

served HERMES products in Yugoslavia. The Yugoslav company was interested in measuring its employees' attitudes, and we surveyed those employees using largely the same questionnaire as that used in HERMES. It is thus possible to add the Yugoslav data to our list, although they do not form part of the HERMES data bank, and

FIGURE 2.1 The Countries Surveyed with the HERMES Questionnaire and the Languages Used

Code	Country	Language(s) of survey questionnaire	Code	Country	Language(s) of survey questionnaire
ARG	Argentina	Spanish	(LEB)	Lebanon	Arabic
AUL	Australia	English	(LYA)	Libya	Arabic
AUT	Austria	German	(MAL)	Malaysia	English
(BAH)	Bahamas	English	MEX	Mexico	Spanish
BEL	Belgium	Dutch/	(NAT)	Neth. Antilles	Dutch
		French	NET	Netherlands	Dutch
(BOL)	Bolivia	Spanish	(NIC)	Nicaragua	Spanish
BRA	Brazil	Portuguese	(NIG)	Nigeria	English
CAN	Canada	English	NOR	Norway	Norwegian
CHL	Chile	Spanish	NZL	New Zealand	English
COL	Colombia	Spanish	PAK	Pakistan	English
(COS)	Costa Rica	Spanish	(PAN)	Panama	Spanish
DEN	Denmark	Danish	PER	Peru	Spanish
(DOM)	Dominican Republic	Spanish	PHI	Philippines	English
(EGY)	Egypt	Arabic	POR	Portugal	Portuguese
(EQA)	Ecuador	Spanish	SAF	South Africa	English
FIN	Finland	Finnish	(SAL)	El Salvador	Spanish
FRA	France	French	SIN	Singapore	English
GBR	Great Britain	English	SPA	Spain	Spanish
GER	Germany (F.R.)	German	SWE	Sweden	Swedish
(GHA)	Ghana	English	SWI	Switzerland	French/
GRE	Greece	Greek			German
(GUA)	Guatemala	Spanish	TAI	Taiwan	English
HOK	Hong Kong	English	THA	Thailand	Thai
(HOD)	Honduras	Spanish	(TRI)	Trinidad	English
(IDO)	Indonesia	English	TUR	Turkey	Turkish
IND	India	English	(URU)	Uruguay	Spanish
IRA	Iran	Farsi	USA	United States	English
IRE	Ireland	English	VEN	Venezuela	Spanish
(IRQ)	Iraq	Arabic	(VIE)	South-Vietnam	English
ISR	Israel	Hebrew	(ZAM)	Zambia	English
ITA	Italy	Italian			
(JAM)	Jamaica	English			
JAP	Japan	Japanese	HERMES:		
(KEN)	Kenya	English	YUG	Yugoslavia	Serbo-Croatian
(KOR)	South Korea	English			Slovenian
(KUW)	Kuwait	Arabic			

There were small differences among the various Arabic, Dutch, English, French, German, Portuguese, and Spanish versions due to local idiom. Countries with codes shown in parentheses were eliminated from the analysis in this book because of insufficient sample size.

the different superstructure of the worker-self-managed Yugoslav company should be taken into account in the comparison.

Questionnaire Translation and Survey Administration

The master versions of the international questionnaires were always formulated in English. It had been noticed early that some words (for example, "achievement") were difficult to translate in many of the other languages; such words were henceforth avoided. In general, the master versions sought plain formulations without culturally loaded idiom.

The translations were made and checked by in-company personnel. It is a definite advantage that in an international organization whose lingua franca is English, capable bi- and multilingual persons are numerous. As the surveys were not meant to be scientific instruments but practical management tools, and as their preparation was subject to a tight business time schedule, back-translation was used only exceptionally. In most cases it was considered sufficient to have a draft translation made by the person who was going to act as the local survey coordinator or by another person selected by him or her for linguistic skills. The translators translated into their native language. The translations were then checked by some of the company's bilingual managers. In some cases, pilot runs of the translated versions were made with small panels of employees who were asked to signal any difficulties or ambiguities they met in answering.

In later stages of the analysis, I have done several back-translation checks on items that produced unexpected results in some countries. In all these cases the translation proved to be right. Comparative correlation and factor analysis between items in various language versions revealed some differences but again translation errors were ruled out as causes. In spite of the unsystematic approach to the translation process, I feel reasonably confident about the quality of the translations. Only in two cases were translations recognized as weak and containing definite errors; in both cases they had been made by qualified psychologists who refused assistance in preparing the translations.

The administration of a survey in 67 countries is a heroic adventure which could never have succeeded without the help of the existing corporation infrastructure. After the initial approval of the country general manager had been obtained, the most suitable way of administering the surveys was determined separately for each country and each survey with the assistance of International Headquarters researchers. These issued for each survey a "Survey Administration Manual." In the larger subsidiaries which had their own personnel research person or staff, the latter handled the survey administration completely. In the medium-sized subsidiaries which lacked a personnel research person, a lay survey coordinator was nominated, trained by the International Headquarters researchers, and entrusted with the entire handling of the survey. In the smallest subsidiaries either a traveling regional headquarters person distributed the questionnaires and took the completed questionnaires with him or her, or everything was handled by mail.

The task of the local survey coordinators included advance information to managers and employees; some designed extensive and imaginative internal publicity campaigns in order to prepare employees for the survey. The actual filling out of the questionnaires was done (1) for employees who did not have desks, usually in the

cafeteria, in groups; and (2) for employees who had desks, usually at their desks, individually.

The questionnaires were always anonymous and contained a reassurance that no attempt to identify respondents would be made and that they were free not to answer a question if they did not want to. Completed questionnaires were dropped in boxes which were supervised by a person who could be assumed to have the employees' confidence. The contents of the boxes were later bundled and sent to data processing. Employees in remote locations received and sent in questionnaires by mail.

Initially, data processing was done centrally in two places, but afterwards more and more subsidiaries handled their own data processing and sent in copies of their data on card or tape for the international data bank. Data were transferred to punched cards by manual key punching from the questionnaire, or from an answer sheet attached to the questionnaire, or by the use of machine-readable answer sheets. Results were printed out in data books with various degrees of specificity (by division in a country, by country, international) using special-purpose computer programs which allowed comparisons among groups and with previous surveys of the same group. An example of a page of such a data book is shown in Figure 2.2.

The analysis of the data for organization development purposes was coordinated by the personnel research staff but entrusted as much as possible to line managers, sometimes assisted by analysis task forces of employee delegates. All employees were usually informed of their country or division results by a written brochure and by one or more group meetings with their colleagues and superiors. Managers were expected to develop strategies for corrective actions which the survey showed to be necessary. The effectiveness of this procedure varied widely.

Even with the help of the existing company infrastructure, the purely administrative aspects of such a survey remain delicate. Working through so many different persons in so many different cultures means a large number of sources of error, misunderstanding, and accidents. Questions were mysteriously missing in some countries, answer categories were inadvertently left out, packages of questionnaires got lost in the mail. Once a box containing the answer sheets of a thousand respondents was stolen from an airplane and never found. Questions were coded on the wrong number, so that, for example, the answers on the preferred type of manager (see Chapter 3) showed up among the answers on the actually perceived manager of the other countries. Some groups were found coded on the wrong occupations. In international survey administration, as in any large human undertaking, Murphy's Law applies: If anything can go wrong, it will. A painful process of correcting, recoding, and discounting suspect information is necessary to arrive at results that make sense.

The HERMES Survey Data Bank

The computerized survey data bank contains the scores on all questions for all surveys held between November 1967 and 1973. The June 1967 product development survey is not part of the data bank because it had too many different questions. Some data, for example those from the U.S. are not integrated into the data bank, but available separately. With 65 countries (66 including the U.S.) and about 88,000 different respondents on about 117,000 questionnaires, the HERMES data bank rep-

resents probably the largest body of survey data ever collected with one instrument up to that time.

The entries into the data bank are coded by country (65 countries) and by occupation (50 different occupations). This produces a matrix of $65 \times 50 = 3250$ cells, but many of these are empty; only about 1150 really occur, and then often with very small numbers of respondents. The part of the matrix that is full is L-shaped: Only a few large countries have all occupations, and only a few general occupations (such as sales representatives, service technicians, and office clerks) occur in all countries.

As stated earlier, 60 "core" questions and 66 "recommended" questions were standardized in 1971. According to their content, they can be divided into four types:

- (1) *Satisfactions* supply a personal evaluation of an aspect of the work situation (for example: "How satisfied are you with . . ." but also "How do you like your job—the kind of work you do?" with answers from "very good" to "very poor").
- (2) *Perceptions* are subjective descriptions of an aspect or problem of the work situation; about half of the "perception" questions deal with the behavior of various managers (for example: "How often does your manager expect a large amount of work from you?"). I include in this category the question about job stress (see Chapter 4).
- (3) *Personal goals and beliefs* are statements not about the job or the company as such but related to an ideal job or to general issues in industry. Personal goals (for example: "How important is it to you to have an opportunity for high earnings?") deal with the *desired* and beliefs (for example, "Competition between employees usually does more harm than good") with the *desirable*; there need not always be consistency between the two (see Chapter 1). This category includes the preferred manager (see Chapter 3).
- (4) *Demographics* deal with age, sex, years of education, years with the company, and so on.

The present study is concerned with questions that can be assumed to represent values—that is, people's more permanent mental programming—that reflect the contribution of the *person* more than the *situation*. For all questions except perhaps the demographics, the answers reflect both the person and the situation; but the situational component can be expected to be stronger for satisfactions than for personal goals and beliefs, with perceptions in between. The choice of the questions for further analysis reflects this: For the present study, one satisfaction question, 14 perception questions, and 44 personal goals and beliefs questions were used; the latter include 19 questions that had actually been dropped from the questionnaire in 1971 or before, but for which the results available on file still proved interesting (C1 through C19).

Four demographic questions served as controls; thus, the cross-cultural analysis of HERMES Survey data is based on $1 + 14 + 44 + 4 = 63$ questions. Their text can be found in Hofstede (1980b: Appendix 1).

The use of the "personal goals" questions and of the "beliefs" questions represents a feature of the HERMES questionnaires without which this book would not have been written. This type of question is not part of most standard attitude survey instruments.

The "personal goals" questions ask respondents "how important" they consider each of a list of aspects (facets) of the work situation, such as high earnings, job challenge, or good physical working conditions. This type of question has been used in many research studies in the U.S. in the 1950s and 1960s, mostly for testing theoretical models of job satisfaction. It fits a questionnaire sold as an organization devel-

opment tool only to the extent that average work goal importance rankings can contribute to setting priorities for action: If people are equally dissatisfied on two work facets, then the one with the highest average importance rating should have action priority (Hofstede, 1976c: 49). The "personal goals" questions were introduced in the international HERMES questionnaire from the first (1967) product development laboratories survey. The researchers' team that prepared the questionnaire felt that in an *international* survey these questions would help in understanding differences in mentality among countries. The action argument came only second, although it can be argued that different mentalities should lead to different action approaches after surveys.

The content of the "personal goals" questions derived from similar lists used in U.S. surveys and from open interviews with laboratory personnel in six European countries. The various versions used in HERMES counted between 26 and 14 goals. The content validity (representativeness of the universe of personal goals) of the various lists is doubtful; for greater content validity, initial open-ended interviews should have been held by a multicultural team of interviewers with different categories of employees in all countries.

Let me illustrate this. The personal goal "Live in an area desirable to you and your family" was selected for inclusion in the list by this author (who is a native Dutchman) after pilot interviews in the Netherlands. Its inclusion was disputed several times—among others, by colleagues from Germany and Italy. The results show that the mean importance rank of "living in a desirable area" found among HERMES employees is 3 out of 22 in the Netherlands, 17 out of 22 in Italy, and 22 out of 22 in Germany. The "desirable area" item is one of the most culturally discriminating items on the masculinity-femininity axis (Chapter 6). Not developing items from multicultural sources or giving in to pressures of those who considered this item irrelevant would have led to suppressing the culturally relevant information. Fortunately, many culturally relevant questions were retained.

The "beliefs" questions were first introduced in the questionnaire in the November 1967 Asian, Latin American, and Pacific survey. The list then contained 19 items, of which 11 gradually were dropped, while two new items were added. Even less than the "personal goals" questions, this list of statements (to which responses should be given on an agree/disagree scale) has content validity. It is not based on interviews with employees, but derives from a brainstorming of International Headquarters personnel for beliefs which, according to their experience, distinguish HERMES people in one country from those in another—in view of the wide international experience of these informants, not a bad source at all. The "beliefs" items have no meaning for organization development, which is one of the reasons why their number has soon been reduced and they were not made "core" items. They are, however, extremely useful for providing insight in value patterns.

A Second Research Setting: IMEDE

IMEDE Management Development Institute in Lausanne, Switzerland, is a relatively small postgraduate and postexperience international business school. It was founded by the Nestlé Corporation in 1958, and provides training to managers from all over the world through courses whose length can vary from a few days to one year.

I taught courses in organizational behavior at IMEDE from 1971 to 1973. By that time it had become clear that certain questions in the HERMES questionnaire which could be expected to express values produced highly stable and predictable differences in answer patterns among countries. I included in my IMEDE courses the administration of a 17-item "Questionnaire on Work Goals and Preferences" which consisted of questions from the HERMES questionnaire; I used the results as teaching material in the course itself. Answers on this questionnaire were obtained from 362 managers from about 30 different countries and from a variety of private and public organizations unrelated to the HERMES Corporation. As will be shown in Chapters 3 and 5, the major country differences found in HERMES are also visible in the IMEDE sample. The latter is based on a different population, and all respondents reacted to the *English* version of the questionnaire, whereas in HERMES every nationality received its own language version. The similarity between HERMES and IMEDE data rules out the hypothesis that the differences found among countries could be due to the translation of the questionnaire.

Unfortunately, at the time I arrived at IMEDE I had only a vague idea of what survey questions were most culturally relevant. Otherwise, my selection for the questionnaire used at IMEDE would have been somewhat different.

In addition, I collected at IMEDE data from participants on some other values tests (L. V. Gordon's Surveys of Personal and Interpersonal Values). The results of this study will be used as comparative evidence in Chapter 3.

All in all, the IMEDE experience showed that the differences among countries found in the HERMES data could be reproduced at least partly with other respondents, and that it was worthwhile to continue the analysis of the HERMES data, as they contained evidence of broad differences in value systems between the respective countries which were not limited to HERMES employees.

The situation at the end of 1973 was thus: HERMES had completed its second survey round. I had served my term at IMEDE, which had proven further analysis of the data worthwhile, and HERMES was willing to make the data bank accessible for further study. Under the auspices of the European Institute for Advanced Studies in Management in Brussels, I started on the research project which has provided the data for this book, not aware that it would take five years.

DATA TREATMENT

Data Analysis: Frequency Distributions, Measures of Central Tendency, and Within-Group Analysis

The first information obtained from the HERMES survey data bank consists typically of frequency distributions for the different answer categories of one question, as the one reproduced in Figure 2.2. The question analysed in Figure 2.2 is: "How important is it to you to have challenging work to do—work from which you can get a personal sense of accomplishment?" Five valid answer categories follow. The page shown produces the frequency distribution in full percents for nonmanagers in country headquarters for a number of countries. For each country, the 1973 data are followed by the results of the same group in the previous survey round (1969) in order to provide historical comparison.

Every paper-and-pencil instrument produces invalid responses; blank answers, double answers (more than one answer checked for a question for which only one is allowed) and sometimes data entry errors which produce, for example, some answers "6" for a case where only five exist. In the HERMES surveys, invalid answers rarely exceed five percent of total (see the last column labeled "other" in Figure 2.2) and they are excluded for further analysis; which means that the percents in the frequency distribution are based on valid responses only.

Most questions in the HERMES questionnaire use five-point answer scales, and most frequency distributions are skewed; nearly all are unimodal. The vast majority use *ordinal* scales, which means that the answer categories show a natural and unambiguous rank order from less to more important, satisfied or dissatisfied, or vice versa. They are not *interval* scales in the strict sense of the word, which would imply that the distance between, for example, answers 1 and 2 (such as from very good to good) is equal to the distance between answers 3 and 4 (such as from average to poor). A few questions do not have ordinal scales but only *nominal* scales (no natural rank order for all answers).

For further processing of the information contained in the frequency distributions it is often necessary to reduce the information to a single number per frequency distribution. This can be done by dichotomizing or by using a measure of central tendency. Dichotomizing means retaining only the percent giving answer 1, or answers 1 and 2, or another combination. It will be obvious that a considerable amount of information is lost in this case. As measures of central tendency, the mean and the median are available. The mean loses the least information, is easier to compute, and plays a role in all parametric statistical calculations, such as product moment correlations. However, it formally presupposes interval scales which we do not have. The median is the theoretically more correct measure, but for short scales with many cases per answer category it approaches the mean closely.² In the analysis of the HERMES data the choice has been made to consider scales of the type "very good" to "very poor," "utmost" to "no importance," and "strongly agree" to "strongly disagree" as *quasi-interval scales* and to use the mean as a measure of central tendency for such scales. In the case of questions with different scales, I shall not use a measure of central tendency, but instead dichotomize the frequency distributions at the most meaningful point.

Figure 2.2 shows, beside the means, the standard deviations which, however, are rarely used in the analysis; large standard deviations can be a warning that we are dealing with heterogeneous groups of respondents and that we should look for criteria to further break down our groups.

The data have been extensively analyzed within groups, "groups" being any sets of respondents that were assumed to be homogeneous as to certain external criteria. Usually a group for analysis represented one occupation (or set of similar occupations) in one country; sometimes one or more occupations across a set of countries.

The major analysis tools were cross-tabulations, correlation analysis, and factor analysis. However, for the subject of this book these within-group analyses are of minor importance: the essential analyses are *between-group* analyses, which I shall discuss below.

FIGURE 2.2 An Example of Information Output for HERMES Survey Feedback

PERSONNEL RESEARCH - PREFER PROGRAM									
NON MANAGERS									
OPINION SURVEY 1972-73									
HOW IMPORTANT IS IT TO YOU TO HAVE CHALLENGING WORK TO DO									
4-LITTLE IMP 5-VERY LITTLE/NO IMP									
ALLOWABLE RESPONSES 1 THROUGH 5									
1-OF UTMOST IMP 2-VERY IMP 3-MODERATE IMP									
QUESTION LABEL AS	MEAN	STD. DEV.	VALID RESP.	TOTAL RESP.	1	2	3	4	5
CATEGORY									
(HEAD QUARTERS)									
1973	1.92	0.66	415	423	31	42	50	52	46
1969	1.95	0.75	285	297	28	45	52	46	47
1973	1.66	0.69	270	270	47	55	55	34	34
1969	1.77	0.63	115	115	29	46	46	34	34
1973	1.08	0.79	171	174	41	51	46	34	34
1969	1.98	0.77	107	110	28	46	46	34	34
1973	1.56	0.63	41	41	28	46	46	34	34
1969	1.65	0.68	26	26	28	46	46	34	34
1973	1.85	0.72	263	263	46	51	50	34	34
1969	1.73	0.64	215	218	37	53	53	34	34
1973	2.01	0.68	138	142	32	53	53	34	34
1969	1.79	0.68	96	99	20	55	55	34	34
1973	1.77	0.74	350	351	45	57	57	34	34
1969	1.61	0.66	343	358	45	57	57	34	34
1973	1.65	0.62	207	208	46	57	57	34	34
1969	1.59	0.65	213	213	53	57	57	34	34
1973	1.51	0.65	487	493	56	56	56	39	39
1969	1.51	0.63	55	55	56	56	56	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
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1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
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1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
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1969	1.79	0.82	24	24	42	42	42	39	39
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1973	1.79	0.82	24	24	42	42	42	39	39
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1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39
1973	1.79	0.82	24	24	42	42	42	39	39
1969	1.79	0.82	24	24	42	42	42	39	39

Variance Analysis: Country, Occupation, Sex, and Age

The main criteria that can be responsible for group differences in the survey data and that apply to all data are country, occupation, sex, and age groups of the respondents. From these, occupation and sex are closely related; only a few occupations have sizable numbers of both men and women. Other possible criteria are length of service with the company and education level. Length of service with the company is obviously correlated with age. Educational level is closely related to occupation. For our international survey population, however, data about education levels are less accurate than data about occupations, as education systems vary from one country to another, but the occupation classification is standardized throughout the corporation. I shall use occupation as the main criterion, but where it is necessary to order the various occupations on a one-dimensional scale I shall order them according to the mean number of years of formal education of their incumbents.

In order to test the relative contribution to the variance in the data of the four criterion variables country, occupation, sex, and age, I have performed a variance analysis (ANOVA) on a subsample of the data covering a wide range of respondents on all four criteria.³ The subsample was taken from the 1970 survey in the manufacturing plants. It included ten countries (Argentina, Brazil, Canada, France, Great Britain, Germany, India, Japan, the Netherlands, and Sweden) and five occupational groups (managers, professionals, technicians plus skilled workers, clerks, and unskilled workers). The number of cases per cell of one country, one occupation, was randomly reduced for the larger plants so that it varied between 12 (professionals in India) and 181 (unskilled in Netherlands); the average number per cell was 64 (a total of 3220 cases for 50 cells). Sex and age group were taken as covariants. The variance analysis was done separately for the six questions that will be used in Chapters 3 and 4 to form the Power Distance Index and the Uncertainty Avoidance Index. In addition, separate variance analyses were done on two composite scores computed for each respondent as the differences between the scores on two questions each: an Individualism score (see Chapter 5) and a Masculinity score (see Chapter 6). The reason for analyzing the difference between two questions in this case, rather than single questions, is that in this way I eliminate acquiescence (see below); otherwise the variance analysis would have shown mainly variance in acquiescence.

The outcome of the variance analysis is presented in Figure 2.3. We see that the country effect is highly significant (beyond the .001 level) in all eight cases. This is not surprising, because the eight questions were selected because of their ability to discriminate between countries. The occupation effect is also significant in all eight cases, although not always at the .001 level. Sex and age effects are each significant in five out of eight cases.

The fact that the nationality of the respondents (and sometimes the other criterion variables occupation, sex, and age) affects the scores of these questions highly significantly does not mean, of course, that a respondent's answer is fully predictable from his or her nationality or any other identification. In fact, of the total variance in the answers of the 3220 respondents in the variance analyses, only 4.2% is accounted for by their belonging to one of the 10 nationalities in the sample. This, however, is 16 times as much as could be expected on the basis of pure chance. We should imagine

FIGURE 2.3 Summary of Results of ANOVA on Data from 3220 Respondents from the 1970 Manufacturing Survey*

Question	F-Value and Significance of Effects for:				
	Country 9 d.f.	Occupation 4 d.f.	Country x Occupation 36 d.f.	Sex 1 d.f.	Age 1 d.f.
B46: employees afraid to disagree	7.1***	24.9***	2.3***	.4	.4
A54: preferred manager no.3	3.2***	19.8***	1.0	7.3**	.1
A55: perceived manager no.1 or 2	5.9***	5.8***	.7	1.6	2.0
A37: stress	46.7***	3.8**	1.5*	3.2	5.8*
A43: continue less than five years	8.8***	6.7***	1.8**	120.8***	92.7***
B60: company rules should not be broken	6.0***	19.8***	1.6*	3.9*	56.9***
A18-A9: importance personal time but not training (individualism)	12.9***	2.8*	1.6*	39.3***	21.5***
A7-A8: importance earnings but not cooperation (masculinity)	25.8***	6.0***	1.5*	11.7***	13.2***
significance limits for F:					
.001	3.1	4.6	2.1	10.8	10.8
.01	2.4	3.3	1.7	6.6	6.6
.05	1.9	2.4	1.3	3.8	3.8

*Ten countries, five occupations for six questions plus two composite scores.
significance levels: *** .001 level ** .01 level * .05 level

the distribution of answer scores within and between countries as pictured by Figure 1.5: a broad dispersion across individuals and relatively small shifts of group means which, nevertheless, may have considerable consequences for group behavior and for institutions.

The main purpose of this book is a comparison by country. This will be supplemented with comparisons by occupation, sex, and age groups where such comparisons seem meaningful (for the effect of sex see Chapter 6; for the effect of age, see Chapter 8).