part of MS/OR specialists of what is required from them to user functions. (Indicator #44)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(7)	(6)	(5)	(4)	(3)	(2)	(1)

53

Whenever required accountants welcome the opportunity to join a MS/OR project team. (Indicator #45)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false
(7)	(6)	(5)	(4)	(3)	(2)	(1)

54

Majority of MS/OR projects that have been (or are being) carried out involve consulting accountants regarding financial considerations. (Indicator #46)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false
(7)	(6)	(5)	(4)	(3)	(2)	(1)

55

If a MS/OR specialist had some type of accounting training, it would help bridging the communication gap. (Indicator #47)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree
(7)	(6)	(5)	(4)	(3)	(2)	(1)

56



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Little 'accounting-MS/OR' joint effort is being made in the areas of financial modelling. (Indicator #48)								57
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
Many MS/OR specialists believe their work is finished once they have proposed a solution for a particular problem. (Indicator #49)								58
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
Regarding the image of MS/OR specialists in my organization, not enough improvement has been made as much as I would like to have seen. (Indicator #50)								59
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
MS/OR specialists are coming to play a 'notable' part as analysts in the information network of this organization. (Indicator #51)								60
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		
MS/OR specialists tend to 'oversell' the expected benefits to be gained from using MS/OR methodology. (Indicator #52)								61
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
With present MS/OR capabilities in mind, they - MS/OR specialists - can 'do a lot of good' to the survival and growth of this organization. (Indicator #53)								62
Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false		
(7)	(6)	(5)	(4)	(3)	(2)	(1)		
In my experience, I think there is a need for greater integration between accountants and MS/OR specialists in this organization. (Indicator #54)								63
Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		

Appendix B, # 3.3.

MS/OR specialists' knowledge regarding accounting procedures is inadequate. (Indicator #55)

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Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	64
(1)	(2)	(3)	(4)	(5)	(6)	(7)	

Majority of accountants in this organization consider MS/OR function as a 'complementary' activity. (Indicator #56)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	65
(7)	(6)	(5)	(4)	(3)	(2)	(1)	

Accountants in this organization monitor its financial pulse. (Indicator #57)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	66
(7)	(6)	(5)	(4)	(3)	(2)	(1)	

Chosen MS/OR projects, at present, are of the type which do not involve accountants. (Indicator #58)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	67
(1)	(2)	(3)	(4)	(5)	(6)	(7)	

I think both parties (accountants and MS/OR specialists) have interests in ensuring the organization's continued growth. (Indicator #59)

Definitely true	Often true	More true than false	Uncertain about this	More false than true	Usually not the case	Definitely false	68
(7)	(6)	(5)	(4)	(3)	(2)	(1)	

Accountants are getting to appreciate risk, probability and related futuristic concepts. (Indicator #60)

Strongly agree	Moderately agree	Slightly agree	Undecided	Slightly disagree	Moderately disagree	Strongly disagree	69
(7)	(6)	(5)	(4)	(3)	(2)	(1)	

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