COMPREHENSION OF 500 SAFETY WORDS:

A COMPUTER-BASED METHODOLOGY.

VOL·2

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Doctor of Philosophy

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VOLUME 2

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APPENDIX I

Words and phrases used in the pilot study

WORDS

01 Emetic	02 Abraid	03 Extinguish
04 Ignition	05 Combustible	06 Toxic
07 Fumigation	08 Peroxide	09 Corrosive
10 Cumulative	11 Contaminate	12 Flammable
13 Smoulder	14 Compound	15 Incinerate
16 Puncture	17 Respiratory	18 Sealed
19 Induce	20 Copious	21 Irrigate
22 Explosion	23 Ventilated	24 Confined
25 Aspiration	26 Neutralize	27 Mutagenic
28 Oxidise	29 Inhale	30 Liberates
31 Bonds	32 Ingest	33 Incandescent
34 Irreversible	35 Friction	36 Vapour
37 Contact	38 Dispose	39 Irritant
40 Spontaneous		

PHRASES

01 In case of contact with eyes give prolonged irrigation with water.
02 Flush out eyes with copious amounts of water.
03 Harmful if taken internally.
04 Do not induce vomiting because of the risk of aspiration.
05 Spillages should be neutralised with a mild alkali.
06 Avoid naked flames.
07 If swallowed do not induce vomiting.
08 Contact may cause severe irritation of chemical burns.
09 Flammable vapour - avoid use near naked flame.
10 Reacts violently with water.
11 extremely flammable liquified gas.
12 Harmful in contact with skin.
13 When using con not smoke.
14 Toxic by inhalation.
15 During fumigation wear suitable respiratory equipment.
16 Highly Flammable.
17 Contact with water liberates highly flammable gases.
18 Explosive when mixed with oxidising substances.
19 Extremely flammable.
20 Harmful if swallowed.
21 Keep out of reach of children.
22 Avoid contact with air.
23 Keep away from food, drink and animal feeding stuffs.
24 Keep away from sources of ignition.
25 Harmful by inhalation.
26 Keep away from combustible material.
27 avoid contact with eyes.
28 Petroleum mixture giving off highly flammable vapour.
29 Avoid direct sunlight.
30 Do not puncture or incinerate can even when empty.

APPENDIX II

Pilot Study. Data summary for the 40 test words

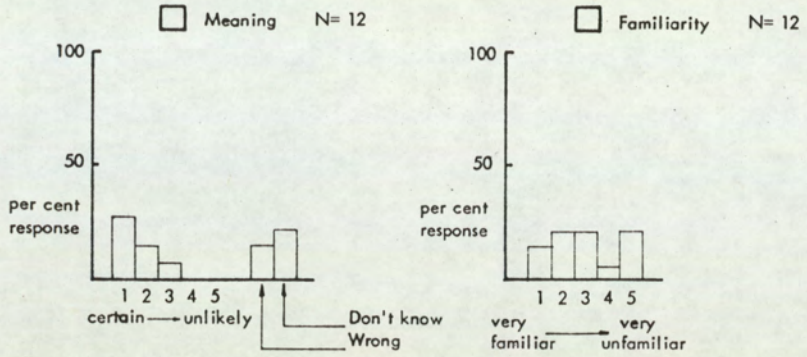
The following pages present a summary of the data analysis for the 40 test words used in the pilot study:

1) Percentages of the categorised meaning responses for the sample excluding inappropriate context responses and missing values

2) Percentage of the sample responding for the familiarity scale.

3) The verbatim product association responses generated by the respondent sample.

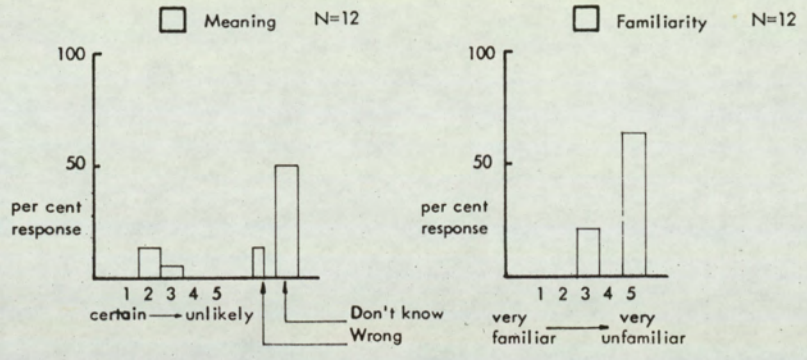
WORD = EMETIC



Product Association

1 Toilet Cleaner
10 Bleach
18 Mustard
29 Medicine for someone poisoned.
37 Medicine
70 Pharmaceutical Products
124 (Something) Metal

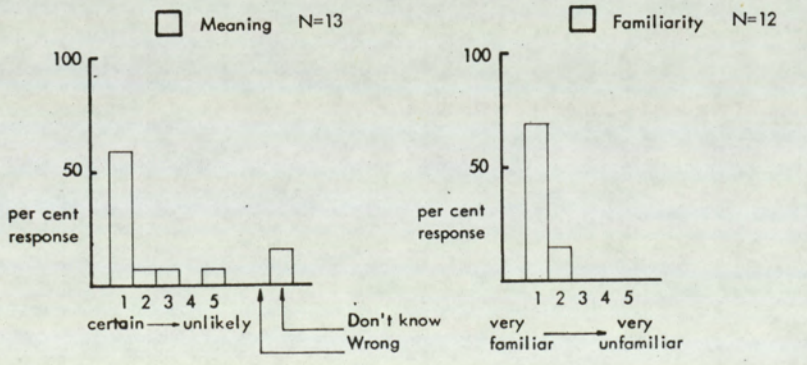
WORD = ABRAID



Product Association

16 Household Cleansers
30 A Sander or Emery Board

WORD = EXTINGUISH

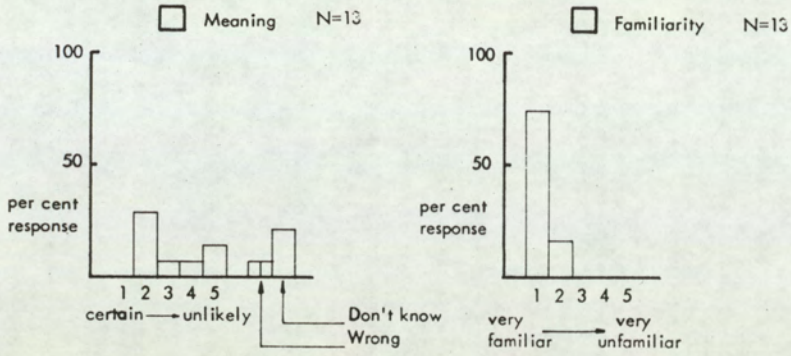


Product Association

19 Cooking Oil
31 Paraffin Stove
56 Beans
81 Fire Extinguisher
92 Oil Lamp
96 Polish

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

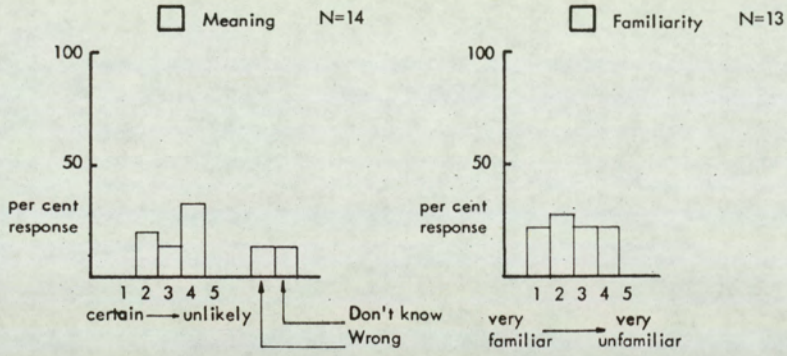
WORD = IGNITION



Product Association

20 Car Manual
32 Gas Stove & Automatic Lighter
40 Fireworks
82 Lighter Fuel
93 Lawn Mower

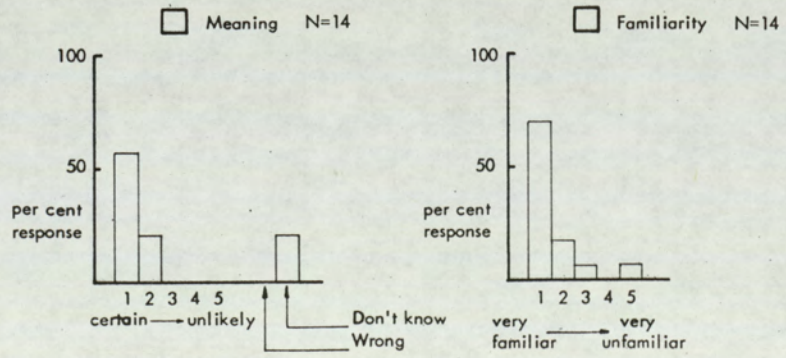
WORD = COMBUSTIBLE



Product Association

7 Aerosol Can
9 Hair Laquer/Spray
33 Furniture Padding & Covering
97 Nail Polish
125 Farm Products
135 Petrol

WORD = TOXIC

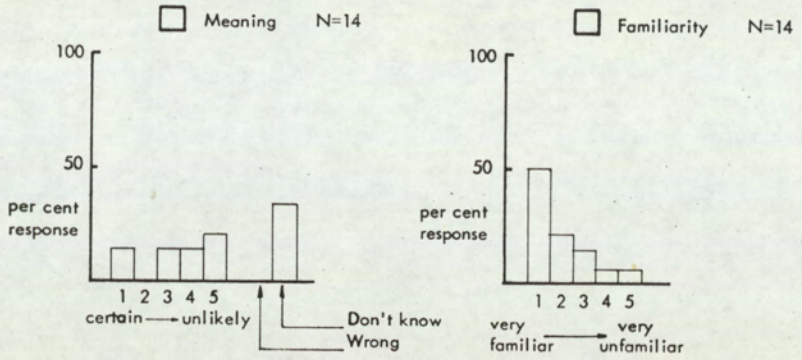


Product Association

2 Paint Cleaners
8 Harpic Toilet Cleaner
21 Weedkiller
34 Garden Insect Killer
37 Medicine
61 Paint Tin
98 Chemical
136 Paint Brush Cleaner

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

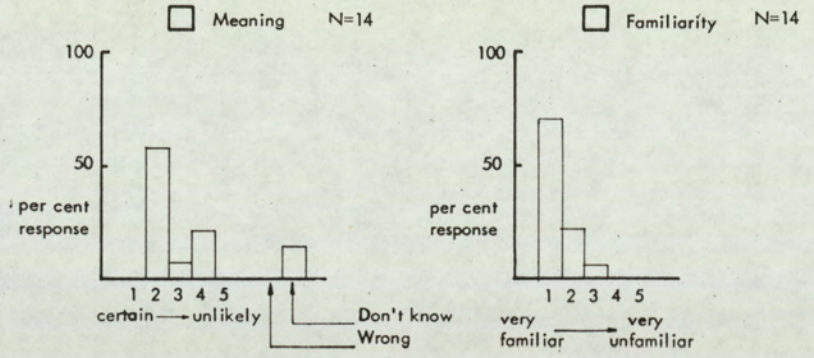
WORD = FUMIGATION



Product Association

22 Greenhouse Cleaner/ Smoke Bomb
35 Greenhouse - Fungus Killer
95 Air Freshener
99 Flea Powder

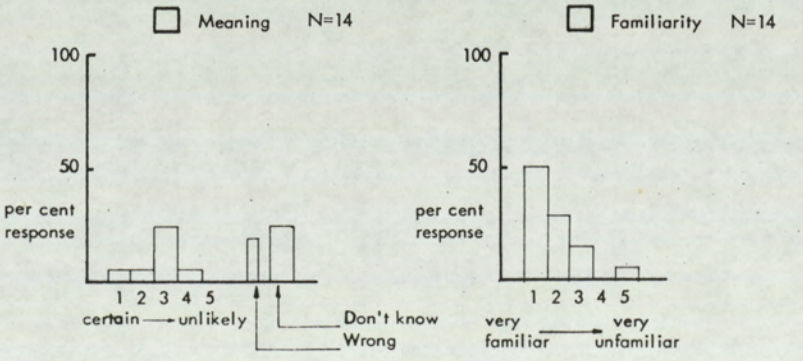
WORD = PEROXIDE



Product Association

3 Hair Colourants
36 Hydrogen Peroxide for Bleaching
48 Home Perm
57 Hair (Shampoo)
83 Hair Dye
106 Domestos
137 Hair Bleach

WORD = CORROSIVE

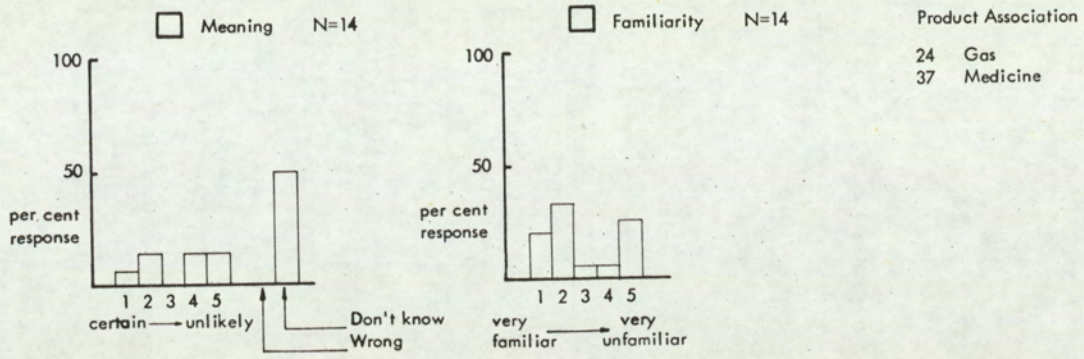


Product Association

4 Anti-freeze
15 Oven Cleaner
23 Paint Stripper
84 Car Battery
94 Tools
96 Polish
100 Batteries
126 Creosote
131 Sodium Chlorate
138 Battery

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

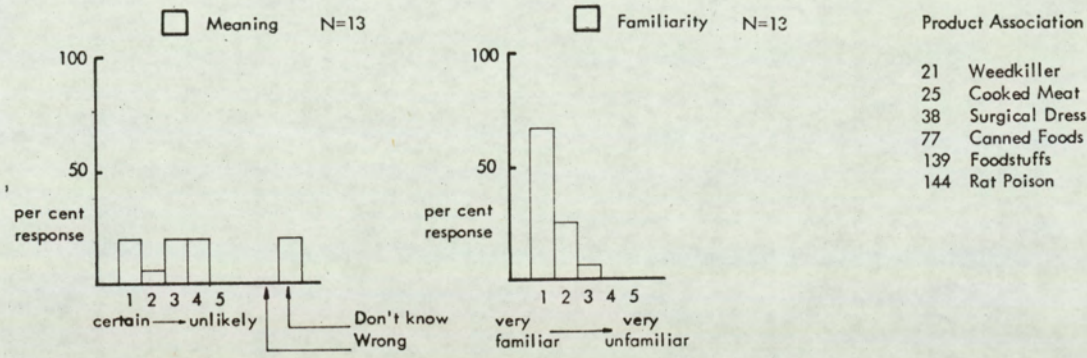
WORD = CUMULATIVE



Product Association

24 Gas
37 Medicine

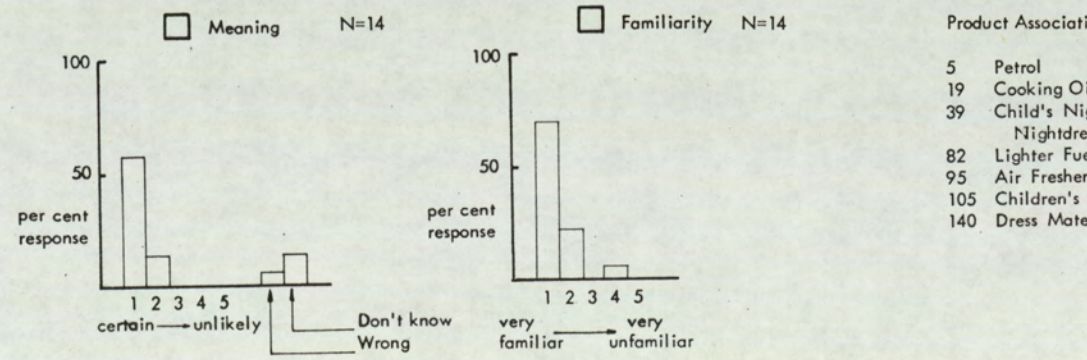
WORD = CONTAMINATE



Product Association

21 Weedkiller
25 Cooked Meat
38 Surgical Dressings
77 Canned Foods
139 Foodstuffs
144 Rat Poison

WORD = FLAMMABLE

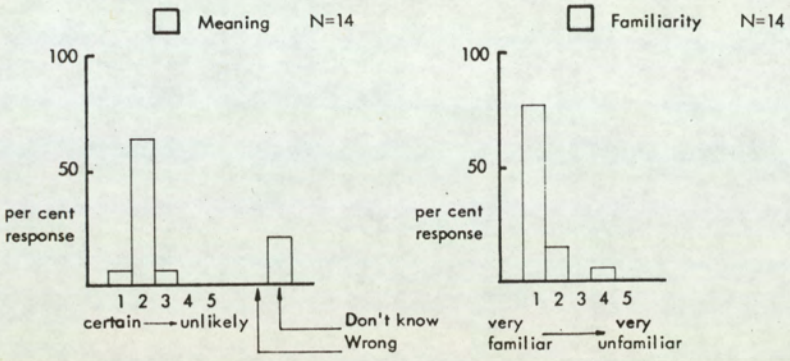


Product Association

5 Petrol
19 Cooking Oil
39 Child's Nightdress/ Nightdress
82 Lighter Fuel
95 Air Freshener
105 Children's Clothes
140 Dress Material

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

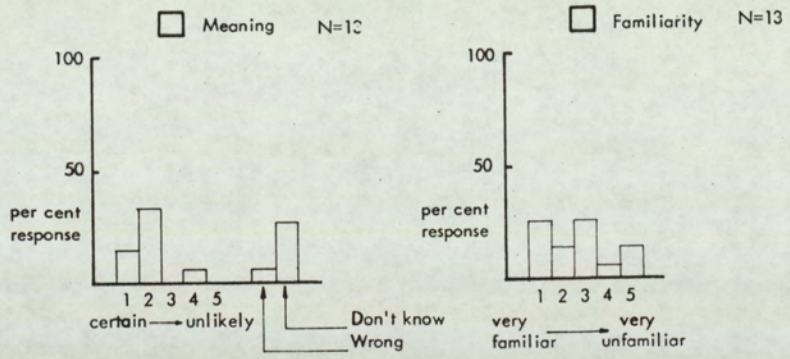
WORD = SMOULDER



Product Association

6 Polystyrene Material
23 Paint Stripper
40 Fireworks
58 Coal
64 (Some) Clothes
127 Treated Garments
145 Furniture

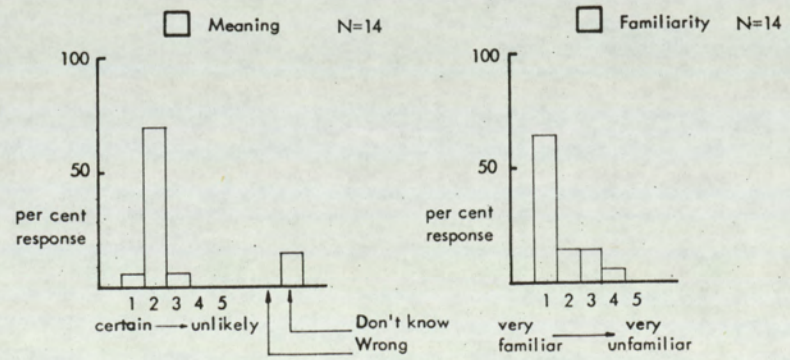
WORD = COMPOUND



Product Association

15 Household Cleansers
37 Medicine
41 Cleaning Fluid
85 Rubbing-down Compound
98 Chemical
107 Adhesive/ Impact Adhesive
108 Cough Mixture

WORD = INCINERATE

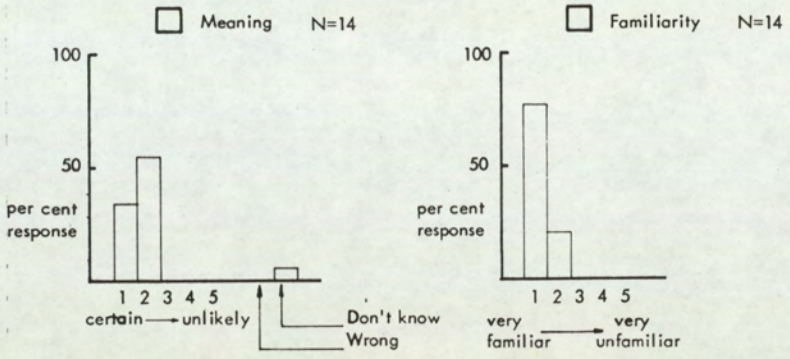


Product Association

7 Aerosol
9 Hair Laquer/Spray
32 Gas Stove/ Automatic Lighter
42 Aerosol Deoderant
59 Can/Tin
68 Sanitary Towels/ Non-flushable Lint
73 Pressurised Cans

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

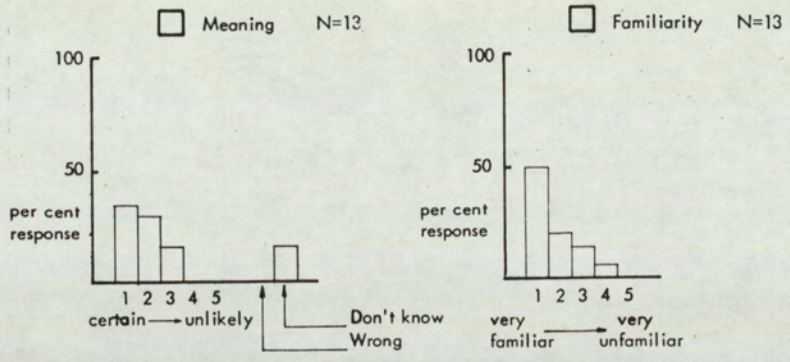
WORD = PUNCTURE



Product Association

7 Aerosol (Can)
42 Aerosol Deoderant
43 Jam
69 Steamed Pudding Tins
73 Pressurised Cans
86 Inflatable Toys
96 Polish
116 Cycle Repair Outfit

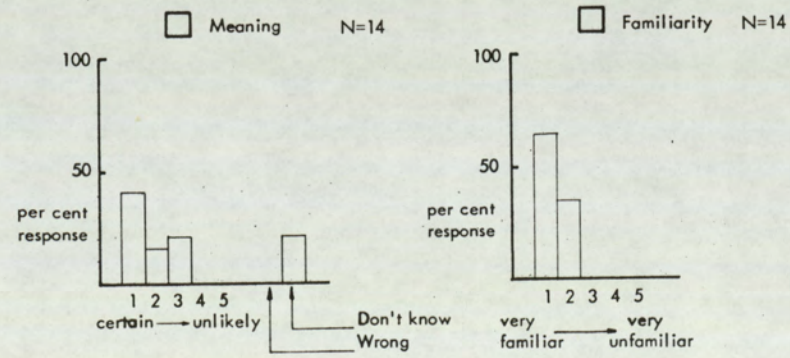
WORD = RESPIRATORY



Product Association

8 Harpic Toilet Cleaner
9 Hair Laquer/Spray
15 Oven Cleaner
26 Bronchial Inhalant/ Nasal Inhalant
37 Medicine
44 Dry Cleaning Fluid/ Fabric Cleaner
146 Aqua-cleaner

WORD = SEALED

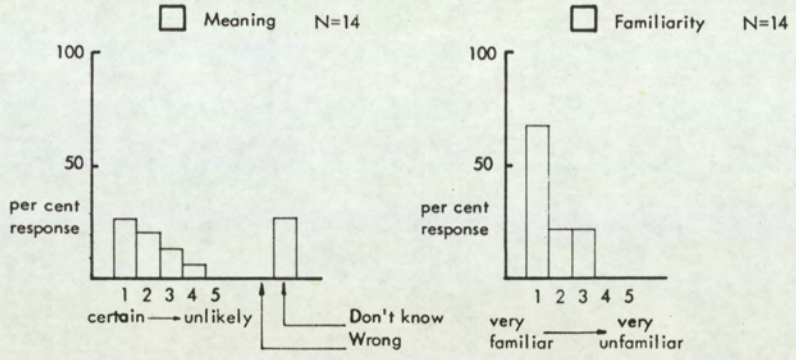


Product Association

5 Petrol
9 Hair Laquer/Spray
38 Surgical Dressings
43 Jam
45 Sellotape
59 Can/Tin
70 Pharmaceutical Products
78 Liquid Paper
87 Vacuum-packed Bacon
102 Sterile Cotton Wool
117 Pizza Products
128 Potted Paste
132 Sliced Ham

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

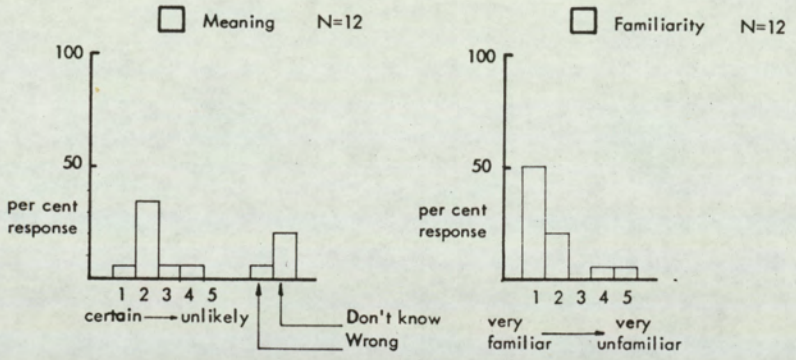
WORD = INDUCE



Product Association

10 Bleach
23 Paint Stripper
37 Medicine
71 Biscuits
103 Yoghurt Starter
108 Cough Mixture
141 Poly-Cleanse

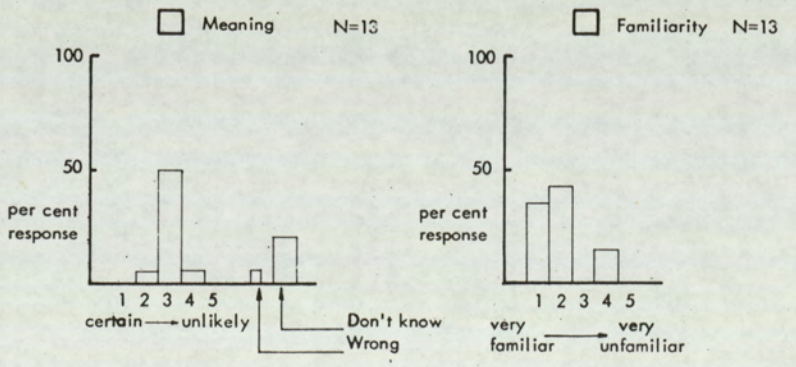
WORD = COPIOUS



Product Association

10 Bleach
13 Glue/Cement
88 Dangerous Chemicals
98 Chemical
109 Ear Drops
142 Knives

WORD = IRRIGATE

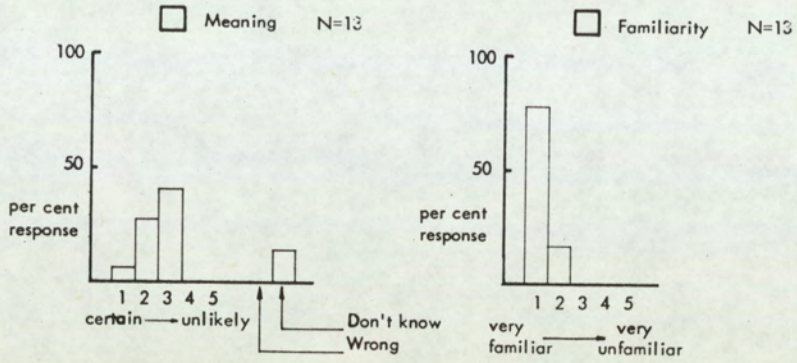


Product Association

10 Bleach
21 Weedkiller
46 Garden Seeds
72 Factory Solvents
101 Soil Additive
104 Eye Lotion/Optrex
147 Gardening Equipment

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

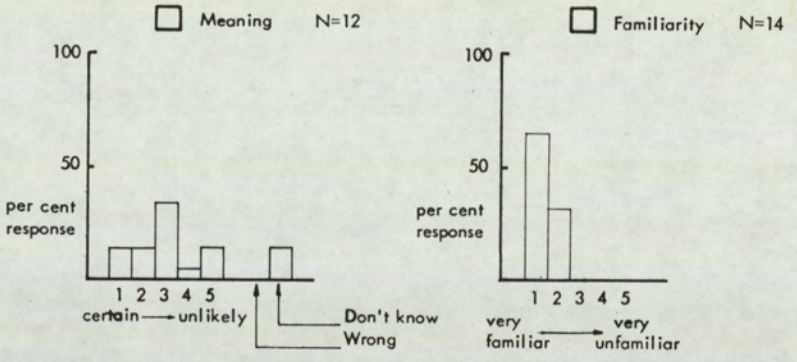
WORD = EXPLOSION



Product Association

7 Aerosol Can
9 Hair Laquer/Spray
10 Bleach
40 Fireworks
73 Pressurised Cans
90 Paraffin
118 Electrical Products
129 Gas Container
133 Dynamite

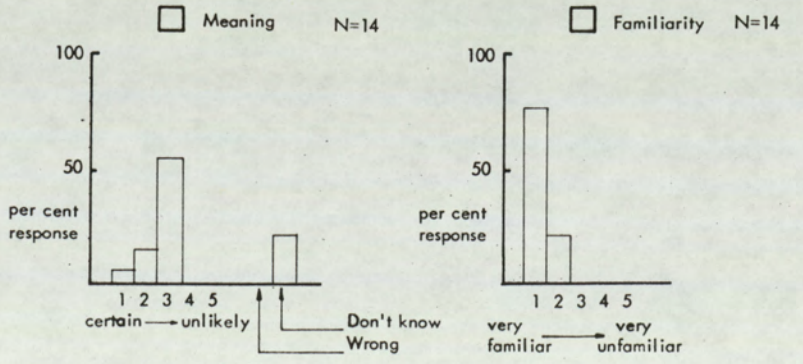
WORD = VENTILATED



Product Association

9 Hair Laquer/Spray
11 Caustic Soda
15 Oven Cleaner
23 Paint Stripper
44 Dry Cleaning Fluid/ Fabric Cleaner
61 Paint Tin
74 Nail Varnish Remover
110 Meat

WORD = CONFINED

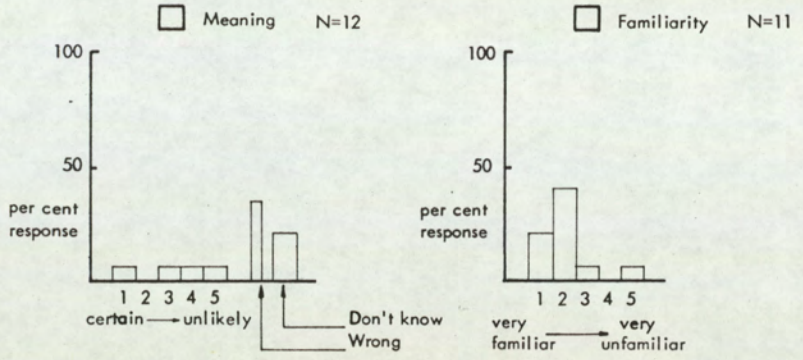


Product Association

13 Glue/Cement
15 Oven Cleaner
21 Weedkiller
23 Paint Stripper
44 Dry Cleaning Fluid/ Fabric Cleaner
61 Paint Tin
75 Strong Pain Killer
119 Shoe Spray

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

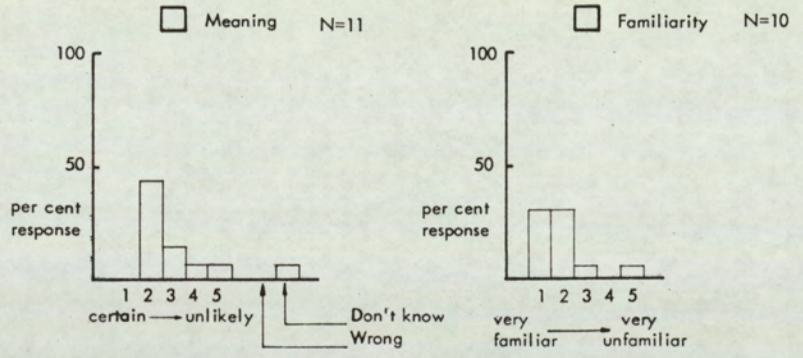
WORD = ASPIRATION



Product Association

25 Bronchial/Nasal Inhalant
47 Plant Spray

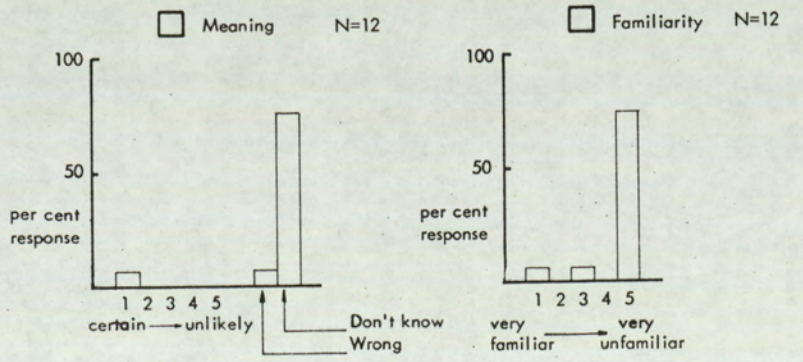
WORD = NEUTRALISE



Product Association

3 Hair Colourants
10 Bleach
41 Cleaning Fluids
48 Home Perm
60 Andrews Liver Salts
76 De-scaler (for kettles etc.)
83 Hair Dye
89 Acids

WORD = MUTAGENIC

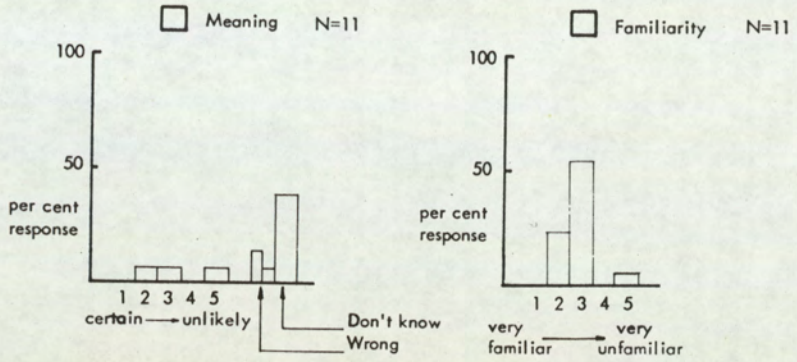


Product Association

None Specified

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

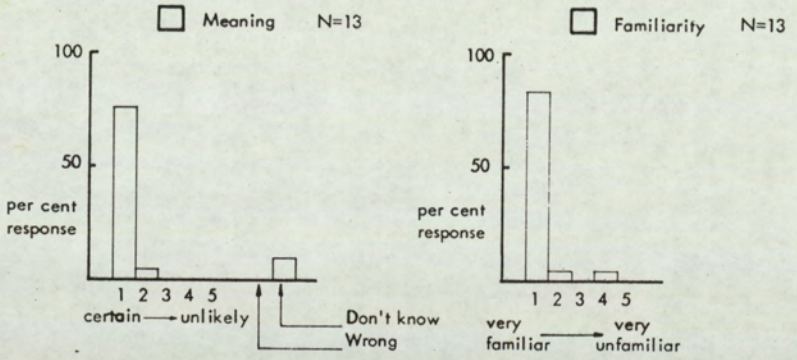
WORD = OXIDISE



Product Association

7 Aerosol Can
49 Metal Fire Tools
61 Paint Tin
77 Canned Foods
120 Tinned Fruit

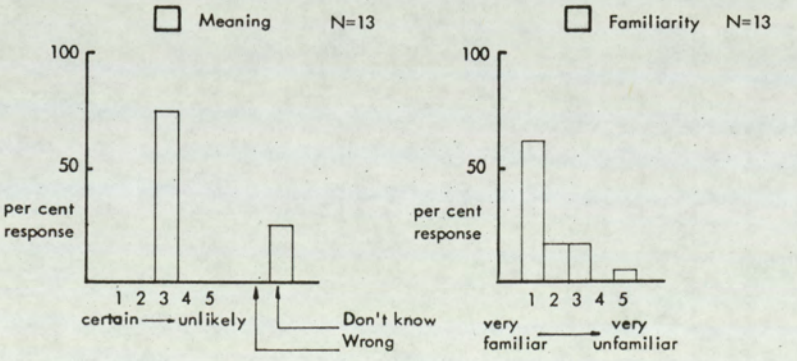
WORD = INHALE



Product Association

7 Aerosol Can
8 Harpic Toilet Cleaner
11 Caustic Soda
12 De-Congestant
13 Glue/Cement
26 Bronchial/Nasal Inhalant
34 Garden Insect Killer
50 Friars Balsam
62 Vick Vapour Rub
78 Liquid Paper
143 Inhaler

WORD = LIBERATES

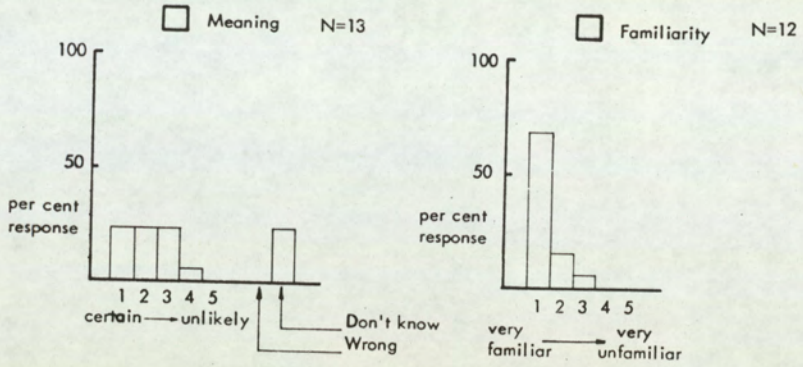


Product Association

27 Soap Powder
37 Medicine
51 Plastics
63 Pantie Girdle
81 Fire Extinguisher
95 Air Freshener
130 Nitromors (Paint Stipper)

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

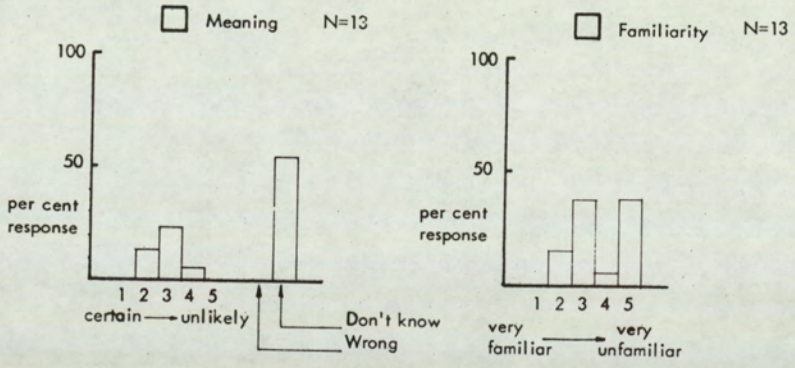
WORD = BONDS



Product Association

13 Glue/Cement
107 Adhesive/Impact Adhesive

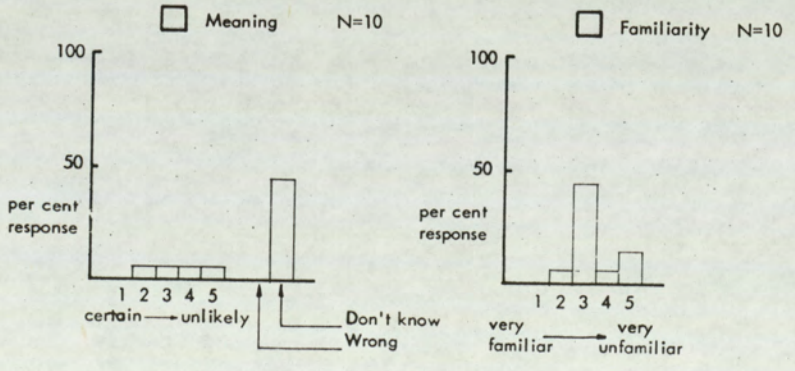
WORD = INGEST



Product Association

27 Soap Powder
37 Medicine
65 Children's Toys
111 Medical Cream
121 Benger's Cream

WORD = INCANDESCENT

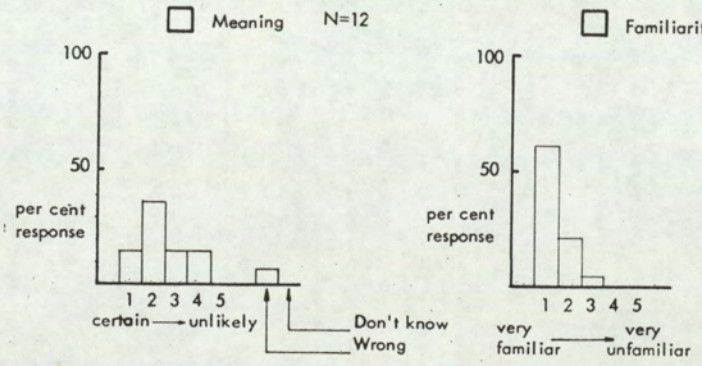


Product Association

52 Gas Mantle
61 Paint Tin

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

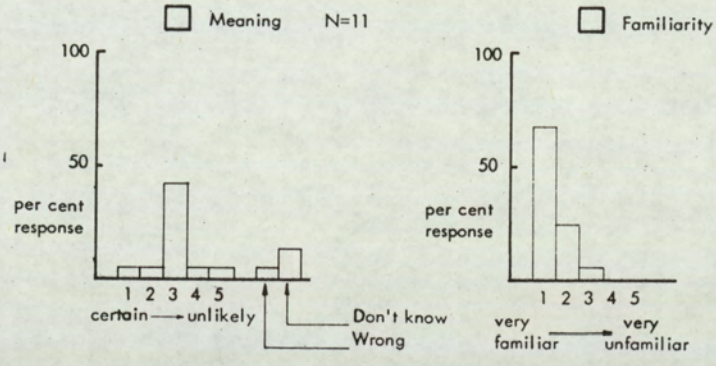
WORD = IRREVERSIBLE



Product Association

14 Dye
64 (Some) Clothes
114 (Permanent) Dye

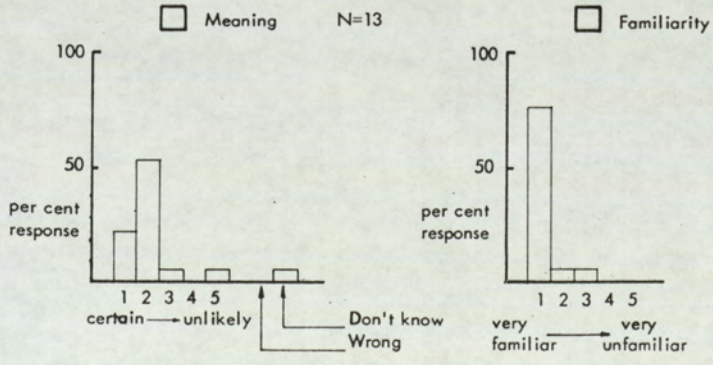
WORD = FRICTION



Product Association

30 A Sander/Emery Board
44 Dry Cleaning Fluid/ Fabric Cleaner
53 Matches
65 Children's Toys
93 Lawn Mower
112 Spin Dryer
122 Gas Lighter
134 Car Tyres

WORD = VAPOUR

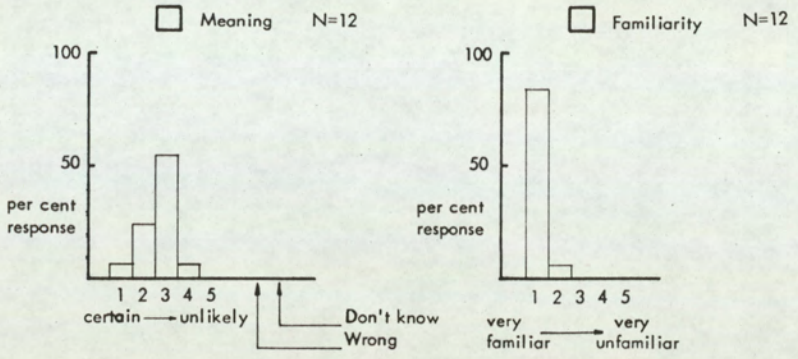


Product Association

5 Petrol
7 Aerosol Can
15 Oven Cleaner
26 Bronchial/Nasal Inhalant
34 Garden Insect Killer
62 Vick Vapour Rub
90 Paraffin
119 Shoe Spray

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

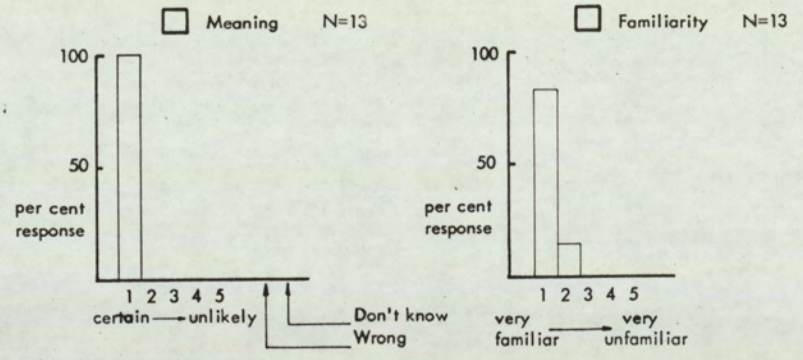
WORD = CONTACT



Product Association

10 Bleach
13 Glue/Cement
15 Oven Cleaner
16 Household Cleansers
66 Sticky-back Paper
123 Electric Plug

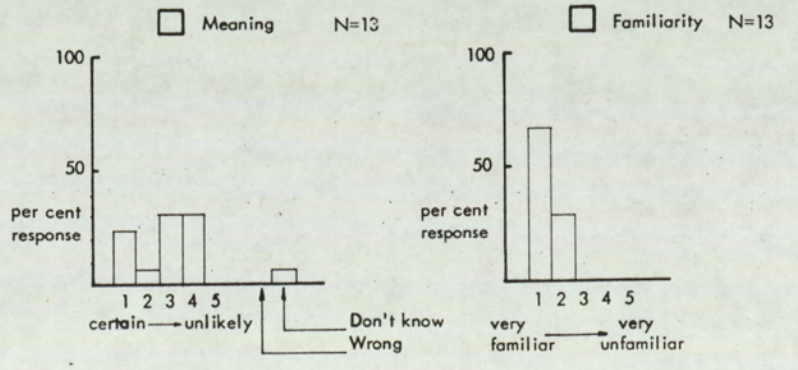
WORD = DISPOSE



Product Association

7 Aerosol Can
28 Paper Hankies
37 Medicine
54 Plastic Bags
67 Bottle(s)
68 Sanitary Towels/ Non-flushable Lint
79 Medicine Bottles
91 Antibiotics
98 Chemical
113 Oven Cleaner Pad
115 Paper Cups

WORD = IRRITANT

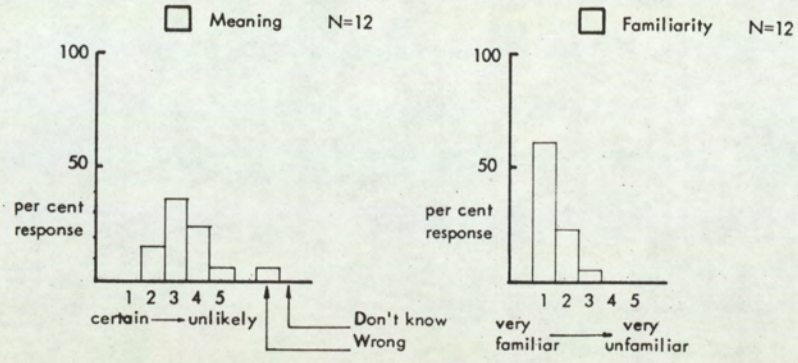


Product Association

10 Bleach
16 Household Cleansers
23 Paint Stripper
27 Soap Powder
42 Aerosol Deoderant
80 Detergents
83 Hair Dye

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

WORD = SPONTANEOUS



Product Association

7	Aerosol Can
11	Caustic Soda
13	Glue/Cement
17	Soluble Aspirin
37	Medicine
41	Cleaning Fluid
55	Sodium Chlorate Tablets

Table A2.1 Pilot study. Summary of meaning, familiarity and product association responses for each of the 40 words investigated (continued).

APPENDIX III

Pilot Study. Data summary for the 30 test phrases

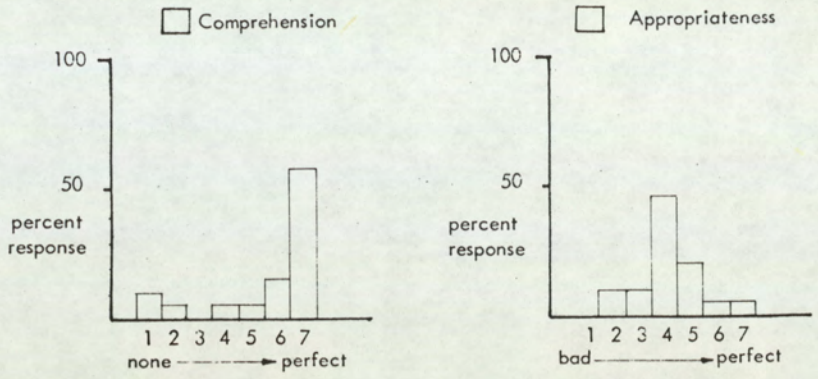
The following pages present a summary of the data analysis for the 30 test phrases used in the pilot study:

1) Percentages of the sample responding on the comprehension scale.

2) Percentages of the sample responding on the appropriateness scale.

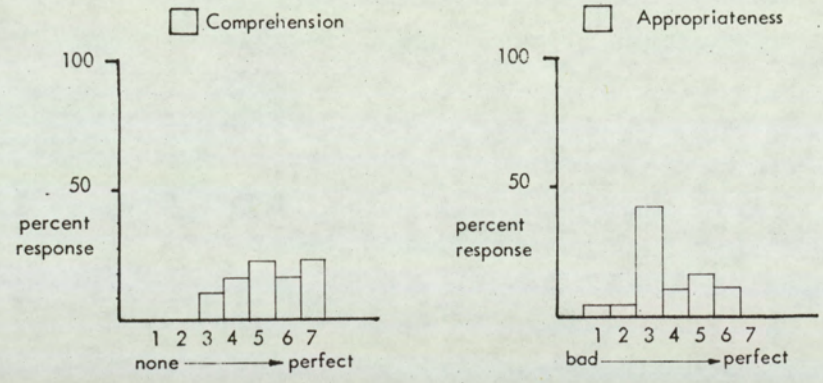
3) The Generalised Index of Comprehension derived from normalising the ranked responses for the scenario.

IN CASE OF CONTACT WITH EYES GIVE PROLONGED IRRIGATION WITH WATER N=19



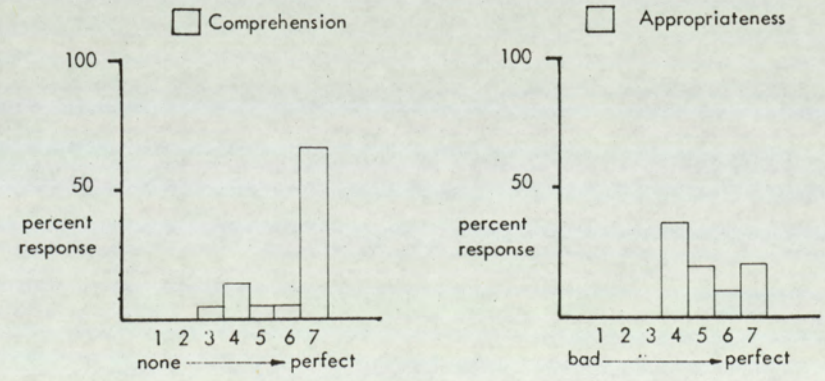
GIC= 0.917

FLUSH OUT EYES WITH COPIOUS AMOUNTS OF WATER N=16



GIC= 0.979

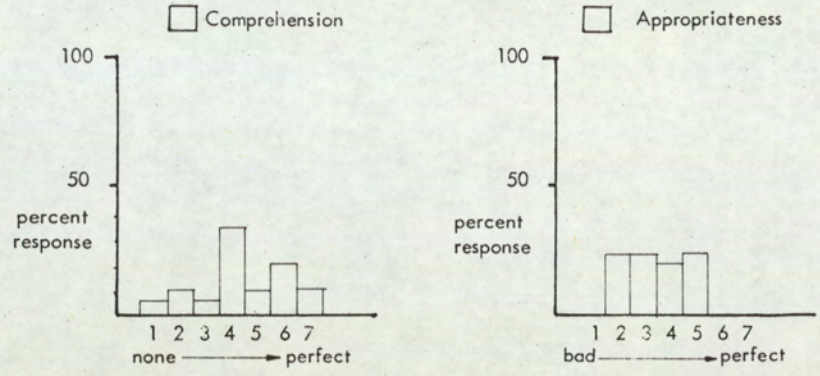
HARMFUL IF TAKEN INTERNALLY N=18



GIC= 0.963

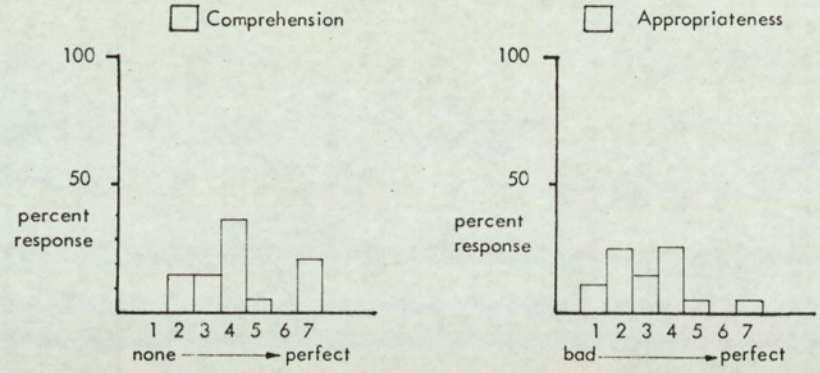
Table A3.1 Pilot study. Summary of comprehension and appropriateness scales with the Generalised index of Comprehension (GIC) for each of the 30 phrases investigated.

DO NOT INDUCE VOMITING BECAUSE OF THE RISK OF ASPIRATION N=19



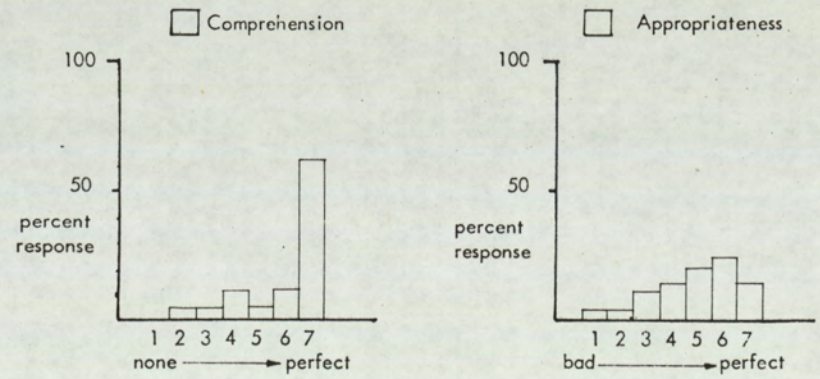
GIC= 0.902

SPILLAGES SHOULD BE NEUTRALISED WITH A MILD ALKALI N=18



GIC= 0.873

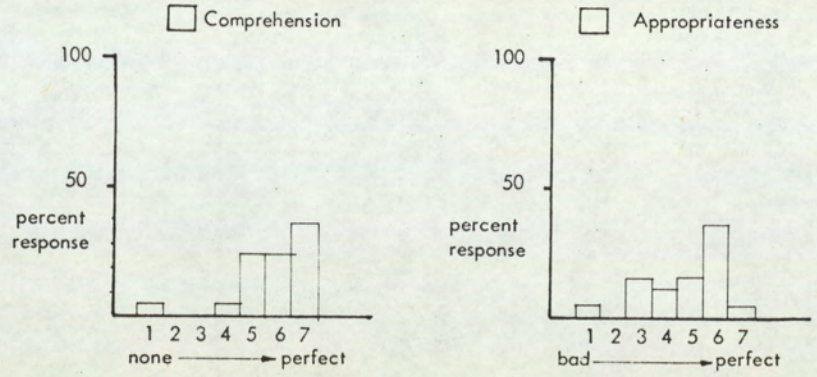
AVOID NAKED FLAMES N=19



GIC= 0.902

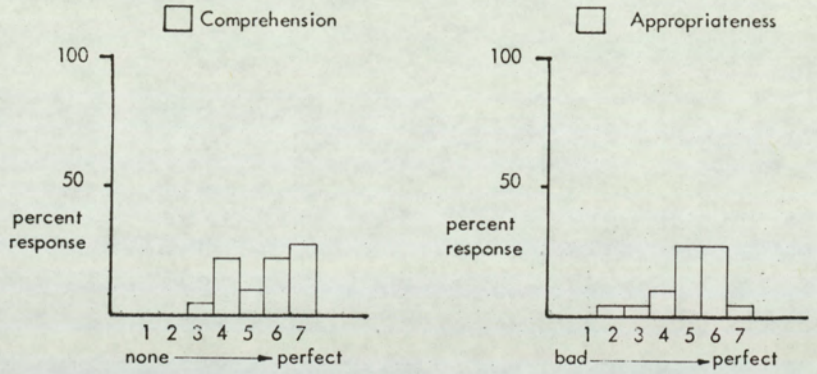
Table A3.1 Pilot study. Summary of comprehension and appropriateness scales with the Generalised index of Comprehension (GIC) for each of the 30 phrases investigated.

IF SWALLOWED DO NOT INDUCE VOMITING N=16



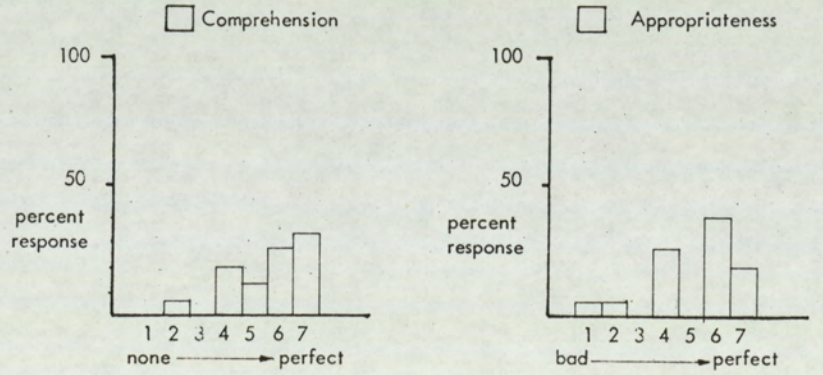
GIC= 0.777

CONTACT MAY CAUSE SEVERE IRRITATION OR CHEMICAL BURNS N=16



GIC= 0.969

FLAMMABLE VAPOUR - AVOID USE NEAR NAKED FLAME N=15



GIC= 0.976

Table A3.1 Pilot study. Summary of comprehension and appropriateness scales with the Generalised index of Comprehension (GIC) for each of the 30 phrases investigated.

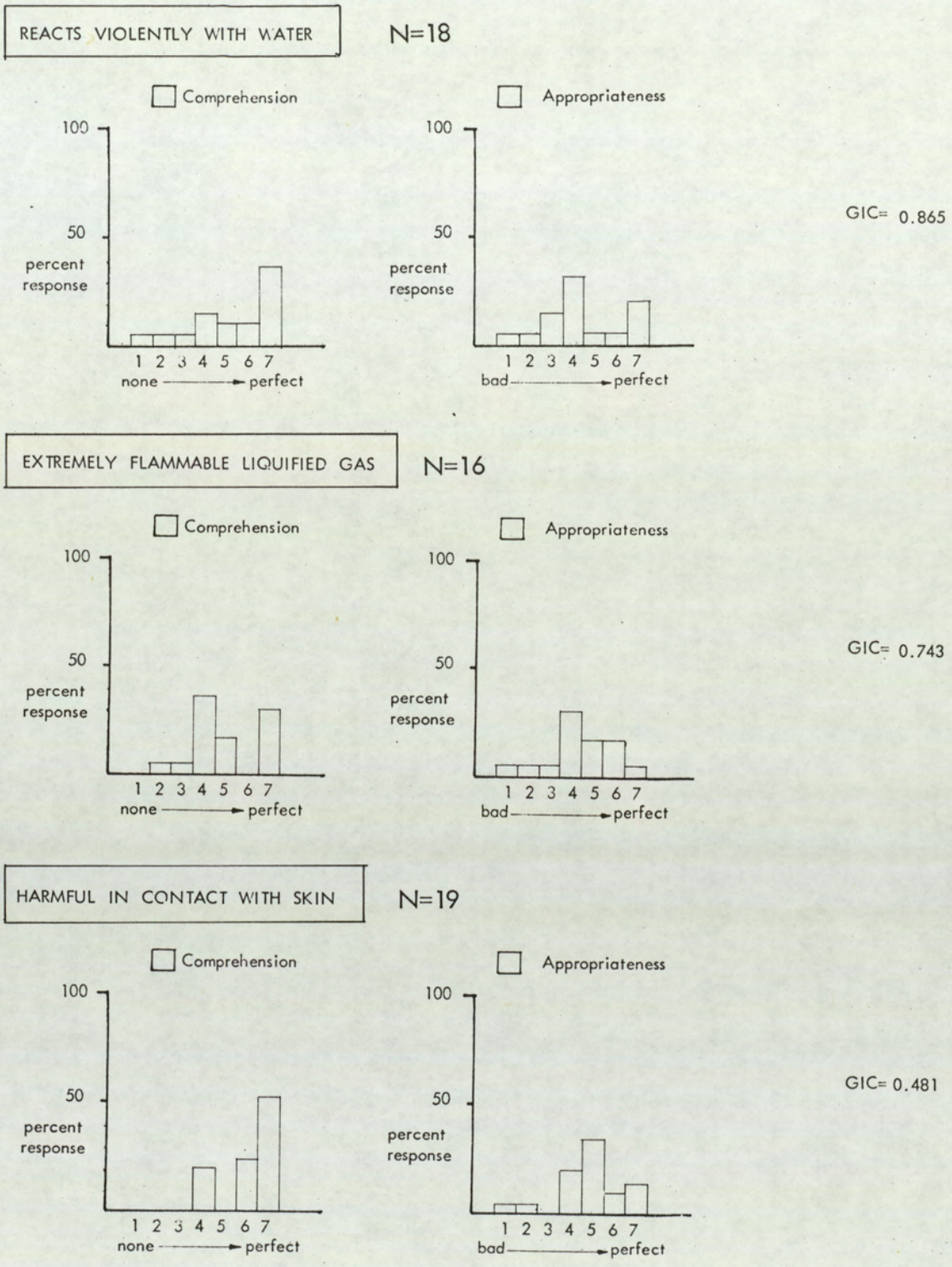


Table A3.1 Pilot study. Summary of comprehension and appropriateness scales with the Generalised index of Comprehension (GIC) for each of the 30 phrases investigated.

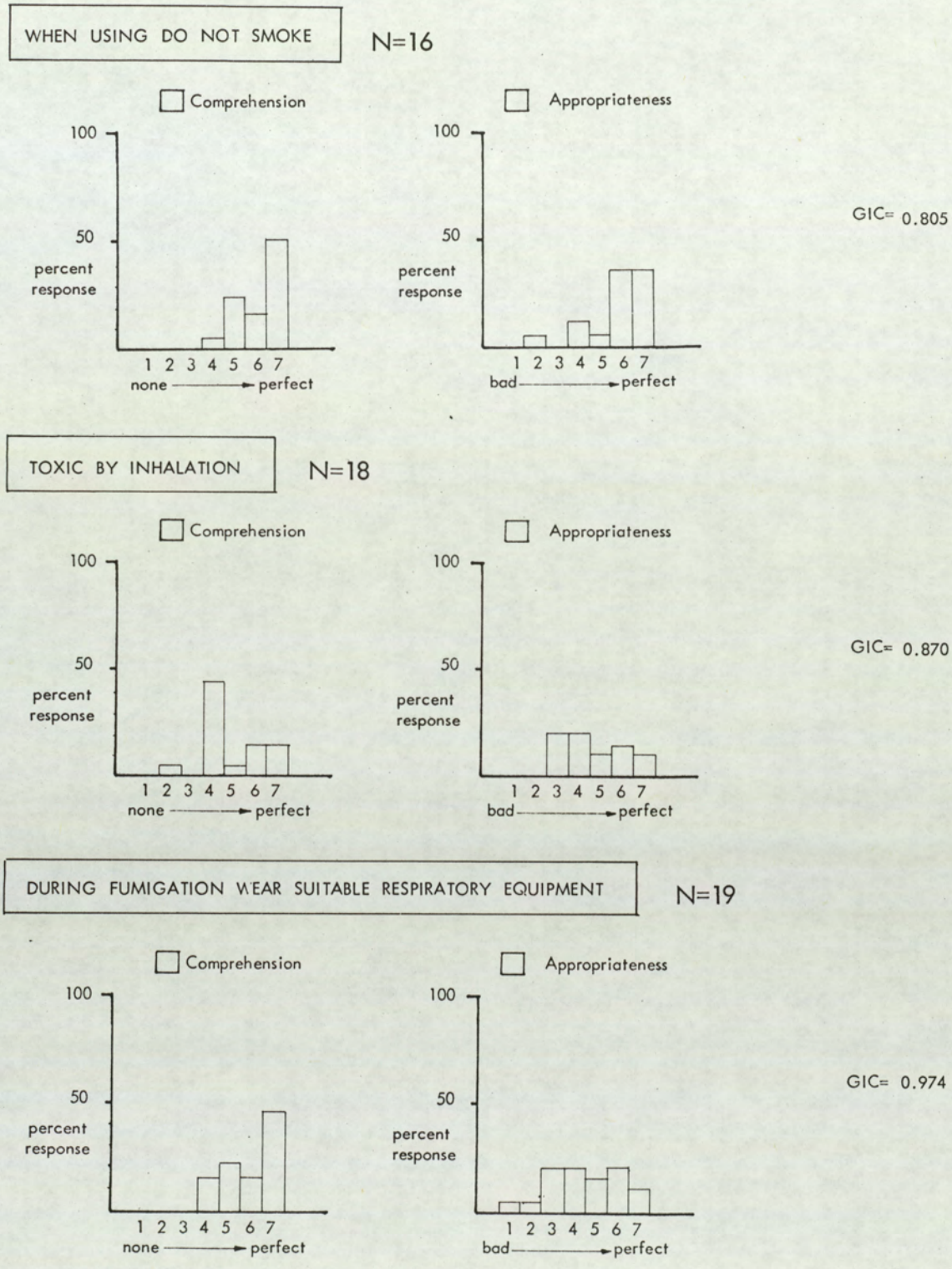


Table A3.1 Pilot study. Summary of comprehension and appropriateness scales with the Generalised index of Comprehension (GIC) for each of the 30 phrases investigated.

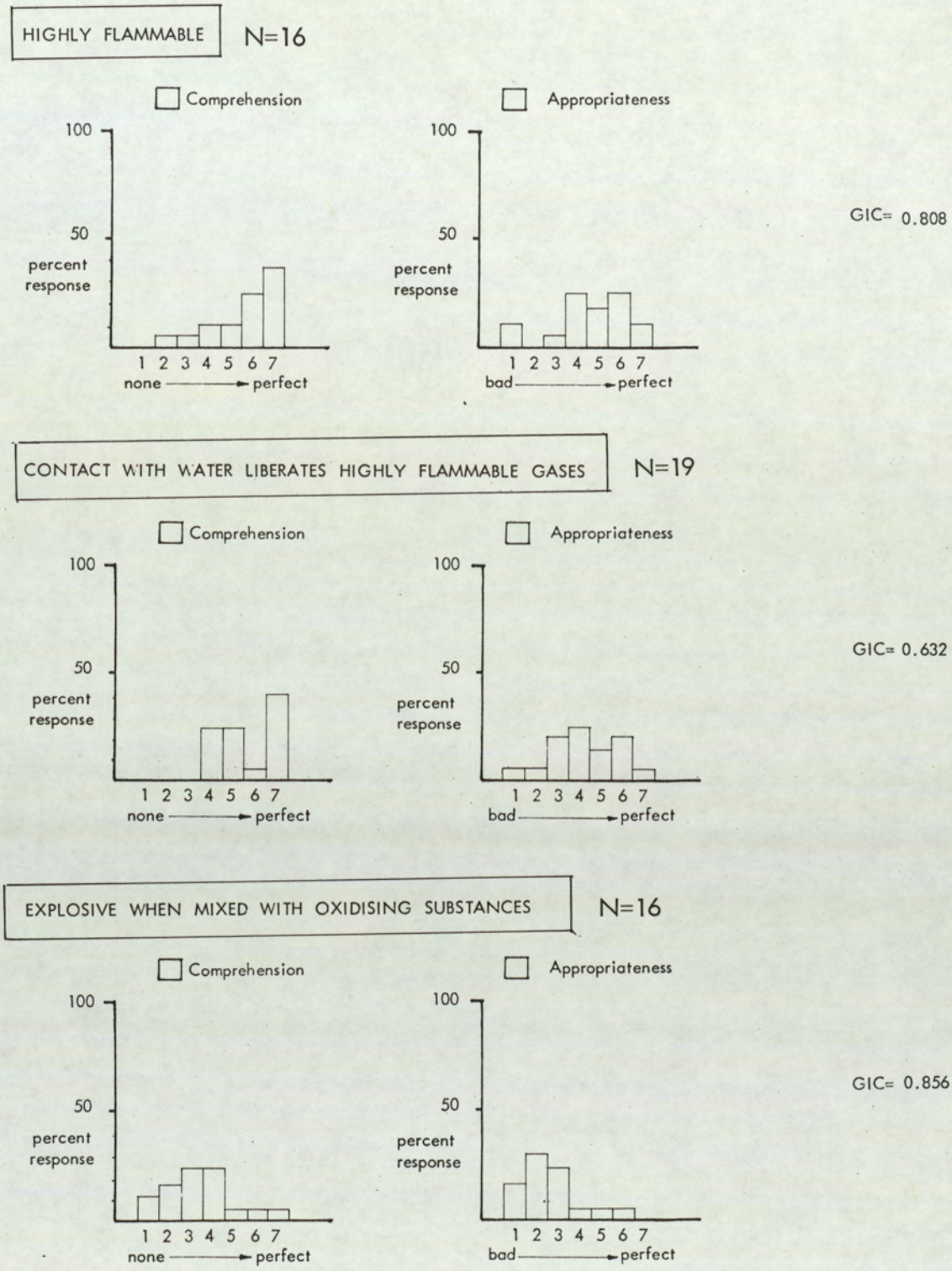


Table A3.1 Pilot study. Summary of comprehension and appropriateness scales with the Generalised index of Comprehension (GIC) for each of the 30 phrases investigated.

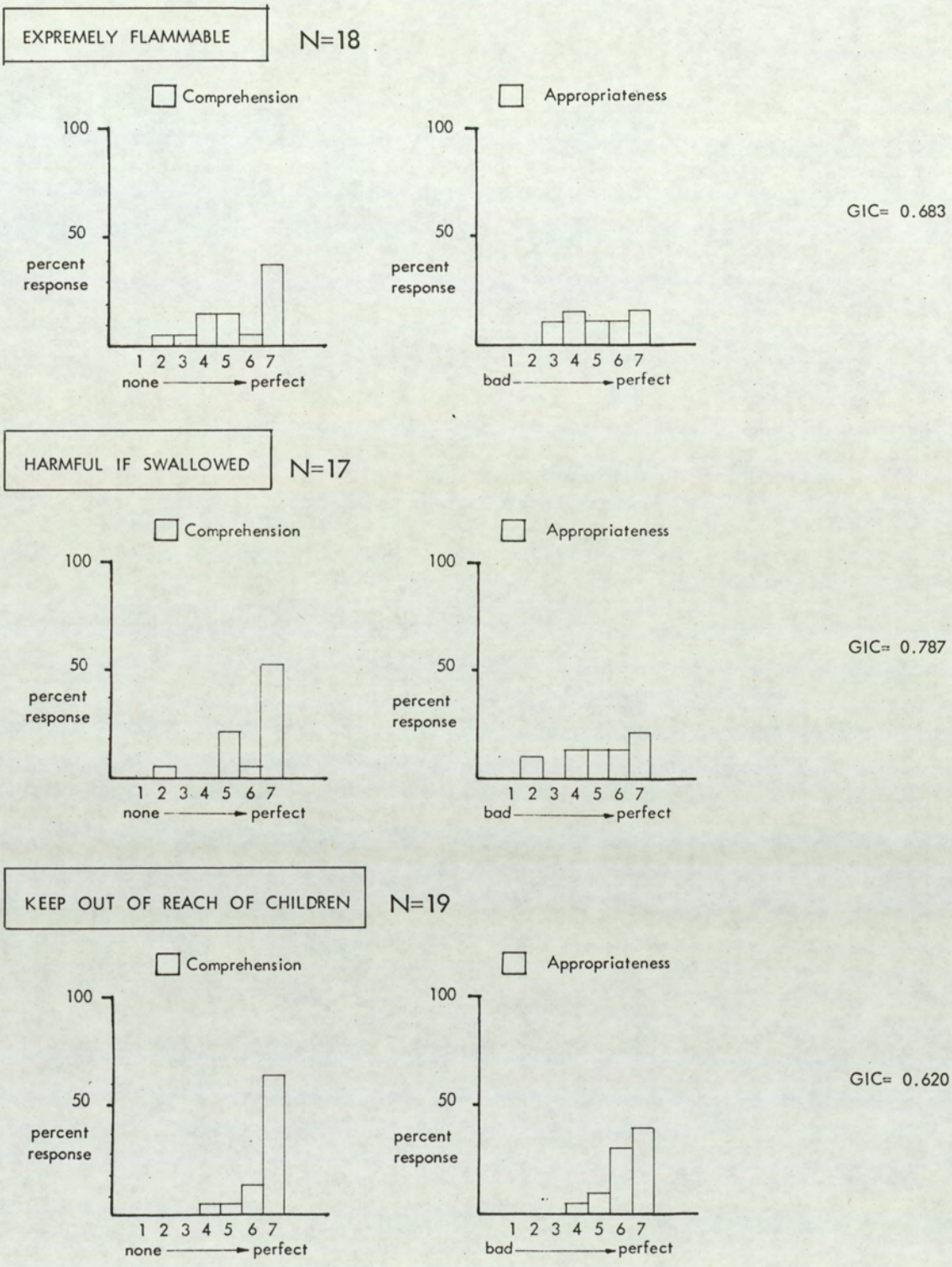
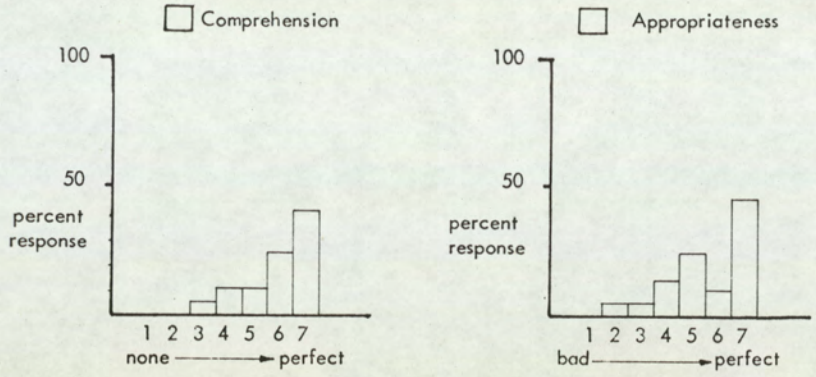


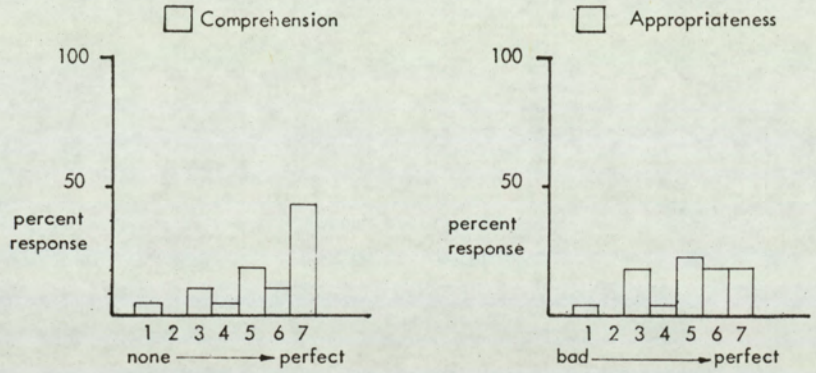
Table A3.1 Pilot study. Summary of comprehension and appropriateness scales with the Generalised index of Comprehension (GIC) for each of the 30 phrases investigated.

AVOID CONTACT WITH AIR N=18



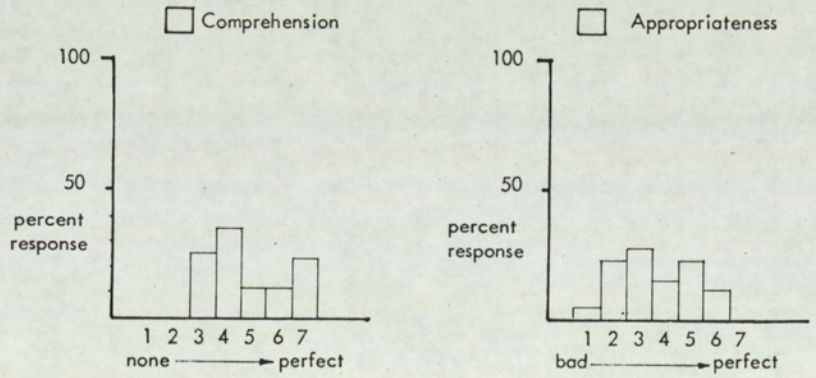
GIC= 0.897

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS N=19



GIC= 0.649

KEEP AWAY FROM SOURCES OF IGNITION N=17



GIC= 0.482

Table A3.1 Pilot study. Summary of comprehension and appropriateness scales with the Generalised index of Comprehension (GIC) for each of the 30 phrases investigated.

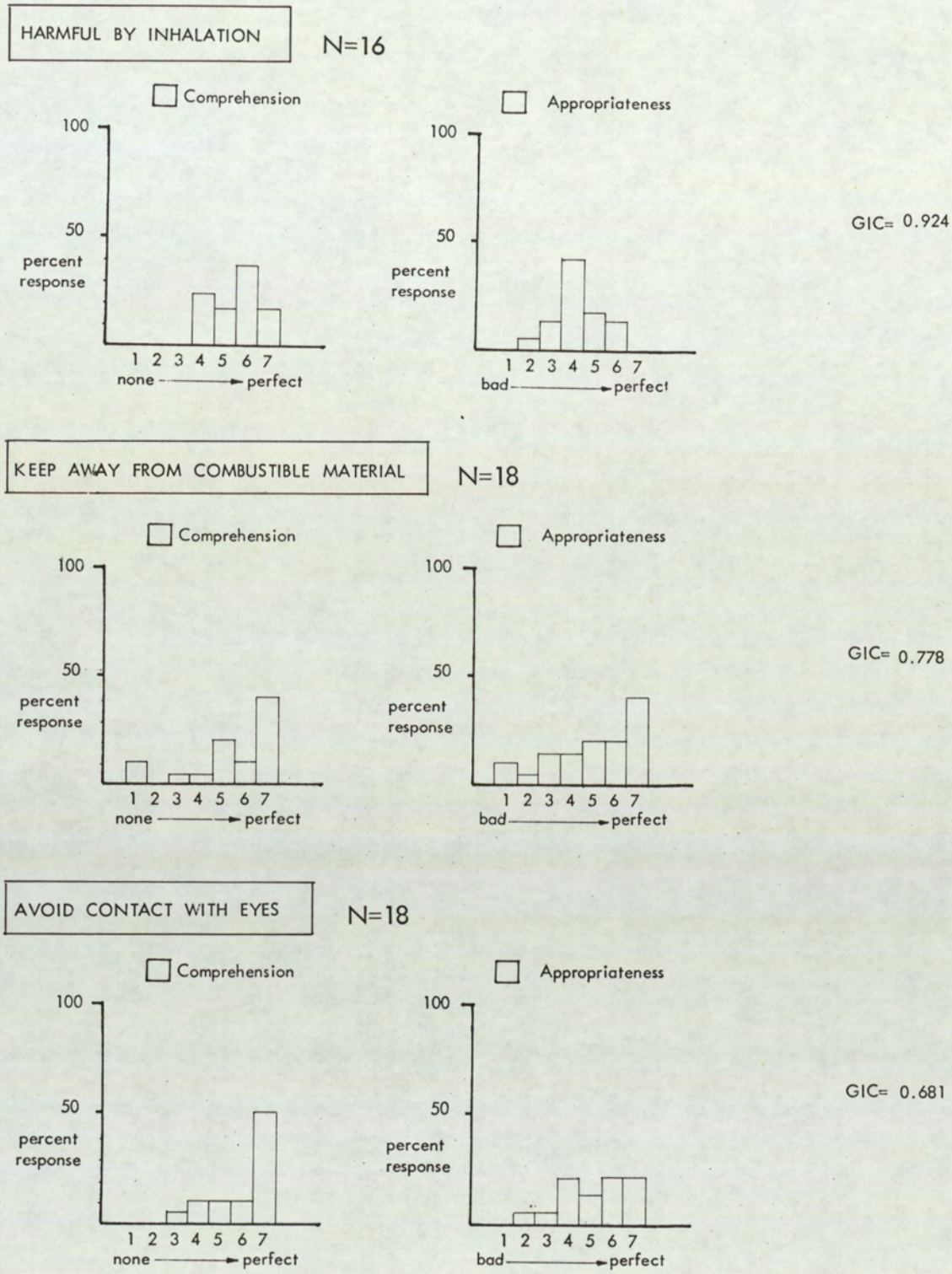
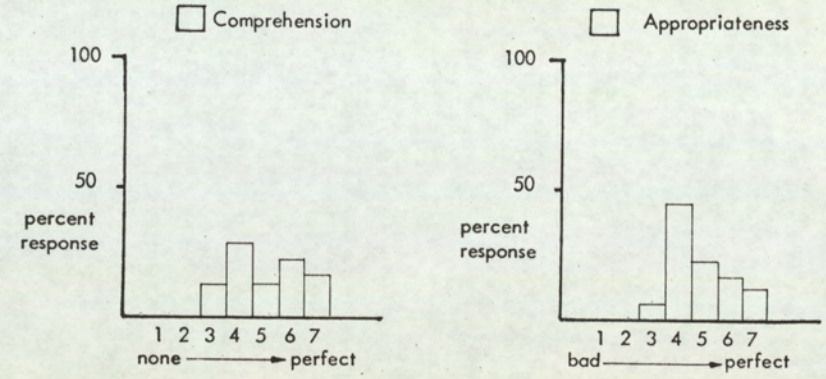


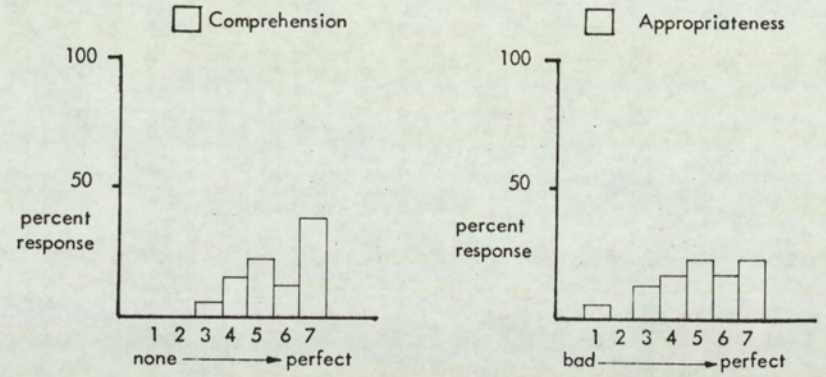
Table A3.1 Pilot study. Summary of comprehension and appropriateness scales with the Generalised index of Comprehension (GIC) for each of the 30 phrases investigated.

PETROLEUM MIXTURE GIVING OFF HIGHLY FLAMMABLE VAFOUR N=16



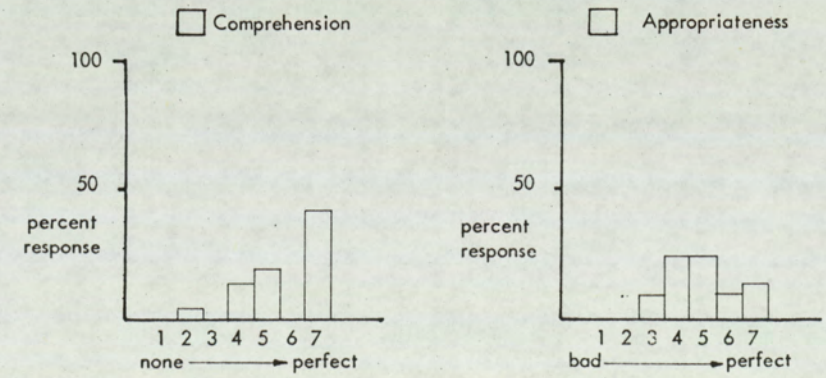
GIC= 0.741

AVOID DIRECT SUNLIGHT N=17



GIC= 0.832

DO NOT PUNCTURE OR INCINERATE CAN EVEN WHEN EMPTY N=18



GIC= 0.926

Table A3.1 Pilot study. Summary of comprehension and appropriateness scales with the Generalised index of Comprehension (GIC) for each of the 30 phrases investigated.

APPENDIX IV

Recode validation study. Instructions to recode judges.

APPLIED PSYCHOLOGY DEPARTMENT
UNIVERSITY OF ASTON

INFORMATION DISPLAY RESEARCH GROUP

SAFETY LABELLING OF CONSUMER PRODUCTS

REDUCED CODING VERIFICATION OF SAFETY WORD COMPREHENSION RESPONSES:

PREABLE:

We are trying to find out how effective safety labels are when they appear on harmful products which you could buy at any supermarket. If the labels are not clearly understood then they are not doing their job properly.

One aspect of the study was to test the comprehension of actual words used in such labels. Our approach has been to give respondents the context and then ask them to respond to a series of questions probing the test words. One such question was open-ended and required a response as to the meaning of the word given:

e.g. TOXIC
what do you think this word means?

However, analysing such free response data has created significant analysis problems for psychologists. An effective solutions to this problem involves 'reduced coding procedures' whereby responses are categorised according to some predetermined protocol. We therefore classified the responses according to a graded set of categories defined by the

'likelihood of the respondent behaving correctly given their meaning response to the given word'.

AIM:

What we wish to do is verify the reliability of this procedure by asking you to carry out the same categorisation task.

INSTRUCTIONS:

We would like you to categorise the responses made to each of the safety words appearing below according to a set protocol.

Taking the first word you will see a list of responses to that word. Look at the first response and, bearing in mind the context of consumer safety, assign it a category as follows:

'If this is the meaning given by the respondent then he is

1. Certain
2. Very likely
3. Likely
4. Marginally likely
5. unlikely

to behave correctly in response to the word.'

You are likely to find two types of response which do not fit into any of the above categories:

6. Wrong
7. Inappropriate context

Category 6. Wrong
You should assign responses to this category if there is no possibility of the respondent making the correct behaviour.

Category 7. Inappropriated context
This category is fairly explicit. Where a word has more than one possible meaning and the respondent has selected an accurate meaning for the word but in the wrong context then assign the response to this category. Remember it is not the accuracy of meaning that you are categorising but rather the likelihood of that meaning (in the context of safety) leading to appropriate behaviour.

Sample recode proforma.

Category 1 = Certain yes
2 = Very likely
3 = Likely
4 = Marginally likely
5 = Unlikely
6 = Wrong
7 = Inappropriate response

Select the Category for each response and insert in the list below

EMETIC

Code	Category	Description
001	( )	poison
002	( )	a substance that makes you sick when taken and bring back food
003	( )	something that will make someone vomit a drug
004	( )	if swallowed will cause vomiting
005	( )	something to make a person sick
006	( )	vomit provoking
007	( )	to vomit
008	( )	substances that mixes other substances
009	( )	laxative
010	( )	make you go to the toilet
011	( )	pertaining to measurement (metric)
012	( )	nauseate
013	( )	bowel medicine
014	( )	medicine for inducing vomiting

SAMPLE DESIGN AND FIELDWORK

The Survey

ACCESS is a market research survey based on the BMRB Continuous Consumer Survey. An ACCESS questionnaire is incorporated into as many versions of the questionnaire used for the Continuous Consumer Survey, for as many check periods, as are required in order to achieve an adult or housewife sample of the desired size.

Sampling Method

The sampling technique used in this survey is known as GRID sampling. It is a form of sampling developed within BMRB which is being used increasingly widely in the consumer surveys which BMRB conducts.

This sampling method has been derived to add further refinement to BMRB's sampling methodology, the principle of which has been to eliminate the more unsatisfactory features of quota sampling without incurring the cost and other penalties involved in conducting surveys according to strict probability methods.

One of the principle advantages of probability techniques of sampling is that selection of respondents is taken from the hands of interviewers. In conventional quota sampling, interviewers are given quotas to fill, usually from within specified administrative areas. When, for example, an interviewer is asked to complete a quota of AB respondents, she will tend to go to a part of the district where she knows such individuals to be available. AB individuals living in mixed social class areas will have little chance of inclusion. This and similar defects, lead to biases which are concealed by superficial agreements between sample profiles and accepted standards.

The principle distinguishing characteristic of GRID sampling is that interviewers are given very little choice in the selection of respondents. Respondents are drawn from a small set of homogeneous streets, selected with probability proportional to population after stratification by their ACORN characteristics. Quotas are set in terms of characteristics which are known to have a bearing on individuals' probabilities of inclusion in the sample. Rules are given which govern the distribution, spacing and timing of interviews.

Sampling on all ACCESS surveys uses as its universe all enumeration districts (groups of, on average, 150 households) in Great Britain. The number of enumeration districts sampled will, of course, vary according to the size of sample chosen. A feature of the ACCESS survey is its relative lack of clustering. On average for every 1000 interviews some 75 sampling points are chosen. Each enumeration district is stratified in the following manner:-

(i) Standard Region

(ii) Within Standard Region - by ITV area

(iii) Within strata i and ii by ascending order of ACORN neighbourhood types.

The required number of enumeration districts is then selected with probability proportional to population.

GRID sampling has added refinements to BMRB's traditional Random Location Sampling techniques. The major difference between the two techniques is at the final selection of streets stage. Random Location Sampling used as its first stage of design, wards and parishes listed within ascending order of ACORN neighbourhood type. Within the selected wards and parishes streets were selected at random. GRID Sampling, however, is a one stage sample design. The universe is enumeration districts (each consisting of about 150 households) listed within ascending order of ACORN neighbourhood type. The increased sensitivity of this sampling technique has been brought about by two factors:-

(i) The cluster analysis performed on enumeration districts to determine a 'Classification of Residential Neighbourhoods' or ACORN neighbourhoods.

(ii) The increased scope and sophistication of modern computer equipment.

The published literature on ACORN has shown how apparently similar areas in terms of standard socio-economic measures differ considerably in terms of population behaviour. GRID sampling provides BMRB with a technique to control and measure these differences at street level.

The quota controls are set in terms of the following groups:

Non-working and part-time working housewives
Full-time working housewives (Interviewed at any time of day)
Other women

Men (usually interviewed in the evening or during the day at weekends, with the proviso that up to two men per assignment may be interviewed in the day, provided they are in full time employ or are under 20 years of age).

In addition there is a quota control in terms of:

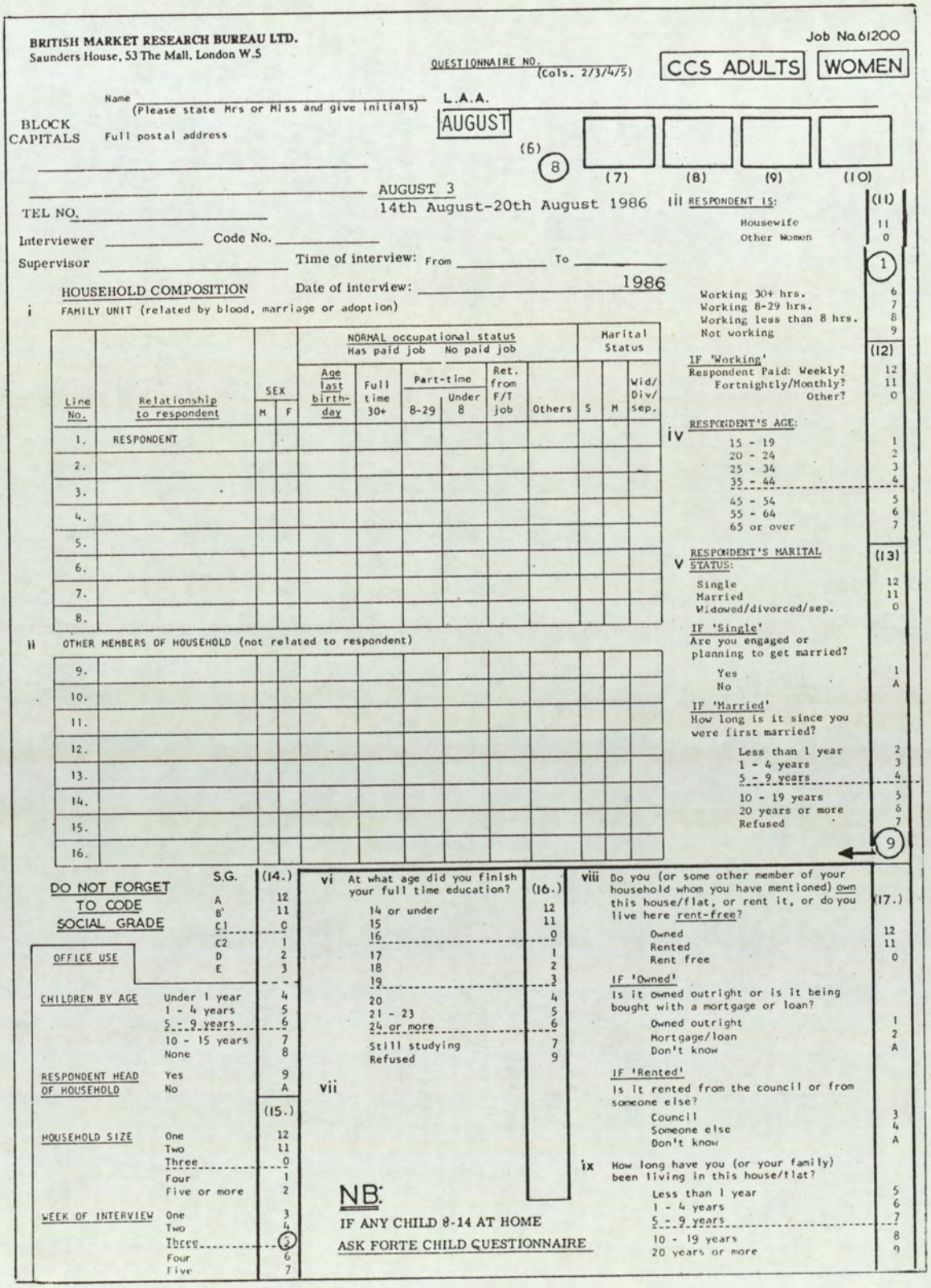
Housewives with children
Housewives without children

After completing an interview the interviewer misses three houses/flats before attempting her next interview. Further rules govern the allocation of interviews to streets to accord with the way in which the streets were selected.

Weighting

Any imbalances in the survey due to sampling fluctuation are corrected by the recently developed computer techniques of target weighting. Targets are based on official statistics such as census data, or large industry surveys such as the National Readership Survey, and are set in terms of Standard Region, age, sex and social class.

In practice careful survey design and quota selection ensure that the actual weights used are minimal and are thus close to one.



BRITISH MARKET RESEARCH BUREAU LTD.
Saunders House, 53 The Mall, London W.5

Job No.61200

QUESTIONNAIRE NO. (Cols. 2/3/4/5)

CCS ADULTS | WOMEN

Name (Please state Mrs or Miss and give initials)

L.A.A.

BLOCK CAPITALS Full postal address

AUGUST (6) 8 (7) (8) (9) (10)

AUGUST 3
14th August-20th August 1986

TEL NO.

Interviewer Code No.

Supervisor Time of interview: From To

HOUSEHOLD COMPOSITION Date of interview: 1986

i FAMILY UNIT (related by blood, marriage or adoption)

Line No.	Relationship to respondent	SEX M	SEX F	NORMAL occupational status: Has paid job: Age last birthday	Has paid job: Full time 30+	Has paid job: Part-time 8-29	Has paid job: Part-time Under 8	No paid job: Ret. from F/T job	No paid job: Others	Marital Status: S	Marital Status: M	Marital Status: Wid/Div/sep.
1.	RESPONDENT											
2.												
3.												
4.												
5.												
6.												
7.												
8.												

ii OTHER MEMBERS OF HOUSEHOLD (not related to respondent)

9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												

iii RESPONDENT IS: (11)
Housewife 11
Other Women 0

(1)
Working 30+ hrs. 6
Working 8-29 hrs. 7
Working less than 8 hrs. 8
Not working 9

IF 'Working' (12)
Respondent Paid: Weekly? 12
Fortnightly/Monthly? 11
Other? 0

iv RESPONDENT'S AGE:
15 - 19 1
20 - 24 2
25 - 34 3
35 - 44 4
45 - 54 5
55 - 64 6
65 or over 7

v RESPONDENT'S MARITAL STATUS: (13)
Single 12
Married 11
Widowed/divorced/sep. 0

IF 'Single'
Are you engaged or planning to get married?
Yes 1
No A

IF 'Married'
How long is it since you were first married?
Less than 1 year 2
1 - 4 years 3
5 - 9 years 4
10 - 19 years 5
20 years or more 6
Refused 7

(9)

DO NOT FORGET TO CODE SOCIAL GRADE

S.G. (14.)
A 12
B 11
C1 0
C2 1
D 2
E 3

OFFICE USE

CHILDREN BY AGE
Under 1 year 4
1 - 4 years 5
5 - 9 years 6
10 - 15 years 7
None 8

RESPONDENT HEAD OF HOUSEHOLD
Yes 9
No A

(15.)

HOUSEHOLD SIZE
One 12
Two 11
Three 0
Four 1
Five or more 2

WEEK OF INTERVIEW
One 3
Two 4
Three (3)
Four 6
Five 7

vi At what age did you finish your full time education? (16.)
14 or under 12
15 11
16 0
17 1
18 2
19 3
20 4
21 - 23 5
24 or more 6
Still studying 7
Refused 9

vii

NB:
IF ANY CHILD 8-14 AT HOME
ASK FORTE CHILD QUESTIONNAIRE

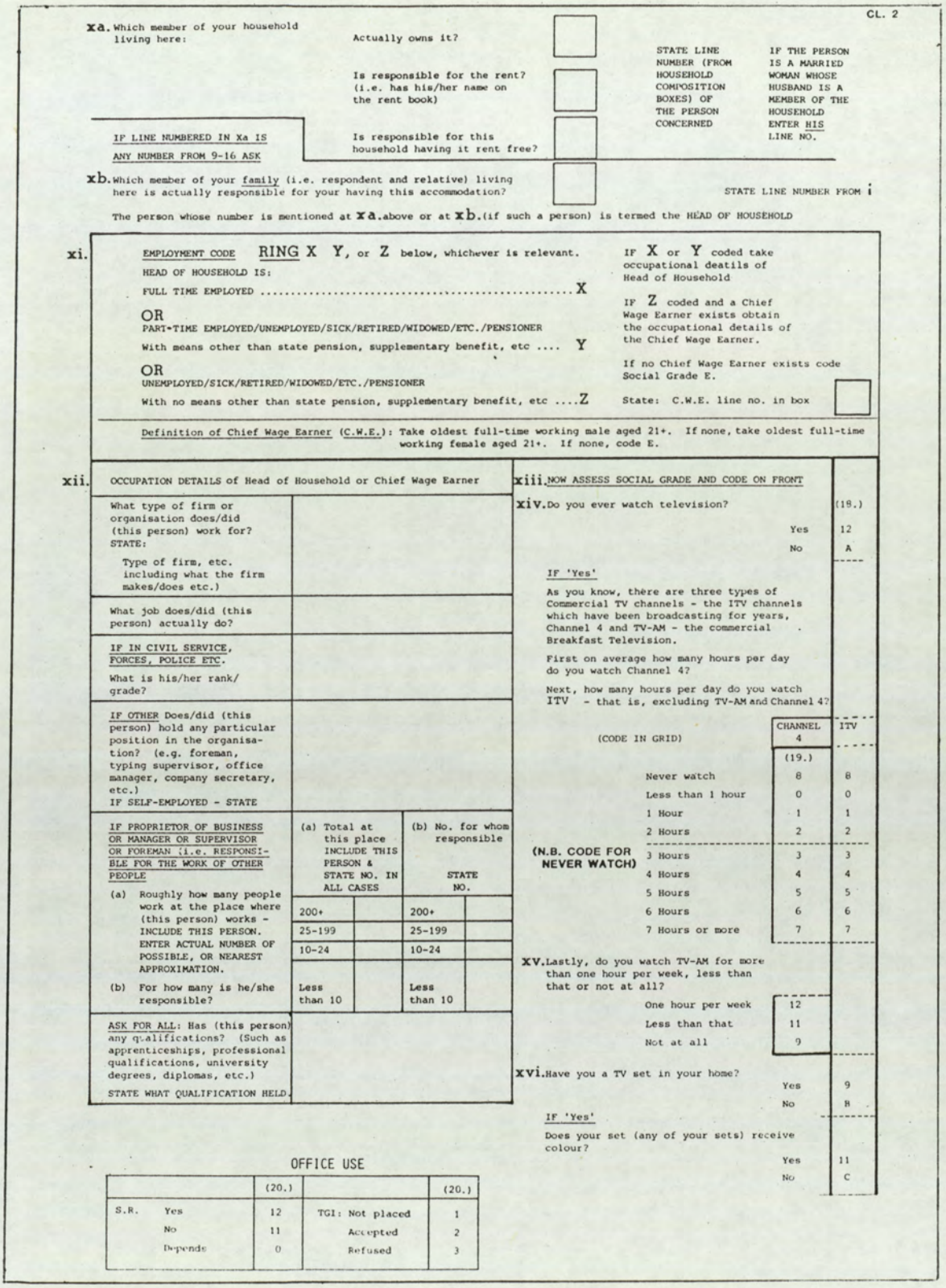
viii Do you (or some other member of your household whom you have mentioned) own this house/flat, or rent it, or do you live here rent-free? (17.)
Owned 12
Rented 11
Rent free 0

IF 'Owned'
Is it owned outright or is it being bought with a mortgage or loan?
Owned outright 1
Mortgage/loan 2
Don't know A

IF 'Rented'
Is it rented from the council or from someone else?
Council 3
Someone else 4
Don't know A

ix How long have you (or your family) been living in this house/flat?
Less than 1 year 5
1 - 4 years 6
5 - 9 years 7
10 - 19 years 8
20 years or more 9

Figure A5.1 BMRB questionnaire requesting demographic details from a female respondent (first page).



CL. 2

xa. Which member of your household living here:

Actually owns it? ☐

Is responsible for the rent? (i.e. has his/her name on the rent book) ☐

Is responsible for this household having it rent free? ☐

STATE LINE NUMBER (FROM HOUSEHOLD COMPOSITION BOXES) OF THE PERSON CONCERNED

IF THE PERSON IS A MARRIED WOMAN WHOSE HUSBAND IS A MEMBER OF THE HOUSEHOLD ENTER HIS LINE NO.

IF LINE NUMBERED IN Xa IS ANY NUMBER FROM 9-16 ASK

xb. Which member of your family (i.e. respondent and relative) living here is actually responsible for your having this accommodation? ☐ STATE LINE NUMBER FROM i

The person whose number is mentioned at **xa.** above or at **xb.** (if such a person) is termed the HEAD OF HOUSEHOLD

xi.

EMPLOYMENT CODE RING X Y, or Z below, whichever is relevant.

HEAD OF HOUSEHOLD IS:

FULL TIME EMPLOYED X

OR

PART-TIME EMPLOYED/UNEMPLOYED/SICK/RETIRED/WIDOWED/ETC./PENSIONER

With means other than state pension, supplementary benefit, etc .... Y

OR

UNEMPLOYED/SICK/RETIRED/WIDOWED/ETC./PENSIONER

With no means other than state pension, supplementary benefit, etc .... Z

IF X or Y coded take occupational deatils of Head of Household

IF Z coded and a Chief Wage Earner exists obtain the occupational details of the Chief Wage Earner.

If no Chief Wage Earner exists code Social Grade E.

State: C.W.E. line no. in box ☐

Definition of Chief Wage Earner (C.W.E.): Take oldest full-time working male aged 21+. If none, take oldest full-time working female aged 21+. If none, code E.

xii. OCCUPATION DETAILS of Head of Household or Chief Wage Earner

What type of firm or organisation does/did (this person) work for? STATE: Type of firm, etc. including what the firm makes/does etc.)	
What job does/did (this person) actually do?	
IF IN CIVIL SERVICE, FORCES, POLICE ETC. What is his/her rank/ grade?	
IF OTHER Does/did (this person) hold any particular position in the organisation? (e.g. foreman, typing supervisor, office manager, company secretary, etc.) IF SELF-EMPLOYED - STATE	

IF PROPRIETOR OF BUSINESS OR MANAGER OR SUPERVISOR OR FOREMAN (i.e. RESPONSIBLE FOR THE WORK OF OTHER PEOPLE

	(a) Total at this place INCLUDE THIS PERSON & STATE NO. IN ALL CASES		(b) No. for whom responsible STATE NO.	
(a) Roughly how many people work at the place where (this person) works - INCLUDE THIS PERSON. ENTER ACTUAL NUMBER OF POSSIBLE, OR NEAREST APPROXIMATION.	200+		200+	
	25-199		25-199	
	10-24		10-24	
(b) For how many is he/she responsible?	Less than 10		Less than 10	

ASK FOR ALL: Has (this person) any qualifications? (Such as apprenticeships, professional qualifications, university degrees, diplomas, etc.)

STATE WHAT QUALIFICATION HELD.

xiii. NOW ASSESS SOCIAL GRADE AND CODE ON FRONT

xiv. Do you ever watch television? (19.)

Yes 12

No A

IF 'Yes'

As you know, there are three types of Commercial TV channels - the ITV channels which have been broadcasting for years, Channel 4 and TV-AM - the commercial Breakfast Television.

First on average how many hours per day do you watch Channel 4?

Next, how many hours per day do you watch ITV - that is, excluding TV-AM and Channel 4?

(CODE IN GRID)	CHANNEL 4 (19.)	ITV
Never watch	8	8
Less than 1 hour	0	0
1 Hour	1	1
2 Hours	2	2
3 Hours	3	3
4 Hours	4	4
5 Hours	5	5
6 Hours	6	6
7 Hours or more	7	7

(N.B. CODE FOR NEVER WATCH)

xv. Lastly, do you watch TV-AM for more than one hour per week, less than that or not at all?

One hour per week	12
Less than that	11
Not at all	9

xvi. Have you a TV set in your home?

Yes 9

No B

IF 'Yes'

Does your set (any of your sets) receive colour?

Yes 11

No C

OFFICE USE

		(20.)		(20.)
S.R.	Yes	12	TGI: Not placed	1
	No	11	Accepted	2
	Depends	0	Refused	3

Figure A5.1 BMRB questionnaire requesting demographic details from a female respondent (second page).

APPENDIX VI

The 500 words used in the main field study

001 Abrasive
002 Absorb
003 Accident
004 Accordance
005 Accurately
006 Acid
007 Activate
008 Add
009 Additional
010 Adequate
011 Adhesion
012 Adhesive
013 Adverse
014 Advice
015 Agent
016 Alkali
017 Allow
018 Appliances
019 Application
020 Apply
021 Asbestos
022 Aspirate
023 Attachment
024 Attempt
025 Attention
026 Automatic
027 Avoid

028 Barrier
029 Below
030 Beneath
031 Best
032 Between
033 Bleach
034 Bond
035 Bottle
036 Box
037 Breathe
038 Buggy
039 Burns

040 Capacity
041 Carefully
042 Certified
043 Characteristics
044 Charge
045 Chemical
046 Circumstances
047 Cleaning
048 Cleansing
049 Closure
050 Combustible
051 Compatible
052 Completely
053 Composition
054 Compound
055 Conditions
056 Confined
057 Connections
058 Consult
059 Contact
060 Container
061 Contamination
062 Contents
063 Convenient
064 Copious
065 Corrosive
066 Cover
067 Cumulative
068 Cure
069 Current
070 Cut

071 Damage
072 Damp
073 Dangerous
074 Decomposition
075 Defective
076 Delay
077 Depending
078 Depress
079 Described
080 Designed
081 Deteriorate
082 Development
083 Diagram
084 Dilution
085 Direct
086 Directions
087 Discharge
088 Discomfort
089 Disconnect
090 Dispersed
091 Dispose
092 Doctor
093 Drains
094 Dries
095 Drink
096 Dry
097 Durable
098 Dust

099 Easily
100 Eat
101 Effective
102 Electrical
103 Eliminated
104 Emergency
105 Emetic
106 Employed
107 Empty
108 Enclosed
109 Energise
110 Ensure
111 Equipment
112 Especially
113 Essential
114 Exceed
115 Except
116 Excess
117 Exclude
118 Existing
119 Expert
120 Explosion
121 Exposed
122 Exterior
123 Extinguisher

124 Face
125 Failure
126 Fastenings
127 Faults
128 Figures
129 Fill
130 Finish
131 Fire
132 Fixed
133 Flames
134 Flammable
135 Flash
136 Flashpoint
137 Fluid
138 Following
139 Food
140 Foodstuffs
141 Formulated

142 Free
143 Friable
144 Friction
145 Fumes
146 Fumigate
147 Functional

148 Gases
149 Gauge
150 Generously
151 Glass
152 Glazing
153 Glue
154 Goggles
155 Government
156 Grease

157 Handling
158 Harmful
159 Harmless
160 Hazard
161 Health
162 Help
163 Hot
164 Humans
165 Humidity
166 Hygroscopic
167 Hypersensitivity

168 Ignition
169 Immediately
170 Immerse
171 Impermeable
172 Impervious
173 Implement
174 Important
175 Impregnated
176 Incandescent
177 Incinerate
178 Including
179 Incorporated
180 Incorrect
181 Increase
182 Indicated
183 Individual
184 Indoors
185 Induce
186 Industrial
187 Inert
188 Inflammable
189 Information
190 Infrared
191 Ingestion
192 Ingredient
193 Inhalation
194 Inhibit
195 Injurious
196 Injury
197 Inside
198 Inspected
199 Instructions
200 Insufficient
201 Insulating
202 Integral
203 Intended
204 Interfere
205 Interior
206 Intermittent
207 Internal
208 Introduce
209 Involved
210 Irreversible
221 Irrigate
222 Irritation
223 Isolate
224 Item

225 Keep
226 Kill

227 Label
228 Lead
229 Leads
230 Leaflet
232 Leaking
233 Level
234 Lever
234 Liable
235 Liberates
236 Lid
237 Life
238 Lightly
239 Likely
240 Limited
241 Liquid
242 Live
243 Loose

244 Machines
245 Maintenance
246 Make
247 Manufacturer
248 Many
249 Marking
250 Material
251 Maximum
252 Measures
253 Mechanical
254 Medical
255 Membrane
256 Mend
257 Metal
258 Method
259 Microwave
250 Mild
251 Minimum
252 Mishap
253 Mixed
254 Mixture
255 Moderate
256 Moisture
257 Movement
258 Mutagenic

259 Naked
260 Nausea
261 Necessary
262 Neutralise
263 Normal
264 Numerous

265 Objects
266 Observed
267 Obtain
268 Occasionally
269 Occur
270 Odour
271 Official
272 Often
273 Omitted
274 Open
275 Operating
276 Optimum
277 Outdoors
278 Outside
279 Overall
280 Oxidising

281 Packaging
282 Point
283 Paraffin

284 Particles
285 Particularly
286 Parts
287 Paste
288 Patient
289 Penetration
290 Perambulator
291 Performance
292 Period
293 Permanent
294 Permit
295 Persons
296 Physician
297 Pierce
298 Plenty
299 Poison
300 Polished
301 Porous
302 Position
303 Positive
304 Possible
305 Power
306 Practicable
307 Practical
308 Pram
309 Precautions
310 Preparation
311 Prepared
312 Preservative
313 Pressure
314 Prevent
315 Problems
316 Process
317 Produce
318 Product
319 Professional
320 Prolonged
321 Promptly
322 Properly
323 Proprietary
324 Protect
325 Protective
326 Protruding
327 Puncture
328 Pushchair

329 Quality
330 Quantities
331 Quick

332 Radiant
333 Range
334 Rapid
335 Reach
336 Reaction
337 Reasonable
338 Received
339 Recharge
340 Recommended
341 Reconnect
342 Reduce
343 Refer
344 Regularly
345 Regulations
346 Relative
347 Release
348 Remains
349 Remedy
350 Remembered
351 Remove
352 Render
353 Repairs
354 Repeatedly
355 Repellent
356 Replace
357 Request
358 Required
359 Reseal
360 Reserve
361 Residual
362 Resistant
363 Respiratory
364 Responsibility
365 Retaining
366 Retarded
367 Reverse
368 Right
369 Rinse
370 Risk
371 Room
372 Rub

373 Safety
374 Satisfactory
375 Satisfy
376 Saturated
377 Sealed
378 Secure
379 Seek
480 Sensitive
381 Separate
382 Serious
383 Service
384 Sever
385 Severe
386 Shaped
387 Shield
388 Shock
389 Sickness
390 Significant
391 Simple
392 Size
393 Skin
394 Slight
395 Smell
396 Smoke
397 Smooth
398 Smoulder
399 Soak
400 Solids
401 Solution
402 Solvent
403 Space
404 Sparingly
405 Specialised
406 Specification
407 Spilt
408 Splashes
409 Spontaneously
410 Spray
411 Spread
412 Squeeze
413 Stability
414 Standard
415 Starting
416 Sterilizing
417 Stir
418 Storage
419 Strain
420 Strength
421 Strong
422 Structure
423 Subsequent
424 Substance
425 Sufficient
426 Suitable
427 Superior
428 Supervision
429 Supplied
430 Surfaces
431 Suspected
432 Swallowed
433 Switch
434 System

435 Take
436 Technical
437 Temperature
438 Tension
439 Tested
440 Textured
441 Thermal
442 Thickness
443 Things
444 Thinners
445 Thoroughly
446 Tightly

447 Time
448 Tin
449 Tool
450 Top
451 Total
452 Touch
453 Toxic
454 Trained
455 Treated
456 Try
457 Turn

458 Ultraviolet
459 Unaffected
460 Unattended
461 Undo
462 Unfamiliar
463 Unhealthy
464 Unless
465 Unopened
466 Unprotected
467 Unstable
468 Unused
469 Unwell
470 Upright
471 Use
472 Useful
473 Useless
474 Usually
475 Utensils

476 Vapour
477 Variety
478 Various
479 Vary
480 Ventilation
481 Vibration
482 Vicinity
483 Vigorously
484 Violently
485 Visibly
486 Voltage
487 Volume
488 Vomiting

489 Warm
490 Warning
491 Way
492 Weak
493 Wear
494 Well
495 Whilst
496 Wide
497 Withstand
498 Worn
499 Wrapping
500 Wrong

APPENDIX VII

Instructions to data coders.

INSTRUCTIONS TO CODERS :

Material:

1) Raw response sheets
2) Data code sheets
3) Newspaper code list
4) Pre-coded computer coding forms

What to do:

1) Take the first batch of material comprising
   - about 10 raw response sheets attached to
   - one computer coding form

2) Separate the raw response sheets from the computer coding sheet. Take the first raw response sheet and the computer coding form. You will notice that there is a series of numbers at the top of the raw response sheet. Check that the first number appears in the first column of the computer coding sheet. If the numbers do not match then phone me immediately!! Next match the 2nd and 3rd numbers with the two numbers printed at the top of the computer coding sheet. If either of these numbers fail to match up then phone me immediately!! These numbers uniquely associate the forms so be careful when you are carrying out this checking operation. (Notice that the 3-digit numbers already on the computer coding sheets relate to the word numbers on the raw response forms which appear in bold print. This can also be used as a way of checking you have the correctly associated sheets.)

3) Looking at the first raw response sheet you will notice that for each of the words printed in bold type there is an identifying number. Find the data code sheets for each of these ten words and lay them out in front of you together with the newspaper code sheets.

4) Take the first raw response sheet and write in the questionnaire no. and the age on the first available pre-coded line of the computer coding sheet as follows:
   a) Questionnaire no. - this is the bold printed number which appears at the top of each raw response sheet. Write the 4-digits into cols. 2-5 of the computer coding form. (Box 1 should already have a number in it.)
   b) Age - the age appears at the bottom of the raw response sheet in the box marked "for office use". Write the 2-digits into cols. 6-7 of the computer coding form.

5) Assigning a newspaper code:
   a) Refer to the newspaper code sheet it is laid out as follows:
      - the first code '999' is for when no paper has been specified by the respondent
      - the next codes up to code 30 are for national papers
      - codes 31 to *** are regional local papers
      - finally codes 800 on are papers which we have been unable

to locate so far

N.B. There should be a code for every paper you come across.

b) See if there is already a code for the newspaper that is by checking the code sheet. In some instances the respondent has named more than one paper. In this instance :
   (1) Take the national paper first.
   (2) If no national then opt for the first occurring regional paper.
   (3) If no national or regional paper then select the first paper.
   (4) If there are two papers occurring at, say, the national level then select the first occurring paper.

c) If no code exists take a note of the paper and contact us.

d) If there is a code then write the newspaper code number in boxes 8-10 on the computer coding form.
   Be careful to distinguish between daily/Sunday papers and between local/national papers.

6) Looking at the raw response sheet you will see that for each of the 10 words there is a meaning written alongside. You have to assign a code number to this meaning if one does not exist already. Do this as follows:

a) Check for special cases first. These are:

   * Code 999 - missing values
   If there is no mark next to the word then the response is a missing value. Write in code 999

   * Code 900 - don't know
   If there is any sort of mark that has been written in by the respondent then this is a don't know. Write in code 900

b) Check if a code number for the meaning already exists by looking at the data code sheet for the particular word. If so then you can proceed to 5d) and write the code number on the computer coding form.

c) If no code exists for the meaning then you have to assign a code to it. Do this by writing the whole meaning on the data code sheet alongside the lowest available code number. (If in any doubt about assigning a new code, e.g. if two meanings are nearly the same, then assign a new code - we can always amalgamate code numbers later but we cannot expand them !)

d) Now take the computer coding form and in the 3 boxes directly following the word number write in the meaning code number.
   N.B. All codes should be written as 3 digits. Thus if you have a code '3' this should be written on the computer coding form '003'.

7) Now repeat the whole of step 6) for the next word on the raw response sheet until you have completed all 10 words on the sheet.

8) When you have finished coding all the data on a raw response sheet

then start a new coding sheet with the same random arrangement of words starting at step 2)

9) When you have finished coding all the raw response sheets for the particular random arrangement then take a new random arrangement with the new raw response sheets and start again at step 1).

10) Finally when you have coded all the data return it to us as quickly as possible preferably by hand.

APPENDIX VIII

Instructions given to recode judges in the main study.

RECODING WORD MEANINGS

DESCRIPTION OF TASK

Over a period of ten weeks last summer we ran a large field study involving about 1000 members of the general public each week. Our aim has been to test the comprehension of a series of safety related words, around 500 hundred in number. In the survey we stressed that we wished to find out what the respondents thought a word might mean in the context of a safety label on a potentially harmful household product, and each respondent was asked to write down their own interpretation of the meaning of a group of ten words.

In analysing the responses of all our people in the survey, the large number of possible answers creates significant analysis problems. We get round this by getting 'judges' such as yourself to categorise answers according to some predetermined rules.

In our case this involves classifying the responses according to a graded set of categories defined by the:

> 'likelihood of the respondent behaving correctly given their meaning response to a given word.'

What we ask is that you look at the responses and ask yourself:

> "If this is what they think the word means, how likely is it that they would behave properly?"

1. Certain
2. Very likely
3. Likely
4. Marginally likely
5. Unlikely

To put it another way we do not assess the accuracy of the respondent's definition of a safety word but rather the appropriateness of their likely behaviour if that is what they think a given word means.

For example, if someone had said that the word 'poison' meant 'Do not drink' they would not be strictly correct; however it would be likely that they would behave appropriately given their understanding of the word.

If on the other hand someone said that 'poison' meant 'a liquid that could kill you if drunk', then it would be certain that they would behave appropriately given their understanding of the word.

You are also likely to find other types of response which do not fit into any of the above categories.

6. Wrong
7. Inappropriate response

6. Category wrong

You should assign responses to this category if you think there is no possibility of the respondent making the correct behaviour.

7. Category inappropriate response

In some cases our respondents have misconstrued the context and given what is a correct meaning, but not the one which would apply in the safety context. Categorise these responses as : 7. Inappropriate context.

To help you with the task, we have defined a satisfactory meaning for each word in the context of safety and this appears at the top of each word responses list. Directly beneath this is a context phrase illustrating a typical usage of the word. Whenever in doubt about a code for a response ask yourself:

"If this is what they think the word means, how likely is it that the person would behave correctly in a safety situation?"

and then generate your categorisation accordingly.

APPENDIX IX

Main study. Alphabetical tabulation of the 500 test words.

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
1	Abrasive	22222222222222222222222233333444 55 UUUUUUUUUU	177	15.8				
2	Absorb	11111111111111111111111111122333444 55 UUUUUUUUUU	168	16.5			V	
3	Accident	11222222333333333333444444444444 55 UUUUUUUUUUUUUU	166	10.3			V	
4	Accordance	1112222222333333334444 UUUUUUUUUUUUUUUUUUUUUUUUUUU	157	19.0				
5	Accurately	11111111122222222222233333333345 UUUUUUUUUUUUUUUUUU	168	12.6				
6	Acid	11111112222222222222223333333333344444455 UUUUU	151	20.1				
7	Activate	11111111111111111111112334555555 UUUUUUUUUUUUUUUU	178	13.2				
8	Add	11111222222222223333333344444445 UUUUUUUUUUUUUUUU	163	13.2				
9	Additional	11111111111112222222222223334445 UUUUUUUUUUUU	185	12.3				
10	Adequate	11111111111111111111122223333333445 UUUUUUUUUUU	175	10.8				
11	Adhesion	11111111111111112222222222345 UUUUUUUUUUUUUUUU	154	15.9				
12	Adhesive	12222233333333333333333333333333333344UUUUUUUUUU	174	16.4				
13	Adverse	111111122233444445 UUUUUUUUUUUUUUUUUUUUUUUUUUU	154	23.5	I			
14	Advice	22223333333333333333444444444445555 UUUUUUUUUUUU	142	25.2		A		
15	Agent	123333333444444445 UUUUUUUUUUUUUUUUUUUUUUUUUUU	* 92	52.9	I			
16	Alkali	12222233333333333344455 UUUUUUUUUUUUUUUUUUUUUU	197	6.2				G
17	Allow	11111111111111112233333344555 UUUUUUUUUUUUUUU	186	12.3		A		
18	Appliances	22222222223333333333333444444444 UUUUUUUUUUUUU	167	13.4				
19	Application	222222223333333333333333444444455 UUUUUUUUUUU	139	29.4	I		V	
20	Apply	11111111111111111111113333333444455 UUUUUUUUUU	150	26.2	I	A		
21	Asbestos	11111122222233333333333334444444455 UUUUUUUUUUUU	162	12.4				
22	Aspirate	11111123333445 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	138	25.6				
23	Attachment	11111122222233333333333333334444445 UUUUUUUUUUUUUUU	155	16.2		A		
24	Attempt	11111111111111111111111111111123355 UUUUUUUUUUUU	164	17.2				

Table A9.1 The 500 test words sorted alphabetically

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
25	Attention	1112222222222222223333333333333334444455 UUUUUUUU	169	10.7				
26	Automatic	11111111111111222222334444455 UUUUUUUUUU	163	16.0				
27	Avoid	1111122222222333333333333333344444444445555 UUUUUU	169	7.6				
28	Barrier	22233333333333344444444445 UUUUUUUUUUUUUU	153	20.3		A	V	
29	Below	11111111111111111111112333444444445 UUUUUUUUUUUU	150	19.4				
30	Beneath	111111111111111111111111111111334 UUUUUUUUUUUU	181	11.8				
31	Best	11111112222222222333344444 UUUUUUUUUUUUU	184	13.2				
32	Between	112333333333333333444455 UUUUUUUUUUUUUUUUUU	175	14.2				
33	Bleach	22222222222222223333333333333333333333333344444455U	185	3.1				
34	Bond	11111222222222222222223333344444 UUUUUUUUUUUUUU	158	13.1			V	G
35	Bottle	1111111111112222223333333333333344444445555UUUUUUU	175	19.9		A		
36	Box	22222222222223333333344444444555 UUUUUUUUUUUUUU	173	18.8				G
37	Breathe	11111111111122223333333344444445 UUUUUUUUUUUUUU	169	17.7				
38	Buggy	111111111111112233334444444 UUUUUUUUUUUUUUU	183	12.9				
39	Burns	11111111122222222222222233333333333344455 UUUUUUU	172	13.1				
40	Capacity	1111111112222222222222233333333444444 UUUUUUUUUU	162	19.0				
41	Carefully	11111111111112222223333333444444444555 UUUUUUUUU	172	14.0				
42	Certified	22222333333333333333333333444 UUUUUUUUUUUUUUUUUU	142	27.7	I			
43	Characteristics	11222223333333334444445 UUUUUUUUUUUUUUUUUUUUUUUU	167	15.8			V	
44	Charge	1111112222222222444 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 77	61.1	I			
45	Chemical	22223333333333333333333333333444444455 UUUUUUUUUUUU	162	19.5			V	
46	Circumstances	1111111122222223333344444555 UUUUUUUUUUUUUUUUUU	162	16.4				
47	Cleaning	11112333333333444444444444445 UUUUUUUUUUUUUUU	154	23.4				
48	Cleansing	122222222222222223333333333333444445 UUUUUUUUUUU	168	20.9				

Table A9.1 The 500 test words sorted alphabetically (continued).

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
49	Closure	1111111111222222222233333444455555 UUUUUUUUUUUUU	155	19.8				
50	Combustible	11111111111111122233333333344444 UUUUUUUUUUUUUUUU	166	15.3				
51	Compatible	22222333333333444455 UUUUUUUUUUUUUUUUUUUUUUUUUU	163	17.3				G
52	Completely	1111111111112222333333333344444445 UUUUUUUUUUUUUUUUU	150	18.3				
53	Composition	11111222222333333333333333445 UUUUUUUUUUUUUUUUUUUU	148	26.5	I			G
54	Compound	11111111111111223334445555 UUUUUUUUUUUUUUUUUUUUU	155	23.7	I			
55	Conditions	1123334444445555 UUUUUUUUUUUUUUUUUUUUUUUUUUUUU	131	34.2	I			
56	Confined	11112222222222222222333344445 UUUUUUUUUUUUUUUUU	163	18.1				
57	Connections	22222222222233333334444444444555 UUUUUUUUUUUUUUUU	154	23.0				
58	Consult	1111111111111111111111222222222333333444 UUUUUUUUU	176	8.8				
59	Contact	11111111111111111111223333333444 UUUUUUUUUUUUUUUUU	144	25.6	I			
60	Container	1111111111111222222222223333333333334444445 UUUUUU	163	16.4				
61	Contamination	11111111112222333333333334444444444555 UUUUUUUUU	178	12.3				G
62	Contents	1111111111111111111112333333344445555 UUUUUU	155	18.4				
63	Convenient	12222222222222222222223333333344555 UUUUUUUUUUUUU	144	23.4				
64	Copious	11111122333345 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	182	9.5				
65	Corrosive	1111122222222222222333333333333444444445 UUUUUUUU	169	11.6				G
66	Cover	11111111111223333333344444445555 UUUUUUUUUUUUUU	148	25.2	I		V	
67	Cumulative	11222222222333333333444 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	186	11.5				
68	Cure	1111111222222222222233333334444445 UUUUUUUUUUUUUUU	177	10.7				
69	Current	11111111111111111111111222223344 UUUUUUUUUUUUU	111	44.2	I			G
70	Cut	11111111111111111111222223333333445 UUUUUUUUUUUUU	158	21.0	I			
71	Damage	1111111111111112222223333333333444444455 UUUUUUUUU	157	19.5		A		
72	Damp	11111111111111111111111122223334444455 UUUUUUUU	179	10.1		A		

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
73	Dangerous	1111111111111222222222222233333333333334445UUUUUUU	163	17.8				
74	Decomposition	11111111111111222222223334 5 UUUUUUUUUUUUUUUUUUUUUUU	168	18.0				
75	Defective	1111111111111111111112222222233333 4 UUUUUUUUUUUUUU	173	12.7				
76	Delay	11111111112222222333333334444444555 UUUUUUUUUUUU	165	18.9			V	
77	Depending	12233444455 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	108	44.1	I			
78	Depress	11111111111111111111222333333444455 UUUUUUUUUUUUUUU	122	38.7	I			
79	Described	1111111111111222333334444444445 UUUUUUUUUUUUUUUUUUU	174	15.2				
80	Designed	11111111122222223333333334444455 UUUUUUUUUUUUUUUUUU	171	21.2				
81	Deteriorate	1111222222233333333333444444444444455 UUUUUUUUUUU	160	16.8				G
82	Development	1111111222333444555 UUUUUUUUUUUUUUUUUUUUUUUUUUU	128	35.5	I	A		
83	Diagram	11111111111111111112333333344444555 UUUUUUUUUUUUUU	177	16.1				
84	Dilution	111111111111111122223333333333333445 UUUUUUUUU	172	14.5				
85	Direct	11111111122234444455555 UUUUUUUUUUUUUUUUUU	168	14.8				
86	Directions	1111111111111222222222222233333333444444444 UUUU	170	11.0				
87	Discharge	12222222223333344444555 UUUUUUUUUUUUUUUUUUU	133	23.0	I		V	
88	Discomfort	11111111112333333333333333333444444444 UUUUUUUUU	157	21.7				
89	Disconnect	1111111111111111222222222233333333333333344 UUUUUU	172	12.8			V	G
90	Dispersed	1112222223333444444555 UUUUUUUUUUUUUUUUUUUU	160	18.8				
91	Dispose	11111111111111111111111111111111112334445 UUU	179	13.6			V	
92	Doctor	11111111111122222223333333344444444455 UUUUUUUUUU	180	12.2			V	
93	Drains	22222233333333334444444444555 UUUUUUUUUUU	168	10.6				
94	Dries	11222223333344444444 UUUUUUUUUUUUUUUUUUUUUUUU	145	21.3	I			
95	Drink	11122222233333334444444444444445 UUUUUUU	171	18.2				
96	Dry	1111111111111222222333344444 55 UUUUUUUUUUUUUU	172	12.8				

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
97	Durable	1111111111111111111111111111122345 UUUUUUUUUUUUUU	181	9.5				
98	Dust	11111111122222222222222333334444555 UUUUUUUUUU	151	27.4	I			
99	Easily	22222233333333333334444444555555 UUUUUUUUUUUU	175	17.1				
100	Eat	11111111111111111111222222222233344444 UUUUUUUUU	171	16.3				
101	Effective	11111222222222222233333333333334445 UUUUUUUUUU	154	12.5				
102	Electrical	22222222333344444444444444444445555555 UUUUUUUUUUU	150	21.9		A		
103	Eliminated	1111112222333334444444444444445555 UUUUUUUUUUUUU	169	20.7		A		
104	Emergency	11223333333333333333333344444455555 UUUUUUUUUU	161	17.9				
105	Emetic	11111345 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	170	15.5				
106	Employed	1111111111111111111111113 UUUUUUUUUUUUUUUUUUUU	*80	60.8	I			
107	Empty	11111111111222222222333333333333445 UUUUUUUUUUUU	170	19.5		A		
108	Enclosed	11111111222222222222222222233333344445 UUUUUUU	193	6.8			V	
109	Energise	1111111222222333344444455 UUUUUUUUUUUUUUUUUUUUUU	175	13.9				
110	Ensure	11111111111111111112222223333333355 UUUUUUUUUUUU	184	12.4			V	G
111	Equipment	22222222222233333333333444444555 UUUUUUUUUUUUUUUU	168	18.5				
112	Especially	1111112222333333333444445 UUUUUUUUUUUUUUUUUUUUUUUU	159	14.5				
113	Essential	11111111111111112222222222233333344445 UUUUUUUUUU	154	14.5				G
114	Exceed	1111112222222333333344445555 UUUUUUUUUUUUUUU	166	17.0				
115	Except	111122333333333444455 UUUUUUUUUUUUUUUUUUUU	175	13.3				
116	Excess	11111111111111111112222233444444444455 UUUUUUUUUUUU	171	21.2		A		
117	Exclude	112333333333333333333344444444555 UUUUUUUUUUUUU	170	15.0		A		
118	Existing	11111111111111222222223344555 UUUUUUUUUUUUUUUUU	173	11.8				G
119	Expert	1111122223333333333333333344444444455555 UUUUUUUUUU	164	18.4				
120	Explosion	22222222333333333333444444444444445 UUUUUUUU	163	18.1				

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
121	Exposed	1111111111111111223333444444455 UUUUUUUUUUUU	166	13.6		A		G
122	Exterior	11111111111111111111111111122223334445 UUUUUUUUUU	170	16.3				
123	Extinguisher	1111111111111111111223333333333333333333335 UUUUU	166	11.3			V	
124	Face	1112222222222223333444444455 UUUUUUUUUUUUUUUU	151	22.9				
125	Failure	12222222233333333333334445555 UUUUUUUUUUUUUUU	152	14.1				G
126	Fastenings	1111111111111222222222223333333455 UUUUUUUUUUU	189	7.8				G
127	Faults	11111111111112222233333333444445 UUUUUUUUUUUUU	178	12.8				
128	Figures	111111111111111133445 UUUUUUUUUUUUUUUUUUUUUUUU	150	15.9			V	
129	Fill	12222233333333333344444455555 UUUUUUUUUUUUUUUUU	149	21.2				
130	Finish	11111111111111111111111111112234455 UUUUUUUUUUUU	150	23.5	I			
131	Fire	1111111111112222222222222222222333333345 UUUUUU	181	13.5				
132	Fixed	11111222222223333333333333333444 UUUUUUUUUUUUUUU	144	21.8			V	
133	Flames	1112222222222222222222222222222222223333334445 UUU	172	16.6				
134	Flammable	11111111111111111111111111111111122333444444 UUU	172	14.9				
135	Flash	233333333344444444444 UUUUUUUUUUUUUUUUUUU	140	30.9	I			G
136	Flashpoint	11111222223333333444455 UUUUUUUUUUUUUUUUUUU	186	10.0				G
137	Fluid	111111111111111111111111123333333333444445 UUUUUU	175	17.4				
138	Following	1111111111111111111122334444455 UUUUUUUUUUUUUUUUU	160	19.2				
139	Food	11111111111111111111111111233334444455 UUUUUUUU	157	14.7				
140	Foodstuffs	1111111111111111112222334445 UUUUUUUUUUUUUUUU	164	19.8				
141	Formulated	33333333333333333444445555 UUUUUUUUUUUUUUUUUUU	176	16.2				
142	Free	111112334444444455 UUUUUUUUUUUUUUUUUUUUUUU	* 69	62.5	I			
143	Friable	112334 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	161	16.2				
144	Friction	1111111111112222233333344444555 UUUUUUUUUUUUUUU	147	21.4				

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
145	Fumes	1111111122222222233333333333333333334444444 UUUUUUU	171	11.4			V	G
146	Fumigate	11111233333333333333333344444444455 UUUUUUUUUUUU	173	14.4				
147	Functional	1111111111112223333333333445 UUUUUUUUUUUUUUUU	170	19.0				
148	Gases	12222222222223333333333334444444555 UUUUUUUUUUUUU	163	20.6				G
149	Gauge	1111111111122333333333444444 UUUUUUUUUUUUUUUUUU	161	17.9				G
150	Generously	11111122222223333333333333334444445 UUUUUUUUUUUU	152	24.4	I		V	
151	Glass	111111111111111111111111111122222223333333 UUUU	177	15.8	I			
152	Glazing	22222222222222222222222223333344 UUUUUUUUUUUUU	141	28.5	I			
153	Glue	1111111111222223333333333333344444444445 UUUUUUU	192	10.2				
154	Goggles	11111111111111222222222222222333334444 UUUUUUUUU	164	21.2				G
155	Government	1111111111111122233333333344444445 UUUUUUUUUUUU	161	21.0		A	V	
156	Grease	11111111111111222233333344444444445 UUUUUUUUUUUU	155	15.9				
157	Handling	22222233333333333444444444444455 UUUUUUUUUUUUUUU	166	15.3				
158	Harmful	111111111111111111111111122222333333333444 UUUU	158	14.1				
159	Harmless	1111111111111111111111111111122223333445 UUUUU	148	22.0				
160	Hazard	11111111111111111333333333333333333334445 UUUUUUUU	164	16.3			V	
161	Health	1111111111233333344444445555 UUUUUUUUUUUUU	165	14.6				
162	Help	11111111111112223333333444445 UUUUUUUUUUUUUUUUUUU	164	13.7			V	
163	Hot	112222222222222233333333333333333445 UUUUUUUUUUU	167	14.9		A		
164	Humans	1111111111111111111111111112245 UUUUUUUUUUU	167	18.1				
165	Humidity	11111111111122334445 UUUUUUUUUUUUUUUUUU	166	14.4				
166	Hygroscopic	2 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	165	16.3				G
167	Hypersensitivity	1111111111122223344455 UUUUUUUUUUUUUUUUUUUUUUUUUU	180	11.3			V	
168	Ignition	11111111111111112333344444444455 UUUUUUUUUUU	112	46.9	I			G

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
169	Immediately	111111111111111111111111111111122334555 UUUUUUUUU	148	20.5				
170	Immerse	1111222222222333333333333334444 UUUUUUUUUUUUUUU	174	14.8				
171	Impermeable	1111223445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	165	18.8				
172	Impervious	1111133334445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	168	15.7				
173	Implement	11112222334444455 UUUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 88	54.4	I			
174	Important	11111111111111111222222223333445 UUUUUUUUUUUUUU	185	10.2				
175	Impregnated	1112222222233333334445 UUUUUUUUUUUUUUUUUUUUUUUUU	169	15.0				
176	Incandescent	3333334445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	176	15.4				G
177	Incinerate	11111111111111111111111111111112233335 UUUUUU	172	13.2			V	
178	Including	11111111111111122333333345555 UUUUUUUUUUUUUUUUU	154	23.0	I	A		G
179	Incorporated	1111111111112233333333334445 UUUUUUUUUUUUUUUUUU	165	15.4	I			
180	Incorrect	11111111111111111111111111111112233444 UUUUUU	168	11.1				
181	Increase	1111111112222222222223344444444444455 UUUUUUUUUU	176	18.1				
182	Indicated	11111111111111111111111122333345555 UUUUUUUUUUUU	175	13.9				
183	Individual	1111111111112222222222223333333445 UUUUUUUU	173	18.9	I			
184	Indoors	11111222222222333333333344444444444555 UUUUUUUUU	166	22.6		A		G
185	Induce	1111111111122233334444 UUUUUUUUUUUUUUUUUUUUUUUU	168	13.9		A		
186	Industrial	11112222222223333333344444445555 UUUUUUUUUUUUU	175	15.9		A		
187	Inert	11122222334445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	170	16.3				G
188	Inflammable	11111111111111111111111222222233333333344445 UUU	165	10.9				
189	Information	1111222222222233333333333333334444445 UUUUUUUUUUU	159	14.1				
190	Infrared	12222333334444444444445555 UUUUUUUUUUUUUUUUUUUUU	159	18.1				
191	Ingestion	1223333334555 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	168	17.3				
192	Ingredient	22222222233333333444444444444455 UUUUUUUUU	172	13.2				G

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
193	Inhalation	11111111111111111111122222223333445 UUUUUUUUUUUU	165	13.2				
194	Inhibit	1122333333333444 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	164	14.1				
195	Injurious	11111111111111111111111112333334445 UUUUUUUUUUUUU	175	10.3				
196	Injury	11222222222222333333333333344444455 UUUUUUUUUUU	174	13.5				
197	Inside	1111112222223333334444445 UUUUUUUUUUUUUUUUUUUUUU	163	18.1		A		
198	Inspected	11111111111111111122222222222233333333333345 UUUUU	169	17.7				
199	Instructions	11111111111111111111111111111112223334444 UUUU	181	10.9			V	
200	Insufficient	11111111111111111111111111112333333345 UUUUUUUUU	188	8.3			V	
201	Insulating	233333333333444444444444444444555555 UUUUUUUU	146	9.9				
202	Integral	11111112333455 UUUUUUUUUUUUUUUUUUUUUUUUUUUUU	166	17.9				G
203	Intended	11111111111222223333344444444455 UUUUUUUUUUUUUUU	157	13.3			V	
204	Interfere	1111111122223333444444445555 UUUUUUUUUUUUUUUUUUUUU	145	28.7	I			
205	Interior	11111111111111111111111111111122333344 UUUUUUUUUU	146	16.7				
206	Intermittent	1111111111111222222233333444 UUUUUUUUUUUUUUUUUUUU	174	13.5			V	G
207	Internal	11111111111111111111111112333333333445555 UUUUUU	175	15.1				
208	Introduce	1113344 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	112	46.0	I			
209	Involved	11111222333333333334444 UUUUUUUUUUUUUUUUUUUUUU	162	16.1	I			
210	Irreversible	1111122222222222222334444445 UUUUUUUUUUUUUUUU	166	21.8			V	
211	Irrigate	111122222222233333455 5 UUUUUUUUUUUUUUUUUUUUUUU	162	13.4		A		G
212	Irritation	12222222222222222223333444444444444455 UUUUUUUUUU	135	34.5	I			
213	Isolate	11111111111111222222223333333333444444445 UUUUUUUU	179	11.9				
214	Item	11111111111111111122222233334555 UUUUUUUUUUUUUUU	178	12.8				
215	Keep	1111112223333444444444444444445555 UUUUUUUUUUU	161	18.8	I	A		
216	Kill	11111111111111111112222222222222333333333344 UUUUUU	168	12.5			V	

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
217	Label	1111222222222222233333333333444445 UUUUUUUUUUUUU	156	19.7				
218	Lead	11122222222333333333333344555555555 UUUUUUUUUUUUU	140	28.6	I			
219	Leads	12222222222222223333333344445 UUUUUUUUUUUUUU	150	20.7				G
220	Leaflet	1111111111111111112223333333334445 UUUUUUUUUUUU	172	14.0				
221	Leaking	122222222333333333333444444444444444555555555 U	181	7.7		A	V	
222	Level	11111111122222222222333334444444555 UUUUUUUUUUU	172	12.4		A	V	
223	Lever	223333333333444444444444445 UUUUUUUUUUUUUUUUUUU	162	23.7				
224	Liable	1111111111113334445 UUUUUUUUUUUUUUUUUUUUUUUUU	114	42.9	I			
225	Liberates	11111111111111111233445 UUUUUUUUUUUUUUUUUUUUUUUUU	168	20.0				
226	Lid	111111111111111111111111111112233333445 UUUUUUU	179	8.8				
227	Life	11222222222222233334444455 UUUUUUUUUUUUUUUU	152	28.3	I	A		
228	Lightly	1111111111111111222233334555 UUUUUUUUUUUUUUUU	175	13.9			V	
229	Likely	11111112233333333334 UUUUUUUUUUUUUUUUUUUUUUUUU	168	17.7				
230	Limited	1111111222222333333333334444555UUUUUUUUUUUUUUUUUU	148	23.8	I			
231	Liquid	11111111111111222222333333333344444455 UUUUUUUU	158	18.1				
232	Live	1111222222222333333333333333333444444444 UUUUUUU	152	27.4	I			
233	Loose	11111111112223333334444444445 UUUUUUUUUUUUUUUU	156	19.1				
234	Machines	1111111122233344444444444555555 UUUUUUUUUUUUUUUU	165	12.8			V	
235	Maintenance	11111111111111122222223333444444 UUUUUUUUUUUUUUUUU	162	19.4				
236	Make	22222223333344444445 UUUUUUUUUUUUUUUUUUUUUUUUUU	* 85	53.9	I			
237	Manufacturer	111111111111111111111111111112334444455555 UUUUUUU	161	17.9				
238	Many	11111111111111111111122333333 UUUUUUUUUUUUUUUU	159	19.3				
239	Marking	1111222222223333333444444445 UUUUUUUUUUUUUUUUUUU	169	14.7		A		
240	Material	11111111111111111111122222333333344445 UUUUUUUUUU	169	13.4		A		

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
241	Maximum	1111111111111111111111112333333344455 UUUUUU	180	9.6				
242	Measures	11111222222222233333333334444444555 UUUUUUUUU	158	19.4	I	A	V	
243	Mechanical	233333333333333344444455555 UUUUUUUUUUUUUUUUUUU	154	21.0		A		
244	Medical	1112222222222233333333333333333444445 UUUUUUUUUUU	171	10.0				
245	Membrane	11111112222222223333444445 UUUUUUUUUUUUUUUUUUU	157	16.5			V	
246	Mend	1111111111111111111112222233334444444 UUUUUUUUUU	163	21.2				
247	Metal	333333333333344444444444455555 UUUUUUUUUUUUUUU	176	16.6				
248	Method	11111111111111111111111112222233344 5 UUUUUUUUUU	159	19.7			V	
249	Microwave	22223333333333333333333333333344444455 UUUUUUUUUU	188	10.1				
250	Mild	1111111111111333333333444444555555 UUUUUUUUUU	148	21.3	I			
251	Minimum	11111111111111111111111223333334444555 5 UUUUUUUU	186	8.4				
252	Mishap	1111111111111111111111111333444 5 UUUUUUUUUUUUUUUU	145	21.7				
253	Mixed	11111111233333333333333344444 UUUUUUUUUUUUUUUUU	156	26.4	I			
254	Mixture	1111122222333333333344444444444555 UUUUUUUUUUU	181	16.7		A		
255	Moderate	233333333333333333333333334445 UUUUUUUUUUUUUUUU	139	15.1				
256	Moisture	11111111111111223333333333333334445 UUUUUUUUUUUU	168	9.8				
257	Movement	112333333333444444445 UUUUUUUUUUUUUUUUUUUUUUUUU	140	22.8	I			
258	Mutagenic	234 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	154	21.9				
259	Naked	11111111122222222222223333333333333445 UUUUUUUUU	147	20.1	I		V	
260	Nausea	1111111111111111112222234444445 UUUUUUUUUUUUUUU	145	16.2				
261	Necessary	11111111111111111111111122333344 UUUUUUUUUUUUUU	161	16.2			V	
262	Neutralise	11222222222334444444555 UUUUUUUUUUUUUUUUUUU	168	15.2				G
263	Normal	1111111111222222333333333333445 UUUUUUUUUUUUUUUU	150	23.5	I			
264	Numerous	11111111111111111111111111112334444 UUUUUUUUUUUU	171	11.9				

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
265	Objects	1111111111111111111333444 UUUUUUUUUUUUUUUUUU	159	18.5				
266	Observed	11111112222222222222222222222223334 UUUUUUUUUUUUUU	165	8.3				
267	Obtain	1111111111111111111233333333444 UUUUUUUUUUUUU	172	14.0				
268	Occasionally	11111111233333333333333333333344444455 UUUUUUUUUU	159	22.0			V	
269	Occur	1111111111111111111111111134455 UUUUUUUUUUUUUUUUU	181	9.5				
270	Odour	111111111111111111111111111111111122223334 UUUUUU	181	1.8				
271	Official	112233333333333444444455 UUUUUUUUUUUUUUUUUUUUU	153	19.0			V	
272	Often	11111111133333333333444444455 UUUUUUUUUUUUUUUU	161	21.0				
273	Omitted	1111111111111111111111222335 UUUUUUUUUUUUUUUU	178	15.7				
274	Open	22222333333344444455555 UUUUUUUUUUUUUUUUUUU	156	20.9	I	A		
275	Operating	11111111111222222222233333344445 UUUUUUUUUUUUUU	147	17.4				
276	Optimum	11222222344444 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	176	11.6			V	
277	Outdoors	11111111111111112222233333333344445555 UUUUUUUU	171	16.6				
278	Outside	1111111111111111222233333344445 UUUUUUUUUUUUUUU	178	11.0				
279	Overall	1111111111122244 UUUUUUUUUUUUUUUUUUUUU	152	26.7	I			
280	Oxidising	233333334444444555555 UUUUUUUUUUUUUUUUUUUUUUUUUU	150	23.1		A		G
281	Packaging	11111111122222222222222233333344445 UUUUUUUUUUUU	168	17.2			V	
282	Paint	22222233333333344444444455 UUUUUUUUUUUUUUUUUUUU	164	18.9				G
283	Paraffin	1111111111122222333333333333333333333333334445 UUUUU	165	11.3				G
284	Particles	11111111111111111111222222233333344 UUUUUUUUUUUUU	177	9.3				
285	Particularly	1111112222222333333444555555 UUUUUUUUUUUUUUUUUUUU	168	19.2			V	
286	Parts	11111111111113333444444445555 UUUUUUUUUUUUUUUUUUUU	172	15.7			V	
287	Paste	22222233333333333444445 UUUUUUUUUUUUUUUUUUUUUU	167	16.6				
288	Patient	11111111112223333333334 UUUUUUUUUUUUUUUUUUUUUU	131	27.2	I		V	

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
289	Penetration	22222223333333333334444444 5 UUUUUUUUUUUUUUUUU	167	20.1				
290	Perambulator	11111111111111111111111111 345 UUUUUUUUUUUUUUUUUUUU	176	16.7				
291	Performance	11222222222222333333333333 4455 UUUUUUUUUUUUUUUUUU	158	26.7	I		V	
292	Period	11111111111111111111111111 122233334445 5UUUUUUUUUUU	160	23.5				
293	Permanent	11111111111111122222222333 4444555 UUUUUUUU	160	23.6	I			
294	Permit	11111111111111111111111111 1111124445 UUUUUUUUUUUUU	123	37.8	I			
295	Persons	11111111111111111111112223 344455 UUUUUUUUUUUUUUUU	148	19.6				
296	Physician	11111111111111111111111111 11112355 UUUUUUUUUUUUUUU	165	21.1				
297	Pierce	11111111111111111122222333 3333333334445 UUUUUUUUUU	179	15.1				
298	Plenty	11111111111111111222333333 3445 UUUUUUUUUUUUUUUUU	162	17.4				
299	Poison	11111111222222222222222222 2222222223333333444 4 UUU	165	13.1				
300	Polished	11111111122222223333333333 3334444445 UUUUUUUUUUUU	158	18.1			V	
301	Porous	11222222222333333333334444 4445 UUUUUUUUUUUUUUUUU	168	15.6				
302	Position	11111111111111111111112233 34445 UUUUUUUUUUUUUUUUU	171	16.6				
303	Positive	11111111112333333344445 UUUUUUUUUUUUUUUUUUUUUUUUU	* 93	52.3	I			
304	Possible	11111111111222222222223333 3445 UUUUUUUUUUUUUUUUU	168	12.9			V	
305	Power	11111111111112222222222333 3333333444455 UUUUUUUUUU	160	12.6				
306	Practical	11333333333333333333344455 UUUUUUUUUUUUUUUUUUUUUU	156	25.9	I			G
307	Practicable	12222344444444444444445 UUUUUUUUUUUUUUUUUUUUUUUUU	169	12.5		A		G
308	Pram	11111112223334444444445555 UUUUUUUUUUUUUUUUUUUUUUU	152	22.4		A		
309	Precautions	22222222222223333333333333 3333333333344455UUUUUUUU	162	20.7				
310	Preparation	12222222222222222333333333 34444444455 UUUUUUUU	190	12.9				G
311	Prepared	11111111111111222222233333 3444455 UUUUUUUUUU	183	13.3				
312	Preservative	11111222222222333333344444 455 UUUUUUUUUUUUUUUU	167	12.6				

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
313	Pressure	122333333333333333444444444444444 UUUUUUUUUUUUUUU	142	21.0	I			
314	Prevent	11111111111111111222233333333444444455 UUUUUUUU	168	15.6				
315	Problems	1111111112233333333344445 5 UUUUUUUUUUUUUUUUUUUU	157	20.4				
316	Process	11222222223333333333334444 55 UUUUUUUUUUUUUUUU	150	21.9				
317	Produce	22222233333333333333333344445 UUUUUUUUUUUUU	168	18.6				
318	Product	1111111111111222233333444444455 UUUUUUUUUUUUUU	185	12.8				
319	Professional	11111112222233333333444444444455555 UUUUUUUUUUUUU	166	17.5				
320	Prolonged	11111111222222222233333333333444455 UUUUUUUUUUUUUUU	154	20.3				
321	Promptly	11111111111111111111222222222222333445 UUUUUUUUUUUU	163	17.2				
322	Properly	11111111111111112222222222333333334445 UUUUUUUUUUU	167	18.7				
323	Proprietary	1222222333333334444 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	167	18.6				
324	Protect	11111112222222333333333344444444444444455 UUUUUUU	183	11.7				
325	Protective	11112222333333333333333333344444444455 UUUUUUUUU	175	18.7				
326	Protruding	11111111111111111111111111112233344 UUUUUUUUUUUU	165	19.1				
327	Puncture	111111111111111111111111111111122233344 UUUUUUU	161	18.1	I			
328	Pushchair	11111111222222222222233344455 UUUUUUUUUUUUUUUUU	170	16.3				
329	Quality	444 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 56	72.2	I			
330	Quantities	11111111111111111111111111122233333344 UUUUUUUUUU	165	14.4				
331	Quick	11111111111111111111111122233344455 UUUUUUUUUUU	168	15.6				G
332	Radiant	22223333333333444444444444445555 UUUUUUUUUUUUUUU	139	28.8	I		V	
333	Range	11123333333333333444444445 5 UUUUUUUUUUUUUUU	141	22.6	I		V	
334	Rapid	11111111111111111111111111112223334 UUUUUUUUUUUU	166	18.7				
335	Reach	11111111222222333333333333344 UUUUUUUUUUUUUUUU	164	15.5				
336	Reaction	11122222233333344444444445555 UUUUUUUUUUUUUUUU	157	19.5	I	A	V	

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
337	Reasonable	12222222222222233333333344555 UUUUUUUUUUUUUUUU	153	25.4	I		V	
338	Received	11111111111111223333333344455 UUUUUUUUUUUUU	171	15.3				
339	Recharge	11111222333334444444444444445 UUUUUUUUUUUUUUUU	158	15.5		A	V	
340	Recommended	11112222222222233333333344444444555 UUUUUUUUUU	146	24.8	I	A		
341	Reconnect	11111111111111122222223333333445 UUUUUUUUUUUUU	148	22.1				
342	Reduce	11111111111111111111222334444445555 UUUUUUUUUUU	137	28.1	I	A	V	
343	Refer	111111111223333344445 UUUUUUUUUUUUUUUUUUUU	166	19.0				
344	Regularly	11111122222222222222333333333444444555 UUUUUUUU	180	8.4				
345	Regulations	11111111111111111111111222222333333445 UUUUUUUU	177	12.9				
346	Relative	1112233333344445 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	104	48.7	I			
347	Release	11111111111111111111111111111122223345 UUUUUUUUU	184	11.1				
348	Remains	1111111111111111111111112344455 UUUUUUUUUUUUUUU	173	11.8				
349	Remedy	11111111111111111111112233344 UUUUUUUUUUUUUUUUU	146	25.6	I			
350	Remembered	1111111111111112233333333344 UUUUUUUUUUUUUUUUU	178	11.0				
351	Remove	11111111111111111111112222222223344445 UUUUUUU	157	13.2				
352	Render	33333333455 UUUUUUUUUUUUUUUUUUUUUUUUU	162	19.4	I		V	
353	Repairs	12222222222222233333333333333333344445 UUUUUUUUU	144	16.8				
354	Repeatedly	11111111112222222233333333333345 UUUUUUUUUUUUUU	165	16.2				G
355	Repellent	11122222233333333444444444445555 UUUUUUUUUUUUU	162	16.4		A		
356	Replace	1111111111111111111114455 UUUUUUUUUUUUUUUU	107	47.0	I			
357	Request	11111111111111111111111122333445 UUUUUUUUUUUUU	169	11.5				
358	Required	11111111111111111222222333344444455 UUUUUUUUUUUU	165	20.8				
359	Reseal	11111111111111111222223333333333333444445 UUUUU	175	12.1				
360	Reserve	11111122222222223333333344444555 UUUUUUUUUUUUUUU	153	24.2	I			

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
361	Residual	111111111111233334 UUUUUUUUUUUUUUUUUUUUUUUUUU	166	17.0				
362	Resistant	1112222222233333333444444555 UUUUUUUUUUUUUUUUU	169	14.6				
363	Respiratory	11111111111111111111111111222233345 UUUUUUUUUUUUUUU	173	12.1				
364	Responsibility	11111223333333333333334444445 UUUUUUUUUUUUUUUUUUU	158	26.2	I			
365	Retaining	1111111111111111111111133345 UUUUUUUUUUUUUUUUUU	172	14.4				
366	Retarded	11111222222344 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	118	41.5	I			
367	Reverse	1111111222222222223333333333333333445 UUUUUUUU	185	12.3		A		
368	Right	11111111111111122234445 UUUUUUUUUUUUUUUUUUUUUU	148	26.9	I			
369	Rinse	1111111111111111122222222233334444444455 UUUUU	172	17.8				
370	Risk	11111111111111111111222233333334445555 UUUUUUUUUU	159	13.5		A		
371	Room	1111111111111223333333444 UUUUUUUUUUUUUUUUUUUU	174	13.0				
372	Rub	233333334444444444444444444455 UUUUUUUUUUUUUUUU	164	20.9				
373	Safety	2233333333333333344444444444444444444555 UUUUUUU	158	21.4		A		
374	Satisfactory	1112222222222222222222233333333333445 UUUUUUUUU	170	10.6				
375	Satisfy	123333333344444444445 UUUUUUUUUUUUUUUUUUUUUU	111	40.8	I			
376	Saturated	11111111111111122222223333333333445 UUUUUUUUUU	157	13.3				
377	Sealed	1111111112222222333333333344444444445 UUUUUU	177	11.5			V	
378	Secure	11111111111111111122233333333333344444455 UUUUUUU	173	10.4		A		
379	Seek	1111111111111111111112222222222234 UUUUUUUUUUUUUU	159	21.3				
380	Sensitive	1111222222333333333444444444444445 UUUUUUUUUUUUUU	135	34.0	I	A		
381	Separate	11111111111122233333334444444455555 UUUUUUUUUU	156	25.1	I	A		
382	Serious	12222223333333333333333334444445 UUUUUUUUUUUUUUUU	176	16.2				
383	Service	1111111222222222333344444555555 UUUUUUUUUUUUUUUU	149	24.9	I			
384	Sever	11111111111111111111111223345 UUUUUUUUUUUUUU	148	22.5				

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
385	Severe	1111111222223333333333344455 UUUUUUUUUUUUUUUUUUU	145	20.9				
386	Shaped	11111112233333344444555 UUUUUUUUUUUUUUUUUUUUUUUUUUU	173	17.3				G
387	Shield	1111111111111111112233333333333444 UUUUUUUUUUUUU	161	18.3				
388	Shock	22222222222222222222223333344444 UUUUUUUUUUUUU	136	31.3	I	A		
389	Sickness	1111111111111111111111123333445555 UUUUUUUUUUU	173	14.9				
390	Significant	11111111112222333445 UUUUUUUUUUUUUUUUUUUUUUUUUUU	176	12.0				
391	Simple	11122222222222222222222222223445 UUUUUUUUUUUUU	158	20.2				G
392	Size	1111111111111223333333333333345 UUUUUUUUUUUUUUUU	147	16.0				
393	Skin	11111111111112333333333344444444455 UUUUUUUUUU	148	20.0				
394	Slight	1111111111111111122222333345 UUUUUUUUUUUUUUUUUU	161	16.2				
395	Smell	11111111111111112223333333344444555555 UUUUUUUUUU	150	23.6		A		
396	Smoke	1111122333333333333333333333333444444 UUUUUUUU	173	13.5				
397	Smooth	11111111111111111112333344444444 UUUUUUUUUUUU	169	15.5		A		
398	Smoulder	11111111111111222222222223333333445 UUUUUUUUUUU	178	7.8				
399	Soak	1111111111111111111111111111111234455 UUUUUUU	152	19.6				
400	Solids	11111111111112333333333444444445 UUUUUUUUUUUUU	153	21.6				
401	Solution	11222222222222222222222233345 UUUUUUUUU	136	31.9	I			G
402	Solvent	1111122222233333333344444455 UUUUUUUUUUUUUUUU	183	10.7				G
403	Space	11122222222222222223333334444555 UUUUUUUUUUUUUU	173	14.4				G
404	Sparingly	1111111111111111111111111111112233344444 UUUUUUU	172	8.0				
405	Specialised	12222222222333333333334444445 UUUUUUUUUUUUUUU	178	13.7				
406	Specification	111122222333333333333444444444455 UUUUUUUUUUUUUUUU	174	17.4				G
407	Spilt	22222333333334444444555555 UUUUUUUUUUUUUUU	152	20.4				
408	Splashes	12223333333333333334444444445555 UUUUUUUUUUUUUUUU	165	14.5			V	

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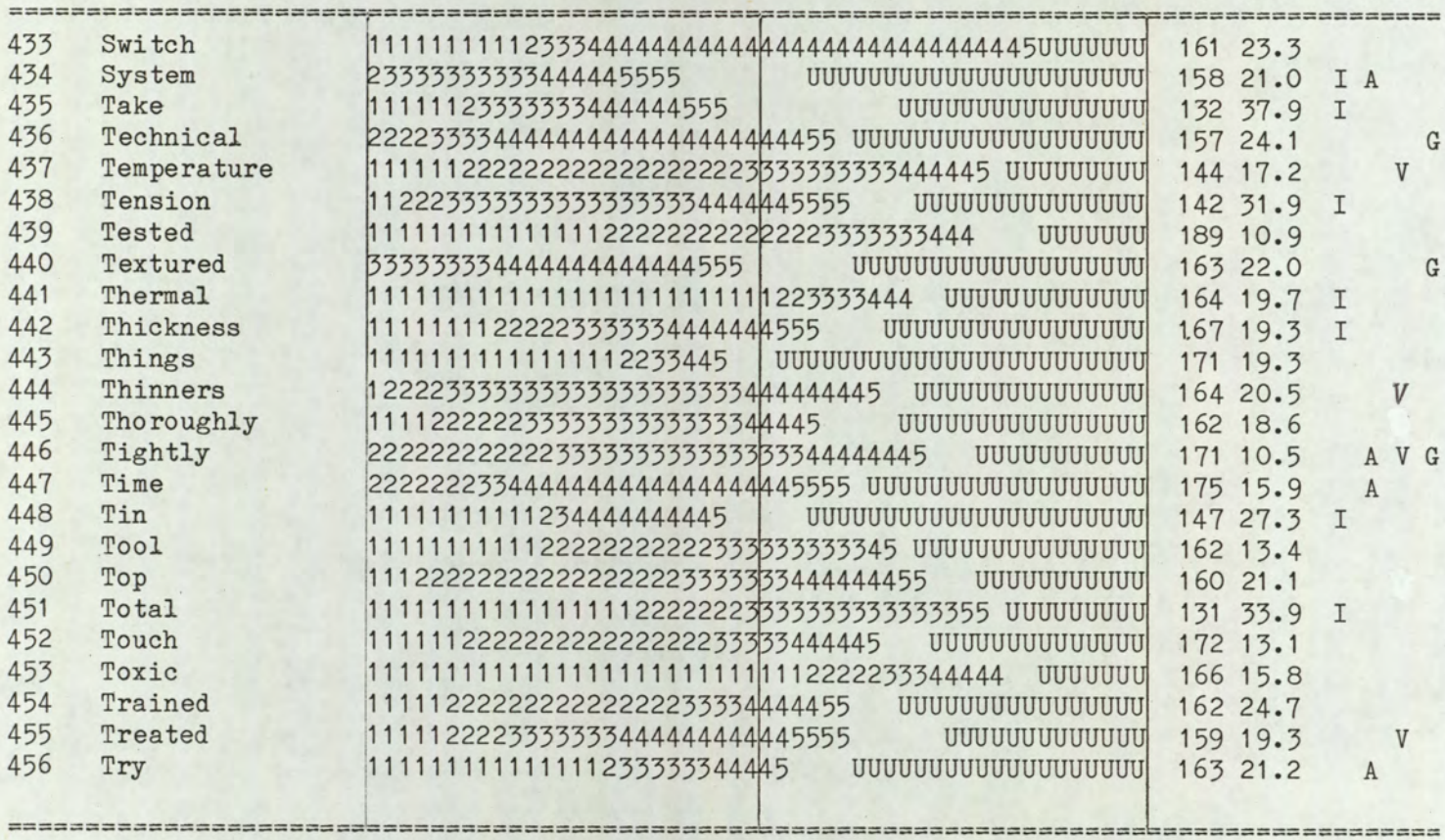
NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
409	Spontaneously	333333333333334444444455555 UUUUUUUUUUUUUUUUU	156	16.1				
410	Spray	1111222223333333344444444444455555555 UUUUUUUUUUU	169	11.6				
411	Spread	1112233333333344444444555 UUUUUUUUUUUUUUUUUUUU	155	19.3	I			
412	Squeeze	11111111111111111122222223333445555 UUUUUUUUUUU	174	14.2			V	
413	Stability	1112222222222333333333344444445 UUUUUUUUUUUUUUUUUU	142	19.9				
414	Standard	11122222222222222233333333334444444445 UUUUUUUUUU	166	16.2				
415	Starting	11111111111111111112222333444455 UUUUUUUUUUUUUU	180	13.1				
416	Sterilizing	11111111112222222222223333333333333445555 UUUUU	175	15.4		A		
417	Stir	1111122222222222222223333333333444455 UUUUUUUUUU	164	12.8			V	
418	Storage	11111111111111111222333333334444444455 UUUUUU	157	19.9		A		
419	Strain	1122222223333333334444444455 UUUUUUUUUUUUUUUUUUUU	132	29.3	I			
420	Strength	11111111222222333333333333333333444445 UUUUUUUUU	156	14.7			V	
421	Strong	1111111333333444444444444455 UUUUUUUUUUU	159	21.8	I			
422	Structure	333333333333333333334444455 UUUUUUUUUUUUUUUUUUUU	158	13.2				
423	Subsequent	11111122333344445 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	161	19.6				
424	Substance	12222333333333333344444444444445 UUUUUUUUUUUUUU	178	11.0				
425	Sufficient	11111111111111111111111111122333344 UUUUUUUUUUUUUU	163	22.0				
426	Suitable	1111111122222333333333333333444444444 UUUUUUUUUU	153	17.8				
427	Superior	11111111111111111111222222222222223445 UUUUUUU	161	10.0				
428	Supervision	1111111122222222222233333333333333333344 UUUUUUUU	183	11.6				
429	Supplied	111111112222223334445 UUUUUUUUUUUUUUUUUUUU	160	19.7		A		
430	Surfaces	11222222223333333333333334444455555 UUUUUUUUUUU	172	14.5				
431	Suspected	22222233333444444444444445 UUUUUUUUUUUUUUUUUUUU	154	15.9	I	A	V	
432	Swallowed	11111111111222222233333333333344444444 UUUUUU	179	7.7				

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
433	Switch	1111111111233344444444444444444444444444445UUUUUUU	161	23.3				
434	System	23333333333444445555 UUUUUUUUUUUUUUUUUUUUUUU	158	21.0	I	A		
435	Take	11111123333333444444555 UUUUUUUUUUUUUUUUU	132	37.9	I			
436	Technical	22223333444444444444444444455 UUUUUUUUUUUUUUUUUUU	157	24.1				G
437	Temperature	1111112222222222222222233333333333444445 UUUUUUUUU	144	17.2			V	
438	Tension	112223333333333333333444444555 UUUUUUUUUUUUUUU	142	31.9	I			
439	Tested	11111111111111122222222222223333333444 UUUUUUU	189	10.9				
440	Textured	333333334444444444444555 UUUUUUUUUUUUUUUUUUU	163	22.0				G
441	Thermal	11111111111111111111111112223333444 UUUUUUUUUUUUU	164	19.7	I			
442	Thickness	1111111122222333333444444555 UUUUUUUUUUUUUUUUU	167	19.3	I			
443	Things	11111111111111112233445 UUUUUUUUUUUUUUUUUUUUUUUU	171	19.3				
444	Thinners	12222333333333333333333444444445 UUUUUUUUUUUUUUU	164	20.5			V	
445	Thoroughly	11112222223333333333333344445 UUUUUUUUUUUUUUUU	162	18.6				
446	Tightly	22222222222233333333333333344444445 UUUUUUUUUUU	171	10.5		A	V	G
447	Time	22222223344444444444444445555 UUUUUUUUUUUUUUUUU	175	15.9		A		
448	Tin	1111111111234444444445 UUUUUUUUUUUUUUUUUUUUUU	147	27.3	I			
449	Tool	11111111111222222222233333333345 UUUUUUUUUUUUUU	162	13.4				
450	Top	11122222222222222233333333444444455 UUUUUUUUUUU	160	21.1				
451	Total	11111111111111111222222233333333333333355 UUUUUUUUU	131	33.9	I			
452	Touch	11111122222222222222233333444445 UUUUUUUUUUUUUU	172	13.1				
453	Toxic	1111111111111111111111111112222233344444 UUUUUUU	166	15.8				
454	Trained	11111222222222222223333444455 UUUUUUUUUUUUUUUU	162	24.7				
455	Treated	11111222233333334444444445555 UUUUUUUUUUUUUU	159	19.3			V	
456	Try	1111111111111112333333444 5 UUUUUUUUUUUUUUUUUU	163	21.2		A		

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
457	Turn	1111111111122222223333444444444 UUUUUUUUUUUUUUUUUU	160	20.0				
458	Ultraviolet	11222222222222333333333334444444445 UUUUUUUUUUUUU	172	14.5		A		
459	Unaffected	1111111223333333333344444 5 UUUUUUUUUUUUUUUUUUUU	156	16.1				
460	Unattended	11111111111222222222223333344444455 UUUUUUUUUU	164	19.2				
461	Undo	111111111222222222222222333334444 UUUUUUUUUUUUU	179	10.3			V	
462	Unfamiliar	1111111111111222222222223334445 UUUUUUUUUUUUUUUUUU	175	11.7				
463	Unhealthy	11111111111111222222223333333333333444444 5UUUUUUUU	179	16.4				G
464	Unless	2334444444444555555 5 UUUUUUUUUUUUUUUUUUUUUUUUUU	156	17.0				
465	Unopened	1111111111111111111111111 12223333344455 UUUUUUU	180	10.0				
466	Unprotected	11111112222222233333333333444445 UUUUUUUUUUUUU	174	16.8		A		
467	Unstable	22222333333344444444444444444555 UUUUUUUUUUUUU	158	19.9				
468	Unused	2222222222333334444455 UUUUUUUUUUUUUUUUUUUUUUUU	106	47.5	I			
469	Unwell	1111111111111111111111111111222233345 UUUUUUUUUUUU	193	7.2			V	
470	Upright	11111111111222222222223333333333334445 UUUUUUUUU	162	18.6			V	
471	Use	1222333333333333444444555 UUUUUUUUUUUUUUUUUU	174	14.3			V	G
472	Useful	22233333333333333333333333445 UUUUUUUUUUUUUUU	162	13.9			V	
473	Useless	11111111111111111111111222223333333334 UUUUUUUU	153	15.6				
474	Usually	1111111111111111111111223333444 UUUUUUUUUUUUU	166	17.0				
475	Utensils	11111111112222223333333333444444445 UUUUUUUUUU	168	12.0		A		G
476	Vapour	1111111111111111111233444444444555 UUUUUUUUU	168	16.0			V	
477	Variety	11111111111111222223333333334444555 UUUUUUUUUUUU	173	12.6		A	V	
478	Various	1111111111111111111122222222333334455 UUUUUUUUUUUU	177	9.8				G
479	Vary	11111111222222223333333333344445 UUUUUUUUUUUUU	185	10.2			V	
480	Ventilation	1111111122223333333333333333334444455 UUUUUUUUUU	179	14.8				

Table A9.1 The 500 test words sorted alphabetically (continued).

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
481	Vibration	22222222222233333333333344444445 UUUUUUUUUUUUUU	177	9.3				
482	Vicinity	11111111111111111111111111112233344 UUUUUUUUUUUUU	152	20.5	I			
483	Vigorously	11111111112223333333333344445 UUUUUUUUUUUUUUUUU	167	16.6				
484	Violently	12222333333334444444444445 UUUUUUUUUUUUUUUUUUUU	157	17.9	I			
485	Visibly	11111111112222222233333333333333445 UUUUUUUUUUUU	156	18.8				
486	Voltage	22222222222333333333333333333333334444444445 UUUUU	168	12.0				
487	Volume	11111111122222222222223333334 UUUUUUUUUUUUU	129	37.6	I			G
488	Vomiting	11111111111111111111111112222222222334555 UUUUU	181	9.5				
489	Warm	11223333333333333444444444444555 UUUUUUUUUUUU	157	20.8				
490	Warning	11111111112222222222222222222333333333344445 UUUU	174	12.2				
491	Way	11112222233334444444445 UUUUUUUUUUUUUUUUUUUUUUUUU	131	35.6	I	A		
492	Weak	11111111111222223333444444455555 UUUUUUUU	154	23.0	I			
493	Wear	11111222222222222223333333444 UUUUUUUUUUUUUUU	141	31.6	I		V	
494	Well	11122222344445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUU	124	36.4	I		V	
495	Whilst	11111111111233333344444555 UUUUUUUUUUUUUUUUUUUUUU	159	23.2			V	
496	Wide	1111111122222223333344 UUUUUUUUUUUUUUUUUUUUUU	169	19.1				
497	Withstand	11112222333333333444444444444444555 UUUUUUUUUUUUUU	148	21.8				
498	Worn	11111111112222222222333333333333334445 UUUUUUUUUUUU	162	22.1	I			
499	Wrapping	11111111111111111111111222233334445 UUUUUUUUUU	164	17.7				
500	Wrong	11111111122222222333333444445 UUUUUUUUUUUUUUUU	166	17.0				G

Table A9.1 The 500 test words sorted alphabetically (continued).

APPENDIX X

Main study. Descending tabulation of the 500 test words.

The data in the tables have been sorted from 'best' to 'worst' in terms of their comprehension as measured in the main study using taking the consensus of seven qualified judges. The sorting criterion adopted was category 3 'likely'.

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
151	Glass	1111111111111111111111111111122222223333333 UUUU	177	15.8	I			
299	Poison	1111111122222222222222222222222222233333334444 UUU	165	13.1				
133	Flames	1112222222222222222222222222222222223333334445 UUU	172	16.6				
91	Dispose	1111111111111111111111111111111111112334445 UUU	179	13.6			V	
198	Inspected	1111111111111111122222222222233333333333345 UUUUU	169	17.7				
270	Odour	1111111111111111111111111111111122223334 UUUUUU	181	1.8				
123	Extinguisher	1111111111111111112233333333333333333333335 UUUUU	166	11.3			*V*	
134	Flammable	1111111111111111111111111111111122333344444 UUU	172	14.9				
216	Kill	1111111111111111112222222222223333333344 UUUUUU	168	12.5			V	
199	Instructions	1111111111111111111111111111111112223334444 UUUU	181	10.9			V	
158	Harmful	111111111111111111111111122223333333333444 UUUU	158	14.1				
33	Bleach	22222222222222223333333333333333333333333444444555U	185	3.1				
177	Incinerate	1111111111111111111111111111111112233335 UUUUUU	172	13.2			V	
131	Fire	1111111111112222222222222222222333333345 UUUUUU	181	13.5				
283	Paraffin	1111111111222223333333333333333333333334445 UUUUU	165	11.3				G
490	Warning	1111111112222222222222222222333333333344445 UUUU	174	12.2				
180	Incorrect	1111111111111111111111111111111112233444 UUUUUU	168	11.1				
89	Disconnect	1111111111111122222222223333333333333344 UUUUUU	172	12.8			*V*	G
488	Vomiting	1111111111111111111111111222222222334555 UUUUU	181	9.5				
188	Inflammable	1111111111111111111111122222233333333444445 UUU	165	10.9				
73	Dangerous	1111111111112222222222222333333333333444 5UUUUUUU	163	17.8				
427	Superior	1111111111111111111122222222222222223445 UUUUUUU	161	10.0				
347	Release	1111111111111111111111111111111122223345 UUUUUUUUU	184	11.1				
327	Puncture	1111111111111111111111111111111122233344 UUUUUUU	161	18.1	I			

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely'

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
200	Insufficient	1111111111111111111111111111112233333345 UUUUUUUUU	188	8.3			V	
428	Supervision	1111111122222222222233333333333333344 UUUUUUUU	183	11.6				
159	Harmless	1111111111111111111111111111122223333445 UUUUU	148	22.0				
451	Total	1111111111111111222222233333333333333355 UUUUUUUUU	131	33.9	I			
473	Useless	1111111111111111111111112222233333333334 UUUUUUUU	153	15.6				
416	Sterilizing	1111111112222222222222333333333333333445555 UUUUU	175	15.4		A		
39	Burns	1111111112222222222222223333333333333344455 UUUUUUUU	172	13.1				
309	Precautions	2222222222222333333333333333333333333344455UUUUUUUU	162	20.7				
137	Fluid	1111111111111111111111111233333333333444445 UUUUUU	175	17.4				
259	Naked	1111111112222222222222233333333333333445 UUUUUUUUU	147	20.1	I		V	
12	Adhesive	1222223333333333333333333333333333333444UUUUUUUUUU	174	16.4				
226	Lid	1111111111111111111111111111112233333445 UUUUUUU	179	8.8				
58	Consult	1111111111111111111111112222222233333444 UUUUUUUUU	176	8.8				
345	Regulations	1111111111111111111111112222223333334445 UUUUUUUU	177	12.9				
439	Tested	1111111111111122222222222223333333444 UUUUUUU	189	10.9				
453	Toxic	1111111111111111111111111112222233344444 UUUUUUU	166	15.8				
367	Reverse	1111111222222222233333333333333333445 UUUUUUUU	185	12.3		A		
404	Sparingly	1111111111111111111111111111112233344444 UUUUUUU	172	8.0				
160	Hazard	1111111111111111133333333333333333334445 UUUUUUUU	164	16.3			V	
205	Interior	1111111111111111111111111111122333344 UUUUUUUUUU	146	16.7				
154	Goggles	1111111111111222222222222222233333444 UUUUUUUUU	164	21.2				G
359	Reseal	1111111111111111112222233333333333333444445 UUUUU	175	12.1				
169	Immediately	1111111111111111111111111111122334555 UUUUUUUUU	148	20.5				
330	Quantities	1111111111111111111111111112223333344 UUUUUUUUUU	165	14.4				

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely' (continued).

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
374	Satisfactory	11122222222222222222222233333333333445 UUUUUUUUU	170	10.6				
122	Exterior	11111111111111111111111111122223334445 UUUUUUUUUU	170	16.3				
399	Soak	11111111111111111111111111111111234455 UUUUUUU	152	19.6				
334	Rapid	11111111111111111111111111112223334 UUUUUUUUUUUU	166	18.7				
60	Container	11111111111122222222222333333333334444445 UUUUUU	163	16.4				
6	Acid	11111122222222222222223333333333344444455 UUUUU	151	20.1				
24	Attempt	11111111111111111111111111111123355 UUUUUUUUUUUU	164	17.2				
321	Promptly	11111111111111111112222222222222333445 UUUUUUUUUU	163	17.2				
86	Directions	11111111111112222222222223333333333444444444 UUUU	170	11.0				
469	Unwell	11111111111111111111111111122223334 5 UUUUUUUUUUU	193	7.2			V	
207	Internal	11111111111111111111111112333333333445555 UUUUUU	175	15.1				
463	Unhealthy	11111111111112222222233333333333444444 5UUUUUUUU	179	16.4				G
470	Upright	11111111112222222222223333333333334445 UUUUUUUUU	162	18.6			V	
145	Fumes	11111111222222223333333333333333334444444 UUUUUUU	171	11.4			V	G
108	Enclosed	11111111222222222222222222233333333445 UUUUUUU	193	6.8			V	
351	Remove	11111111111111111111111222222223344445 UUUUUUU	157	13.2				
297	Pierce	11111111111111111122222333333333334445 UUUUUUUUUU	179	15.1				
183	Individual	11111111111122222222222233333333445 UUUUUUUU	173	18.9	I			
482	Vicinity	11111111111111111111111111112233344 UUUUUUUUUUUUU	152	20.5	I			
126	Fastenings	11111111111112222222222233333333455 UUUUUUUUUUU	189	7.8				G
30	Beneath	11111111111111111111111111111334 UUUUUUUUUUUU	181	11.8				
25	Attention	11122222222222222333333333333333334444455 UUUUUUUU	169	10.7				
266	Observed	11111112222222222222222222222223334 UUUUUUUUUUUUU	165	8.3				
75	Defective	11111111111111111111222222223333334 UUUUUUUUUUUUU	173	12.7				

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely' (continued).

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
420	Strength	1111111122222233333333333333333333444445 UUUUUUUUU	156	14.7			V	
465	Unopened	11111111111111111111111112223333344455 UUUUUUU	180	10.0				
100	Eat	11111111111111111111222222222233444444 UUUUUUUUU	171	16.3				
486	Voltage	22222222222333333333333333333333344444444445 UUUUU	168	12.0				
379	Seek	11111111111111111111122222222234 UUUUUUUUUUUUUU	159	21.3				
248	Method	111111111111111111111111112222333445 UUUUUUUUUU	159	19.7			V	
326	Protruding	1111111111111111111111111112233344 UUUUUUUUUUUU	165	19.1				
292	Period	11111111111111111111111112223333444455UUUUUUUUUUU	160	23.5				
10	Adequate	1111111111111111111112222233333333445 UUUUUUUUUU	175	10.8				
437	Temperature	11111122222222222222223333333333444445 UUUUUUUUU	144	17.2			V	
113	Essential	1111111111111112222222222233333333444445 UUUUUUUUU	154	14.5				G
84	Dilution	111111111111111122223333333333333445 UUUUUUUUU	172	14.5				
417	Stir	11111222222222222222223333333333444455 UUUUUUUUUU	164	12.8			V	
485	Visibly	1111111111222222223333333333333445 UUUUUUUUUUU	156	18.8				
2	Absorb	11111111111111111111111111122333444455 UUUUUUUUU	168	16.5			V	
363	Respiratory	11111111111111111111111111222233345 UUUUUUUUUUUUU	173	12.1				
107	Empty	1111111111112222222223333333333334445 UUUUUUUUUUU	170	19.5		A		
241	Maximum	11111111111111111111111123333333344455 UUUUUU	180	9.6				
378	Secure	1111111111111111112223333333333344444455 UUUUUUU	173	10.4		A		
237	Manufacturer	11111111111111111111111111111233444445555 UUUUUUU	161	17.9				
322	Properly	1111111111111112222222223333333344445 UUUUUUUUUU	167	18.7				
376	Saturated	1111111111111112222222333333333445 UUUUUUUUUU	157	13.3				
70	Cut	11111111111111111111222223333333445 UUUUUUUUUUU	158	21.0	I			
284	Particles	11111111111111111111222222333333344 UUUUUUUUUUUU	177	9.3				

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely' (continued).

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
35	Bottle	11111111111122222223333333333333344444445555UUUUUUU	175	19.9		A		
499	Wrapping	1111111111111111111111112222333344445 UUUUUUUUUU	164	17.7				
425	Sufficient	11111111111111111111111111223333344 UUUUUUUUUUUUU	163	22.0				
240	Material	1111111111111111111111222223333333444445 UUUUUUUUUU	169	13.4		A		
110	Ensure	111111111111111111112222223333333355 UUUUUUUUUUUU	184	12.4			V	G
498	Worn	11111111112222222222333333333333444 5 UUUUUUUUUUU	162	22.1	I			
478	Various	1111111111111111111122222223333334455 UUUUUUUUUUU	177	9.8				G
139	Food	11111111111111111111111111233333444445 UUUUUUUU	157	14.7				
441	Thermal	1111111111111111111111111223333344 UUUUUUUUUUUUU	164	19.7	I			
449	Tool	11111111112222222222233333333345 UUUUUUUUUUUUUUU	162	13.4				
152	Glazing	22222222222222222222222223333344 UUUUUUUUUUUUU	141	28.5	I			
391	Simple	11122222222222222222222222222223445 UUUUUUUUUUUU	158	20.2				G
193	Inhalation	1111111111111111111112222223333445 UUUUUUUUUUU	165	13.2				
256	Moisture	11111111111111223333333333333334445 UUUUUUUUUUU	168	9.8				
480	Ventilation	1111111122223333333333333333334444455 UUUUUUUUU	179	14.8				
251	Minimum	11111111111111111111111233333344445555 UUUUUUUU	186	8.4				
40	Capacity	1111111122222222222222333333344444 UUUUUUUUUU	162	19.0				
398	Smoulder	11111111111111222222222233333445 UUUUUUUUUUU	178	7.8				
244	Medical	11122222222223333333333333333344444 5 UUUUUUUUUU	171	10.0				
305	Power	1111111111111222222222223333333444455 UUUUUUUUUU	160	12.6				
163	Hot	11222222222222233333333333333445 UUUUUUUUUU	167	14.9		A		
72	Damp	11111111111111111111111112222333444455 UUUUUUU	179	10.1		A		
182	Indicated	11111111111111111111111112233334555 5 UUUUUUUUUUU	175	13.9				
264	Numerous	11111111111111111111111111112334444 UUUUUUUUUUU	171	11.9				

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely' (continued).

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
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A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
101	Effective	1111122222222222223333333333333444 5 UUUUUUUUUU	154	12.5				
195	Injurious	11111111111111111111111112333334445 UUUUUUUUUUUUU	175	10.3				
353	Repairs	12222222222222233333333333333344445 UUUUUUUUU	144	16.8				
396	Smoke	11111233333333333333333333333344444445 UUUUUUUU	173	13.5				
296	Physician	11111111111111111111111111112355 UUUUUUUUUUUUUU	165	21.1				
174	Important	11111111111111111222222223333445 UUUUUUUUUUUUUU	185	10.2				
281	Packaging	11111111122222222222222233333344445 UUUUUUUUUUU	168	17.2			V	
71	Damage	11111111111111122222233333333444444455 UUUUUUUU	157	19.5		A		
220	Leaflet	11111111111111111122233333333344445 UUUUUUUUUUU	172	14.0				
231	Liquid	11111111111111222222333333333444444455 UUUUUUUU	158	18.1				
341	Reconnect	11111111111111122222223333333344445 UUUUUUUUUUUU	148	22.1				
189	Information	11112222222223333333333333333444444445 UUUUUUUUUU	159	14.1				
130	Finish	11111111111111111111111111112234455 UUUUUUUUUUU	150	23.5	I			
261	Necessary	11111111111111111111111122333344 UUUUUUUUUUUU	161	16.2			V	
331	Quick	11111111111111111111111122233344455 UUUUUUUUUU	168	15.6				G
294	Permit	11111111111111111111111111111244445 UUUUUUUUUUUU	123	37.8	I			
370	Risk	11111111111111111111122223333334445555 UUUUUUUUU	159	13.5		A		
432	Swallowed	11111111112222222333333333333344444444 UUUUUU	179	7.7				
153	Glue	11111111122222233333333333333344444444445 UUUUUUU	192	10.2				
97	Durable	11111111111111111111111111122345 UUUUUUUUUUUUUU	181	9.5				
232	Live	11112222222223333333333333333444444444 UUUUUUU	152	27.4	I			
357	Request	11111111111111111111111122333445 UUUUUUUUUUUU	169	11.5				
213	Isolate	11111111111111222222223333333444444445 UUUUUUUU	179	11.9				
65	Corrosive	11111222222222222223333333333344444445 UUUUUUU	169	11.6				G

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely' (continued).

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
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1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
387	Shield	1111111111111111112233333333334444 UUUUUUUUUUUU	161	18.3				
354	Repeatedly	1111111111222222223333333333345 UUUUUUUUUUUUUU	165	16.2				G
384	Sever	11111111111111111111111111223345 UUUUUUUUUUUUUU	148	22.5				
268	Occasionally	1111111123333333333333333333344444455 UUUUUUUUUU	159	22.0			V	
461	Undo	1111111122222222222222233333444 UUUUUUUUUUUU	179	10.3			V	
9	Additional	11111111111112222222222223334445 UUUUUUUUUUUU	185	12.3				
300	Polished	1111111122222233333333333334444445 UUUUUUUUUUUU	158	18.1			V	
412	Squeeze	11111111111111111122222223333344555 UUUUUUUUUU	174	14.2			V	
246	Mend	111111111111111111112222233334444445 UUUUUUUUUU	163	21.2				
5	Accurately	1111111112222222222223333333345 UUUUUUUUUUUUUUUU	168	12.6				
164	Humans	11111111111111111111111111112245 UUUUUUUUUU	167	18.1				
1	Abrasive	22222222222222222222222233333344455 UUUUUUUUU	177	15.8				
238	Many	11111111111111111111112233333 UUUUUUUUUUUUUU	159	19.3				
344	Regularly	1111111222222222222233333333344444555 UUUUUUUU	180	8.4				
88	Discomfort	11111111111233333333333333333444444444 UUUUUUUUU	157	21.7				
69	Current	11111111111111111111111222223344 UUUUUUUUUUUU	111	44.2	I			G
369	Rinse	1111111111111111122222222233344444444455 UUUUU	172	17.8				
314	Prevent	1111111111111111122223333333344444444455 UUUUUUUU	168	15.6				
392	Size	11111111111112233333333333333345 UUUUUUUUUUUUUU	147	16.0				
310	Preparation	12222222222222222333333333333444444444455 UUUUUUUU	190	12.9				G
249	Microwave	22223333333333333333333333333344444455 UUUUUUUUUU	188	10.1				
277	Outdoors	11111111111111112222233333333344445555 UUUUUUUU	171	16.6				
63	Convenient	12222222222222222222223333333344555 UUUUUUUUUUUU	144	23.4				
358	Required	11111111111111111122222233334444455 UUUUUUUUUUU	165	20.8				

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely' (continued).

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
11	Adhesion	1111111111111111222222222345 UUUUUUUUUUUUUUUU	154	15.9				
20	Apply	11111111111111111111113333333444555 UUUUUUUUUU	150	26.2	I	A		
34	Bond	1111122222222222222222333333444444 UUUUUUUUUUUUUUUU	158	13.1			V	G
263	Normal	11111111112222233333333333333445 UUUUUUUUUUUUUUUUU	150	23.5	I			
418	Storage	1111111111111111122233333333444444444455 UUUUUU	157	19.9		A		
298	Plenty	1111111111111111122233333333445 UUUUUUUUUUUUUUUUU	162	17.4				
477	Variety	11111111111111222223333333334444555 UUUUUUUUUUUU	173	12.6		A	V	
320	Prolonged	11111111222222222233333333333444455 UUUUUUUUUUUUUU	154	20.3				
377	Sealed	1111111111222222233333333333344444444445 UUUUUU	177	11.5			V	
98	Dust	11111111122222222222222333334444555 UUUUUUUUUU	151	27.4	I			
267	Obtain	1111111111111111111233333333444 UUUUUUUUUUUUUU	172	14.0				
48	Cleansing	12222222222222223333333333333444445 UUUUUUUUUUU	168	20.9				
132	Fixed	11111122222223333333333333333444 UUUUUUUUUUUUUUUU	144	21.8			V	
414	Standard	11122222222222222233333333334444444445 UUUUUUUUUU	166	16.2				
217	Label	11112222222222223333333333333444445 UUUUUUUUUUUUU	156	19.7				
214	Item	1111111111111111111222222333334555 UUUUUUUUUUUUUUUU	178	12.8				
196	Injury	11222222222222233333333333333344444455 UUUUUUUUUUU	174	13.5				
472	Useful	22233333333333333333333333333445 UUUUUUUUUUUUUUU	162	13.9			V	
311	Prepared	11111111111111222222223333333444455 UUUUUUUUUU	183	13.3				
150	Generously	11111122222223333333333333333444444445 UUUUUUUUUUUU	152	24.4	I		V	
170	Immerse	11112222222223333333333333333444444 UUUUUUUUUUUUUUUU	174	14.8				
487	Volume	1111111112222222222222333333334 UUUUUUUUUUUUUU	129	37.6	I			G
426	Suitable	11111111222223333333333333333444444444 UUUUUUUUUU	153	17.8				
335	Reach	1111111112222223333333333333344 UUUUUUUUUUUUUUUU	164	15.5				

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely' (continued).

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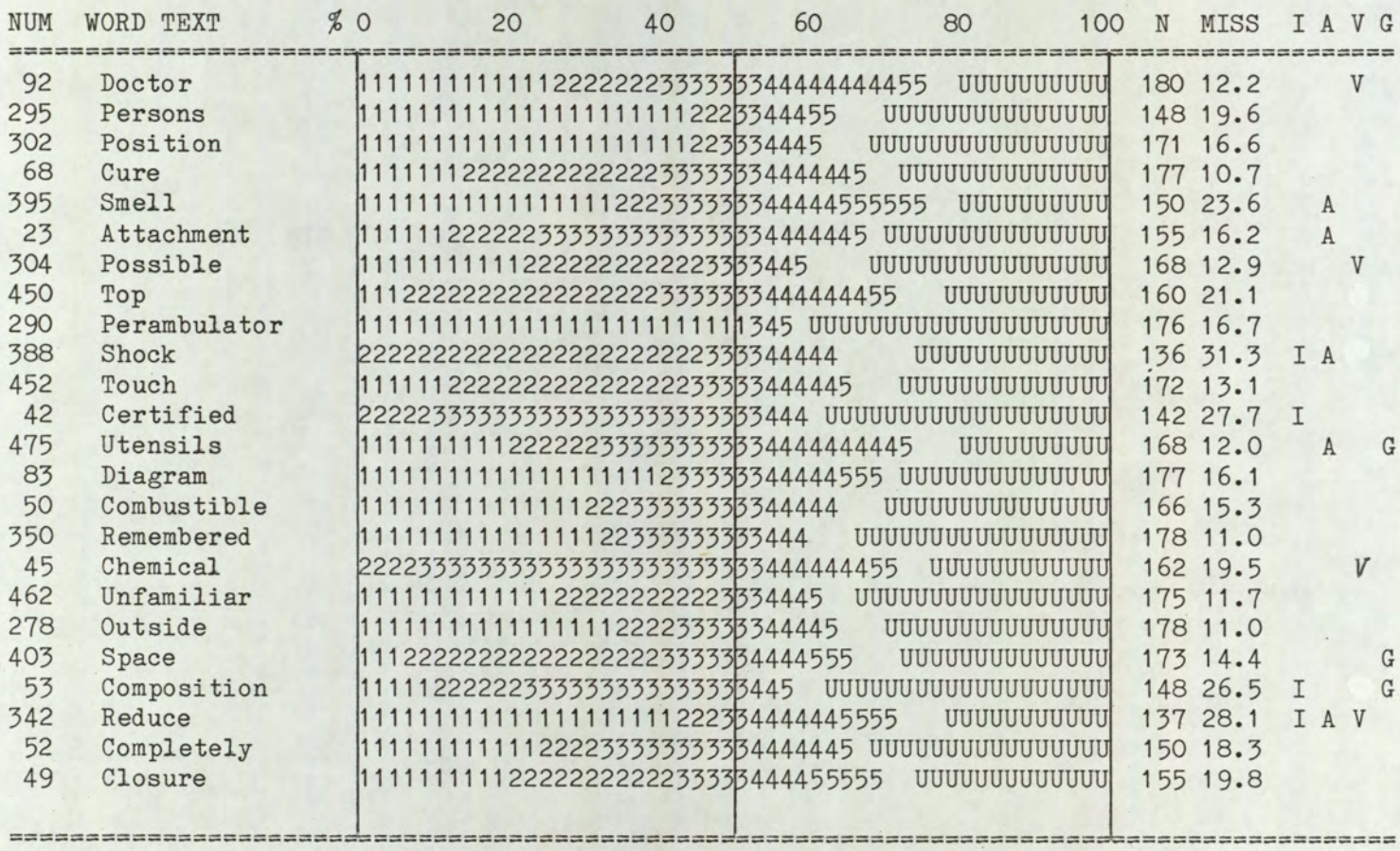
1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
27	Avoid	1111122222222333333333333333344444444445555 UUUUUU	169	7.6				
474	Usually	11111111111111111111112233344 UUUUUUUUUUUUUU	166	17.0				
78	Depress	111111111111111111112223333344445 UUUUUUUUUUUUUUU	122	38.7	I			
62	Contents	11111111111111111111233333344445555 UUUUUU	155	18.4				
349	Remedy	111111111111111111111122333444 UUUUUUUUUUUUUUUUU	146	25.6	I			
479	Vary	1111111122222222333333333344445 UUUUUUUUUUUUU	185	10.2			V	
325	Protective	11112222333333333333333333344444444455 UUUUUUUUU	175	18.7				
275	Operating	1111111111122222222223333333444445 UUUUUUUUUUUUUU	147	17.4				
293	Permanent	11111111111111112222222233334444555 UUUUUUUU	160	23.6	I			
252	Mishap	111111111111111111111111133334445 UUUUUUUUUUUUUUU	145	21.7				
59	Contact	11111111111111111111223333333444 UUUUUUUUUUUUUUUU	144	25.6	I			
389	Sickness	111111111111111111111112333334445555 UUUUUUUUUU	173	14.9				
127	Faults	11111111111122222233333333344444445 UUUUUUUUUUU	178	12.8				
446	Tightly	22222222222233333333333333344444445 UUUUUUUUUU	171	10.5		A	V	G
348	Remains	111111111111111111111111112344455 UUUUUUUUUUUUUU	173	11.8				
493	Wear	11111222222222222222333333344444 UUUUUUUUUUUUUU	141	31.6	I		V	
273	Omitted	1111111111111111111111112223335 UUUUUUUUUUUUUU	178	15.7				
401	Solution	11222222222222222222222233345 UUUUUUUUU	136	31.9	I			G
155	Government	1111111111111222333333333344444445 UUUUUUUUUUU	161	21.0		A	V	
255	Moderate	233333333333333333333333334445 UUUUUUUUUUUUUU	139	15.1				
415	Starting	11111111111111111111222223344445 UUUUUUUUUUUU	180	13.1				
460	Unattended	1111111111122222222223333344444455 UUUUUUUUU	164	19.2				
466	Unprotected	11111112222222233333333333444445 UUUUUUUUUUU	174	16.8		A		
269	Occur	111111111111111111111111134455 UUUUUUUUUUUUUU	181	9.5				

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely' (continued).

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NUM	WORD TEXT	N	MISS	I	A	V	G
92	Doctor	180	12.2			V	
295	Persons	148	19.6				
302	Position	171	16.6				
68	Cure	177	10.7				
395	Smell	150	23.6		A		
23	Attachment	155	16.2		A		
304	Possible	168	12.9			V	
450	Top	160	21.1				
290	Perambulator	176	16.7				
388	Shock	136	31.3	I	A		
452	Touch	172	13.1				
42	Certified	142	27.7	I			
475	Utensils	168	12.0		A		G
83	Diagram	177	16.1				
50	Combustible	166	15.3				
350	Remembered	178	11.0				
45	Chemical	162	19.5			V	
462	Unfamiliar	175	11.7				
278	Outside	178	11.0				
403	Space	173	14.4				G
53	Composition	148	26.5	I			G
342	Reduce	137	28.1	I	A	V	
52	Completely	150	18.3				
49	Closure	155	19.8				

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely' (continued).

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
382	Serious	12222223333333333333333344444445 UUUUUUUUUUUUUUUUU	176	16.2				
116	Excess	1111111111111111111222223344444444455 UUUUUUUUUUUUU	171	21.2		A		
340	Recommended	1111222222222222333333333344444444555 UUUUUUUUUU	146	24.8	I	A		
147	Functional	11111111111122233333333333445 UUUUUUUUUUUUUUUUU	170	19.0				
337	Reasonable	12222222222222223333333333344555 UUUUUUUUUUUUUUUUU	153	25.4	I		V	
29	Below	1111111111111111111111233344444445 UUUUUUUUUUUUU	150	19.4				
140	Foodstuffs	11111111111111111112222333445 UUUUUUUUUUUUUUUUU	164	19.8				
41	Carefully	1111111111111222222333333344444444444555 UUUUUUUUUU	172	14.0				
8	Add	1111122222222222233333333344444445 UUUUUUUUUUUUUUUU	163	13.2				
338	Received	11111111111111122333333333344455 UUUUUUUUUUUUU	171	15.3				
242	Measures	1111122222222223333333333344444445555 UUUUUUUUU	158	19.4	I	A	V	
291	Performance	112222222222223333333333334455 UUUUUUUUUUUUUUUUUU	158	26.7	I		V	
222	Level	1111111112222222222233333444444555 UUUUUUUUUUU	172	12.4		A	V	
7	Activate	11111111111111111111112334555555 UUUUUUUUUUUUUUUU	178	13.2				
394	Slight	1111111111111111222223333345 UUUUUUUUUUUUUUUUUU	161	16.2				
119	Expert	1111122223333333333333333344444444455555 UUUUUUUUUU	164	18.4				
106	Employed	11111111111111111111111113 UUUUUUUUUUUUUUUUUUU	* 80	60.8	I			
235	Maintenance	11111111111111122222223333444444 UUUUUUUUUUUUUUUU	162	19.4				
365	Retaining	11111111111111111111111333345 UUUUUUUUUUUUUUUUUU	172	14.4				
483	Vigorously	11111111112223333333333333444445 UUUUUUUUUUUUUUUUU	167	16.6				
104	Emergency	112233333333333333333333444444455555 UUUUUUUUUU	161	17.9				
138	Following	1111111111111111111112233444445 UUUUUUUUUUUUUUUUU	160	19.2				
430	Surfaces	11222222223333333333333344444555555 UUUUUUUUUUU	172	14.5				
218	Lead	111222222223333333333333344555555555 UUUUUUUUUUU	140	28.6	I			

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
458	Ultraviolet	112222222222233333333334444444445 UUUUUUUUUUUU	172	14.5		A		
61	Contamination	1111111111222233333333334444444444555 UUUUUUUU	178	12.3				G
360	Reserve	11111112222222223333333344445555 UUUUUUUUUUUUUUUU	153	24.2	I			
76	Delay	111111111122222233333333444444555 UUUUUUUUUUUU	165	18.9			V	
253	Mixed	1111111233333333333333334444 UUUUUUUUUUUUUUUUUU	156	26.4	I			
260	Nausea	11111111111111111122222344444 5 UUUUUUUUUUUUUUUU	145	16.2				
80	Designed	111111111222222233333333344455 UUUUUUUUUUUUUUUUU	171	21.2				
184	Indoors	1111122222222223333333333444444444555 UUUUUUUUU	166	22.6		A		G
21	Asbestos	11111122222233333333333334444444455 UUUUUUUUUUUU	162	12.4				
481	Vibration	22222222222233333333333344444445 UUUUUUUUUUUUUUU	177	9.3				
37	Breathe	11111111111112222333333334444445 UUUUUUUUUUUUUUU	169	17.7				
206	Intermittent	1111111111111222222233333 4 UUUUUUUUUUUUUUUUUUUU	174	13.5			V	G
179	Incorporated	11111111111112233333333334445 UUUUUUUUUUUUUUUUUU	165	15.4	I			
74	Decomposition	111111111111122222222333345 UUUUUUUUUUUUUUUUUUUU	168	18.0				
228	Lightly	11111111111111111222233334555 UUUUUUUUUUUUUUUU	175	13.9			V	
148	Gases	12222222222223333333333334444444555 UUUUUUUUUUUUU	163	20.6				G
17	Allow	1111111111111111122333333344555 UUUUUUUUUUUUUUU	186	12.3		A		
19	Application	22222222333333333333333334444444455 UUUUUUUUUUU	139	29.4	I		V	
393	Skin	11111111111111233333333334444444444555 UUUUUUUUUU	148	20.0				
397	Smooth	1111111111111111111233334444444445 UUUUUUUUUUUU	169	15.5		A		
454	Trained	11111222222222222223333444445 UUUUUUUUUUUUUUUU	162	24.7				
230	Limited	1111111222222333333333334444555UUUUUUUUUUUUUUUUUUU	148	23.8	I			
219	Leads	12222222222222223333333344455 UUUUUUUUUUUUUU	150	20.7				G
385	Severe	111111122222333333333333444455 UUUUUUUUUUUUUUUUUU	145	20.9				

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
156	Grease	1111111111111222233333344444444445 UUUUUUUUUUUU	155	15.9				
181	Increase	11111111122222222222233444444444455 UUUUUUUUUU	176	18.1				
413	Stability	11122222222223333333333444445 UUUUUUUUUUUUUUUUUU	142	19.9				
445	Thoroughly	1111222222333333333333344445 UUUUUUUUUUUUUUUUU	162	18.6				
328	Pushchair	11111111222222222222233344455 UUUUUUUUUUUUUUUUU	170	16.3				
400	Solids	1111111111111233333333344444445 UUUUUUUUUUUUU	153	21.6				
324	Protect	11111122222223333333333444444444444455 UUUUUUU	183	11.7				
96	Dry	1111111111111222222333344455 UUUUUUUUUUUUUUU	172	12.8				
178	Including	11111111111111112233333345555 UUUUUUUUUUUUUUUUU	154	23.0	I	A		G
146	Fumigate	1111123333333333333333344444444455 UUUUUUUUUUUU	173	14.4				
118	Existing	1111111111111122222222334555 UUUUUUUUUUUUUUUUU	173	11.8				G
444	Thinners	12222333333333333333333344444445 UUUUUUUUUUUUUUU	164	20.5			V	
144	Friction	1111111111111222223333334444555 UUUUUUUUUUUUUUU	147	21.4				
56	Confined	1111222222222222222333344445 UUUUUUUUUUUUUUUUU	163	18.1				
18	Appliances	22222222223333333333333344444444 UUUUUUUUUUUUU	167	13.4				
317	Produce	2222223333333333333333344445 UUUUUUUUUUUUU	168	18.6				
26	Automatic	1111111111111112222223344444555 UUUUUUUUUUU	163	16.0				
250	Mild	11111111111111333333333444444555555 UUUUUUUUUU	148	21.3	I			
125	Failure	12222222223333333333333444445555 UUUUUUUUUUUUUU	152	14.1				G
111	Equipment	222222222222333333333333444444555 UUUUUUUUUUUUUUUUU	168	18.5				
405	Specialised	1222222222223333333333344444445 UUUUUUUUUUUUUUU	178	13.7				
381	Separate	11111111111112223333333344444455555 UUUUUUUUUU	156	25.1	I	A		
121	Exposed	111111111111111112233333444444455 UUUUUUUUUUUU	166	13.6		A		G
476	Vapour	11111111111111111111233444444444555 UUUUUUUUU	168	16.0			V	

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
371	Room	1111111111111223333333444 UUUUUUUUUUUUUUUUUUU	174	13.0				
212	Irritation	12222222222222222223334444444444455 UUUUUUUUUU	135	34.5	I			
500	Wrong	1111111112222222233333444445 UUUUUUUUUUUUUUUUU	166	17.0				G
81	Deteriorate	1111222222233333333333444444444455 UUUUUUUUUUU	160	16.8				G
356	Replace	11111111111111111111144555 UUUUUUUUUUUUUUUUU	107	47.0	I			
456	Try	1111111111111112333333444 5 UUUUUUUUUUUUUUUUUUU	163	21.2		A		
457	Turn	11111111111222222233334444444 UUUUUUUUUUUUUUUUUU	160	20.0				
117	Exclude	112333333333333333333344444444555 UUUUUUUUUUUUU	170	15.0		A		
312	Preservative	11111222222222233333334444455 UUUUUUUUUUUUUUUUU	167	12.6				
265	Objects	1111111111111111111333444 UUUUUUUUUUUUUUUUUUU	159	18.5				
31	Best	11111112222222222333344444 UUUUUUUUUUUUUU	184	13.2				
318	Product	111111111111122223333344444455 UUUUUUUUUUUUUU	185	12.8				
66	Cover	1111111111112233333333444444455555 UUUUUUUUUUUUUU	148	25.2	I		V	
168	Ignition	11111111111111111233334444444455 UUUUUUUUUUU	112	46.9	I			G
162	Help	1111111111111222333333444445 UUUUUUUUUUUUUUUUUU	164	13.7			V	
301	Porous	11222222222333333333334444445 UUUUUUUUUUUUUUUUU	168	15.6				
364	Responsibility	1111122333333333333333444445 UUUUUUUUUUUUUUUUUU	158	26.2	I			
210	Irreversible	1111122222222222222233444455 UUUUUUUUUUUUUUUU	166	21.8			V	
316	Process	1122222223333333333333444455 UUUUUUUUUUUUUUUU	150	21.9				
36	Box	22222222222222333333334444444555 UUUUUUUUUUUUUUU	173	18.8				G
149	Gauge	1111111111122333333333444444 UUUUUUUUUUUUUUUUUU	161	17.9				G
79	Described	1111111111111222333334444445 UUUUUUUUUUUUUUUUUU	174	15.2				
225	Liberates	11111111111111111233445 UUUUUUUUUUUUUUUUUUUUUUU	168	20.0				
438	Tension	1122233333333333333334444445555 UUUUUUUUUUUUUUU	142	31.9	I			

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
38	Buggy	1111111111111112233334444444 UUUUUUUUUUUUUUUU	183	12.9				
186	Industrial	1111222222222333333334444444445555 UUUUUUUUUUUUUU	175	15.9		A		
288	Patient	11111111112223333333334 UUUUUUUUUUUUUUUUUUUUUUUU	131	27.2	I		V	
272	Often	1111111111333333333334444444455 UUUUUUUUUUUUUUUUU	161	21.0				
221	Leaking	12222222233333333333344444444444444555555555 U	181	7.7		A	V	
422	Structure	333333333333333333333444445 UUUUUUUUUUUUUUUUUUU	158	13.2				
406	Specification	1111222223333333333344444444455 UUUUUUUUUUUUUUUUU	174	17.4				G
319	Professional	11111112222233333333344444444445555 UUUUUUUUUUUU	166	17.5				
496	Wide	111111112222222233333444 UUUUUUUUUUUUUUUUUUUUUUUU	169	19.1				
203	Intended	1111111111122222333334444444455 UUUUUUUUUUUUUUUU	157	13.3			V	
315	Problems	11111111112233333333334444455 UUUUUUUUUUUUUUUUUUU	157	20.4				
245	Membrane	1111111222222222333344444 5 UUUUUUUUUUUUUUUUUUU	157	16.5			V	
114	Exceed	11111122222223333333444455 UUUUUUUUUUUUUUUU	166	17.0				
459	Unaffected	1111111223333333333344444 5 UUUUUUUUUUUUUUUUUUU	156	16.1				
254	Mixture	11111222223333333333444444444444555 UUUUUUUUUUU	181	16.7		A		
443	Things	1111111111111112233445 UUUUUUUUUUUUUUUUUUUUUUUUU	171	19.3				
383	Service	1111111222222222333344444455555 UUUUUUUUUUUUUUUU	149	24.9	I			
368	Right	11111111111111122234445 UUUUUUUUUUUUUUUUUUUUUUU	148	26.9	I			
227	Life	11222222222222223333444445 5 UUUUUUUUUUUUUUUU	152	28.3	I	A		
124	Face	1112222222222222333344444444455 UUUUUUUUUUUUUUU	151	22.9				
67	Cumulative	11222222222333333333344 UUUUUUUUUUUUUUUUUUUUUUUUU	186	11.5				
402	Solvent	1111122222233333333344444455 UUUUUUUUUUUUUUUU	183	10.7				G
209	Involved	111112223333333333334444 UUUUUUUUUUUUUUUUUUUUUU	162	16.1	I			
120	Explosion	22222222333333333333444444444445 UUUUUUUU	163	18.1				

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
14	Advice	22223333333333333333444444444444555 UUUUUUUUUUUU	142	25.2		A		
306	Practical	113333333333333333344455 UUUUUUUUUUUUUUUUUUUUUUUU	156	25.9	I			G
229	Likely	1111111223333333334 UUUUUUUUUUUUUUUUUUUUUUUUUU	168	17.7				
46	Circumstances	11111111222222233333444445555 UUUUUUUUUUUUUUUUUU	162	16.4				
492	Weak	1111111111122222333344444444455555 UUUUUUUU	154	23.0	I			
3	Accident	11222222333333333333444444444444455 UUUUUUUUUUUUUU	166	10.3			V	
57	Connections	22222222222233333333444444444555 UUUUUUUUUUUUUUUU	154	23.0				
285	Particularly	1111111222222233333344455555 UUUUUUUUUUUUUUUUUUUU	168	19.2			V	
211	Irrigate	11112222222222333334555 UUUUUUUUUUUUUUUUUUUUUUU	162	13.4		A		G
233	Loose	1111111111222333333444444445 UUUUUUUUUUUUUUUU	156	19.1				
289	Penetration	22222223333333333333444444445 UUUUUUUUUUUUUUUUUU	167	20.1				
128	Figures	111111111111111133445 UUUUUUUUUUUUUUUUUUUUUUUU	150	15.9			V	
239	Marking	11112222222233333333444444445 UUUUUUUUUUUUUUUUUUUU	169	14.7		A		
380	Sensitive	11112222223333333334444444444444445 UUUUUUUUUUUUUU	135	34.0	I	A		
54	Compound	1111111111111122333444555555 UUUUUUUUUUUUUUUUUUUU	155	23.7	I			
495	Whilst	111111111111233333344444555 UUUUUUUUUUUUUUUUUUUUUU	159	23.2			V	
362	Resistant	11122222222333333334444444555 UUUUUUUUUUUUUUUUU	169	14.6				
175	Impregnated	1112222222233333333445 UUUUUUUUUUUUUUUUUUUUUUUU	169	15.0				
419	Strain	11222222223333333334444444455 UUUUUUUUUUUUUUUUUUUU	132	29.3	I			
99	Easily	22222233333333333334444444555555 UUUUUUUUUUUU	175	17.1				
408	Splashes	12223333333333333334444444445555 UUUUUUUUUUUUUUUUU	165	14.5			V	
442	Thickness	1111111122222333333444444555 UUUUUUUUUUUUUUUUUU	167	19.3	I			
4	Accordance	11122222223333333444 UUUUUUUUUUUUUUUUUUUUUUUUUU	157	19.0				
16	Alkali	12222233333333333344455 UUUUUUUUUUUUUUUUUUUUU	197	6.2				G

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
185	Induce	1111111111122233334444 UUUUUUUUUUUUUUUUUUUUUUUU	168	13.9		A		
161	Health	11111111111233333344444445555 UUUUUUUUUUUUU	165	14.6				
390	Significant	1111111111222233334455 UUUUUUUUUUUUUUUUUUUUUUUUUUU	176	12.0				
32	Between	112333333333333333444455 UUUUUUUUUUUUUUUUUUUU	175	14.2				
136	Flashpoint	111112222233333333444455 UUUUUUUUUUUUUUUUUUUU	186	10.0				G
303	Positive	11111111112333333344445 UUUUUUUUUUUUUUUUUUUUUUUU	* 93	52.3	I			
129	Fill	12222233333333333444444455555 UUUUUUUUUUUUUUUUU	149	21.2				
112	Especially	111111222233333333444445 UUUUUUUUUUUUUUUUUUUUUUUUU	159	14.5				
424	Substance	122223333333333333444444444445 UUUUUUUUUUUUUU	178	11.0				
197	Inside	1111112222223333333444444556 UUUUUUUUUUUUUUUUUUUUUU	163	18.1		A		
286	Parts	11111111111113333444444445555 UUUUUUUUUUUUUUUUUUUU	172	15.7			V	
109	Energise	1111111222222333344444455 UUUUUUUUUUUUUUUUUUUUUU	175	13.9				
167	Hypersensitivity	11111111112222334445 UUUUUUUUUUUUUUUUUUUUUUUU	180	11.3			V	
333	Range	111233333333333334444444455 UUUUUUUUUUUUUU	141	22.6	I		V	
373	Safety	22333333333333333444444444444444444444555 UUUUUUU	158	21.4		A		
313	Pressure	122333333333333334444444444444444 UUUUUUUUUUUUUU	142	21.0	I			
165	Humidity	1111111111112233445 UUUUUUUUUUUUUUUUUU	166	14.4				
497	Withstand	11112222333333334444444444444555 UUUUUUUUUUUUUU	148	21.8				
489	Warm	112233333333333334444444444444555 UUUUUUUUUUUU	157	20.8				
192	Ingredient	22222222233333333444444444444455 UUUUUUUU	172	13.2				G
361	Residual	111111111111233334 UUUUUUUUUUUUUUUUUUUUUUUUUUU	166	17.0				
429	Supplied	1111111122222233344455 UUUUUUUUUUUUUUUUUUUU	160	19.7		A		
355	Repellent	11122222233333333444444444455555 UUUUUUUUUUUUU	162	16.4		A		
141	Formulated	333333333333333334444455555 UUUUUUUUUUUUUUUUUUU	176	16.2				

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
410	Spray	1111222223333333344444444444455555555 UUUUUUUUUUU	169	11.6				
95	Drink	11122222233333333444444444444444445 UUUUUUU	171	18.2				
157	Handling	22222223333333333444444444444455 UUUUUUUUUUUUUUU	166	15.3				
343	Refer	111111111223333344445 UUUUUUUUUUUUUUUUUUUUU	166	19.0				
28	Barrier	22233333333333333444444444445 UUUUUUUUUUUUUUU	153	20.3		A	V	
471	Use	12223333333333333444444455555 UUUUUUUUUUUUUUUUUU	174	14.3			V	G
204	Interfere	11111111222233333444444445555 UUUUUUUUUUUUUUUUUUUU	145	28.7	I			
44	Charge	111111222222222444 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 77	61.1	I			
455	Treated	11111222233333334444444444445555 UUUUUUUUUUUUUU	159	19.3			V	
336	Reaction	1112222223333333444444444445555 UUUUUUUUUUUUUUUUU	157	19.5	I	A	V	
43	Characteristics	11222223333333334444445 UUUUUUUUUUUUUUUUUUUUUUUUU	167	15.8			V	
224	Liable	1111111111113334445 UUUUUUUUUUUUUUUUUUUUUUUUUU	114	42.9	I			
287	Paste	2222223333333333444445 UUUUUUUUUUUUUUUUUUUUUUUU	167	16.6				
87	Discharge	12222222222333334444555 UUUUUUUUUUUUUUUUUUU	133	23.0	I		V	
93	Drains	22222233333333334444444444555 UUUUUUUUUUU	168	10.6				
243	Mechanical	233333333333333344444445555 UUUUUUUUUUUUUUUUUUU	154	21.0		A		
279	Overall	11111111111122244 UUUUUUUUUUUUUUUUUUUU	152	26.7	I			
282	Paint	22222333333333344444444455 UUUUUUUUUUUUUUUUUUUU	164	18.9				G
468	Unused	222222222233333444455 UUUUUUUUUUUUUUUUUUUUUUU	106	47.5	I			
103	Eliminated	1111112222333334444444444444445555 UUUUUUUUUUUUU	169	20.7		A		
115	Except	111122333333333444455 UUUUUUUUUUUUUUUUUUU	175	13.3				
386	Shaped	11111112233333344444555 UUUUUUUUUUUUUUUUUUUUUUUU	173	17.3				G
323	Proprietary	122222333333334444 UUUUUUUUUUUUUUUUUUUUUUUUUU	167	18.6				
271	Official	112233333333333444444445555 UUUUUUUUUUUUUUUUUUU	153	19.0			V	

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
85	Direct	1111111111222344445555 UUUUUUUUUUUUUUUUUU	168	14.8				
433	Switch	11111111112333444444444444444444444444445UUUUUUU	161	23.3				
262	Neutralise	11222222222333444444555 UUUUUUUUUUUUUUUUUUU	168	15.2				G
411	Spread	1112233333333344444444555 UUUUUUUUUUUUUUUUUUU	155	19.3	I			
51	Compatible	22222333333333444555 UUUUUUUUUUUUUUUUUUUUUUU	163	17.3				G
234	Machines	11111111222333444444444445555555 UUUUUUUUUUUUUUU	165	12.8			V	
435	Take	1111112333333344444555 UUUUUUUUUUUUUUUUU	132	37.9	I			
409	Spontaneously	333333333333334444444455555 UUUUUUUUUUUUUUUUU	156	16.1				
484	Violently	12222333333333444444444445 UUUUUUUUUUUUUUUUUUU	157	17.9	I			
47	Cleaning	111123333333334444444444444445 UUUUUUUUUUUUUUU	154	23.4				
332	Radiant	22223333333333444444444444445555 UUUUUUUUUUUUUUU	139	28.8	I		V	
90	Dispersed	1112222223333444444555 UUUUUUUUUUUUUUUUUUUU	160	18.8				
339	Recharge	11111222333334444444444444444445 UUUUUUUUUUUUUUU	158	15.5		A	V	
201	Insulating	233333333333334444444444444444455555 UUUUUUUU	146	9.9				
308	Pram	1111111222333444444444555555 UUUUUUUUUUUUUUUUUUUUU	152	22.4		A		
194	Inhibit	1122333333333444 UUUUUUUUUUUUUUUUUUUUUUUUU	164	14.1				
215	Keep	11111122233334444444444444444445555 UUUUUUUUUUU	161	18.8	I	A		
247	Metal	33333333333334444444444444455555 UUUUUUUUUUUUUUU	176	16.6				
448	Tin	1111111111123444444445 UUUUUUUUUUUUUUUUUUUUUUU	147	27.3	I			
82	Development	1111111222333444555 UUUUUUUUUUUUUUUUUUUUUUUUU	128	35.5	I	A		
421	Strong	11111113333334444444444444455 UUUUUUUUUUU	159	21.8	I			
407	Spilt	22222333333334444444555555 UUUUUUUUUUUUUUU	152	20.4				
491	Way	11112222233334444444445 UUUUUUUUUUUUUUUUUUUUUUU	131	35.6	I	A		
102	Electrical	22222222333344444444444444445555555 UUUUUUUUUU	150	21.9		A		

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
223	Lever	2233333333334444444444444445 UUUUUUUUUUUUUUUUUUU	162	23.7				
467	Unstable	22222333333344444444444444444555 UUUUUUUUUUUU	158	19.9				
366	Retarded	11111222222344 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	118	41.5	I			
423	Subsequent	111111223333444 5 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	161	19.6				
257	Movement	1123333333334444444445 UUUUUUUUUUUUUUUUUUUUUUUUU	140	22.8	I			
13	Adverse	1111111222334444445 UUUUUUUUUUUUUUUUUUUUUUUUUU	154	23.5	I			
94	Dries	11222223333344444444 UUUUUUUUUUUUUUUUUUUUUUUU	145	21.3	I			
64	Copious	11111122333345 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	182	9.5				
274	Open	22222333333344444555555 UUUUUUUUUUUUUUUUUUU	156	20.9	I	A		
236	Make	22222223333344444445 UUUUUUUUUUUUUUUUUUUUUUUUUUU	* 85	53.9	I			
22	Aspirate	11111123333445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	138	25.6				
431	Suspected	22222233333444444444444445 UUUUUUUUUUUUUUUUUUUU	154	15.9	I	A	V	
375	Satisfy	12333333333444444444445 UUUUUUUUUUUUUUUUUUUUUU	111	40.8	I			
346	Relative	1112233333344445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUU	104	48.7	I			
202	Integral	11111112333455 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	166	17.9				G
434	System	23333333333444445555 UUUUUUUUUUUUUUUUUUUUUU	158	21.0	I	A		
173	Implement	11112222334444455 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 88	54.4	I			
190	Infrared	122223333344444444444455555 UUUUUUUUUUUUUUUUUUU	159	18.1				
187	Inert	11122222334445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	170	16.3				G
135	Flash	23333333334444444444 UUUUUUUUUUUUUUUUUU	140	30.9	I			G
191	Ingestion	1223333334555 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	168	17.3				
494	Well	11122222344445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	124	36.4	I		V	
447	Time	22222223344444444444444445555 UUUUUUUUUUUUUUUUU	175	15.9		A		
276	Optimum	11222222344444 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	176	11.6			V	

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NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
15	Agent	123333333444444445 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 92	52.9	I			
172	Impervious	1111133334445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	168	15.7				
142	Free	111112334444444455 UUUUUUUUUUUUUUUUUUUUUUUUUU	* 69	62.5	I			
280	Oxidising	233333334444444555555 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	150	23.1		A		G
436	Technical	22223333444444444444444444455 UUUUUUUUUUUUUUUUUUUU	157	24.1				G
440	Textured	333333334444444444444555 UUUUUUUUUUUUUUUUUUUU	163	22.0				G
372	Rub	233333334444444444444444444455 UUUUUUUUUUUUUUUUU	164	20.9				
352	Render	33333333455 UUUUUUUUUUUUUUUUUUUUUUUUUUU	162	19.4	I		V	
171	Impermeable	1111223445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	165	18.8				
307	Practicable	1222234444444444444445 UUUUUUUUUUUUUUUUUUUUUUUUUU	169	12.5		A		G
55	Conditions	1123334444445555 UUUUUUUUUUUUUUUUUUUUUUUUUUUUU	131	34.2	I			
105	Emetic	11111345 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	170	15.5				
176	Incandescent	3333334445 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	176	15.4				G
77	Depending	12233444455 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	108	44.1	I			
143	Friable	112334 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	161	16.2				
208	Introduce	1113344 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	112	46.0	I			
464	Unless	233444444444455555555 UUUUUUUUUUUUUUUUUUUUUUUUUU	156	17.0				
258	Mutagenic	234 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	154	21.9				
166	Hygroscopic	2 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	165	16.3				G
329	Quality	444 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 56	72.2	I			

Table A10.1 The 500 test words sorted from best to worst at category 3 'likely' (continued).

APPENDIX IX

FORTRAN programs written for the study

The first five were written for the the PDP11/34 where most of the data manipulation was carried out:

1) Program written to generate a list of 60 random balanced sequences of numbers between 1 and 25. The list was used later to index words and generate the questionnaires.

2) Program written to randomise and produce questionaires used in the main study.

3) General program used to generate coding proformas and allow for data input with checking.

4) Consensus program for analysing the judges data they had categorised the verbatim responses.

5) Program used to generate the comprehesive data tabulations with the marginal tabulations.

In addition there was one short program written on the HARRIS 500:

6) Program to match demographic data to raw data using the case number as the common field.

1) Program written to randomise data

```
C
C       CSLRAN.FTN
C
C PROGRAM TO GENERATE BALANCED LISTS OF 10 NUMBERS DRAWN FROM A POOL OF
C 25 NUMBERS WITH NON-REPLACEMENT AFTER 2 USES OF A GIVEN NUMBER I.E.
C NUMBERS ARE SELECTED FROM 2* THE 25 NUMBER LIST TO CREATE A BALANCED
C LIST WITH THE PROVISO THAT NO TWO NUMBERS MAY APPEAR IN THE SAME OUTPUT
C LISTS OF 10 NUMBERS. TO DO THIS THE PROGRAM NECESSARILY MUST LOOP.A LOOP
C COUNTER SET TO 200 DETERMINES THE LIKELIHOOD OF ACHEIVING THE DESIRED
C RANDOM ARRANGEMENT. IF NO RANDOM ARRANGEMENT HAS BEEN FOUND BY THE 200
C LOOP THEN IT IS HIGHLY UNLIKELY THAT ONE WILL BE FOUND. THE PROGRAM WILL
C THEN ABANDON THE CURRENT SEARCH AND START AGAIN.
C
C THIS PROGRAM WAS WRITTEN FOR THE BRITISH MARKET RESEARCH BUREAU SURVEY
C ON THE SAFETY LABELLING OF CONSUMER PRODUCTS.
C
C       IAIN R.GRAYDON
C       UNIVERSITY OF ASTON
C       5TH MAY 1982
C
        IMPLICIT INTEGER (A-Z)
        REAL RND,SEED,NLST
        DIMENSION RANARR(10,5),ARRCHK(25)
C
C OPEN OUTFILE
C
        OPEN(UNIT=1,NAME='RANFIL.OUT',TYPE='NEW')
C
C ASK FOR RANDOM SEED - DEFAULT TO SYSTEM CLOCK AS SEED
C
        SEED = 0.0
C
        NUM=INT(RND(SEED)*25.)+1
        WRITE(1,*)'RANDOM SEED USED WAS ',SEED
C
C INTERROGATE FOR NUMBER OF 10 ELEMENT LISTS REQUIRED
C
 10     WRITE(5,1400)
 1400   FORMAT(1X,'HOW MANY 10-ELEMENT RANDOM LISTS DO YOU REQUIRE ?'/
     1  1X,'NUMBER MUST BE DIVISIBLE BY 5 TO CREATE BALANCED LISTS.')
        READ(5,*)NLST
        NUMLST=INT(NLST)
        IF(NLST/5.0.EQ.FLOAT(NUMLST)/5.0)GOTO 15
        WRITE(5,1300)
 1300   FORMAT(1X,'THE NUMBER OF LISTS IS NOT DIVISIBLE BY 5 AND WILL NOT',
     1        'THEREFORE PRODUCE BALANCED LISTS.TRY AGAIN')
        GOTO 10
C
C INITIALISE ARRAYS
C
 15     DO 500 N=1,NUMLST/5
 20     DO 30 I=1,5
```

```
          DO 30 J=1,10
 30         RANARR(J,I)=0
          DO 40 J=1,25
 40       ARRCHK(J)=0
C
C START RANDOMISATION LOOP
C
          DO 300 I=1,5
            DO 300 J=1,10
            LPCNT=0
 60         NUM=INT(RND(SEED)*25.)+1
C
C CHECK NUMBER OF LOOP-BACKS TO RND - IF MORE THAN 200 THEN RESTART
C
            LPCNT=LPCNT+1
            IF(LPCNT.GT.200)GOTO 20
C
C CHECK IF NUMBER HAS ALREADY BEEN USED IN THIS RUN
C
            IF(ARRCHK(NUM).GE.2)GOTO 60
            DO 70 M=1,10
 70           IF(RANARR(M,I).EQ.NUM)GOTO 60
            ARRCHK(NUM)=ARRCHK(NUM)+1
            RANARR(J,I)=NUM
 300     CONTINUE
C
C WRITE OUT RANDOM SEQUENCES TO LINE PRINTER
C
 350     DO 400 K=1,5
           SEQNUM = (N*5)-5 + K
         WRITE(1,1100)SEQNUM,(RANARR(L,K),L=1,10)
 1100    FORMAT(1X,'RANDOM SEQUENCE ',I3,6X,10(I2,1X))
 400     CONTINUE
C
C LOOP BACK TO TOP UNTIL DESIRED NUMBER OF LISTS HAS BEEN PRODUCED
C
 500     CONTINUE
C
C CLOSE OUTPUT FILE
C
         CLOSE(UNIT=1)
         STOP
         END
```

2) Program used to produce questionaires used in the main study

```
C
C       BMRBPRNT.FTN
C
C IAIN R. GRAYDON
C DEPARTMENT OF APPLIED PSYCHOLOGY
C UNIVERSITY OF ASTON IN BIRMINGHAM
C
C MAY 14 1982
C
C WRITTEN FOR BMRB SURVEY OF SAFETY WORD COMPREHENSION
C
C PROGRAM ACESSES A SERIES OF 60 RANDOM SEQUENCIES GENERATED BY CSLRAN.FTN.
C EACH SEQUENCE CONTAINS 10 INTEGERS SELECTED FROM A INTEGER POOL COMPRISING
C 1 TO 25 INCLUSIVE.EACH INTEGER APPEARS TWICE IN EVERY 5 RANDOM SEQUENCIES
C AND NEVER APPEARS TWICE IN THE SAME SEQUENCE.
C
C THE INTEGERS ARE SUBSEQUENTLY USED AS SUBSCRIPTS FOR ACCESSING THE ITH
C ELEMENT OF AN 20 BYTE ARRAY CONTAINING A SAFETY WORD.THIS WORD IS THEN
C OUTPUT WITH THE APPROPRIATE PRINT SIZE IN A TEN WORD LIST WITH INSTRUCTIONS.
C THE TEN WORDS ARE ARRANGED IN ORDER OF INCREASING PERCEIVED DIFFICULTY.
C
C EVERY TEN ELEMENTS COMPRISE A RANDOM LIST OF TEN WORDS SELECTED FROM THE
C 25 WORD POOL.THIS ENDS A PROCESSING CYCLE AND THE WHOLE OPERATION IS
C REPEATED FOR THE NEXT RANDOM LIST OF 10 ELEMENTS UNTIL ALL 60 SEQUENCIES
C HAVE BEEN CREATED.
C
        IMPLICIT INTEGER (A-Z)
        LOGICAL YES
        BYTE ESC,SPACE,DSH,FILNAM(14),INSFIL(14),DSHARR(51),DUMMY
        BYTE WRDARR(20,25,2),INSARR(80,15)
        INTEGER RANARR(10,60),WRDNUM(25,2),WRDDIF(25,2)
        DATA ESC,DSH,SPACE,TAB/27,'_',' ',9/
C
 10     DO 50 IDSH=1,51
 50       DSHARR(IDSH)=DSH
C
C OPEN INPUT FILE FOR RANDOM SEQUENCIES
C
        WRITE(5,*)'WHAT IS THE NAME OF THE RANDOM SEQUENCE FILE ?'
 60     CALL READFN(5,FILNAM)
        OPEN(UNIT=1,NAME=FILNAM,TYPE='OLD',ERR=80,READONLY)
        GOTO 90
 80     WRITE(5,*)'FILE DOES NOT EXIST - RETYPE.'
        GOTO 60
C
C DUMMY READ
C
 90     READ(1,1400)DUMMY
 1400   FORMAT(24X,A1)
        DO 100 IRAN=1,60
          READ(1,1000)(RANARR(J,IRAN),J=1,10)
 1000     FORMAT(25X,10(1X,I2))
```

```
 100    CONTINUE
C
C OPEN INSTRUCTION FILE FOR INPUT TO INS ARRAY
C
       WRITE(5,*)'WHAT IS THE INSTRUCTION FILE NAME ? (BMRB5.TXT)'
 110   CALL READFN(5,INSFIL)
       OPEN(UNIT=4,NAME=INSFIL,TYPE='OLD',ERR=120,READONLY)
       GOTO 130
 120   WRITE(5,*)'FILE DOES NOT EXIST - RETYPE.'
       GOTO 110
 130   DO 140 LINES=1,15
         READ(4,1500)(INSARR(CHARS,LINES),CHARS=1,80)
 1500    FORMAT(80A1)
 140   CONTINUE
C
C OPEN INPUT FILES FOR FIRST 50 WORDS I.E 2*25 AND INPUT TO WORD ARRAY
C
       DO 300 I=1,2
 210     WRITE(5,*)'WHAT IS THE NAME OF WORD FILE NO. ',I,' ?'
         CALL READFN(5,FILNAM)
         OPEN(UNIT=2,NAME=FILNAM,TYPE='OLD',ERR=220,READONLY)
         GOTO 230
 220     WRITE(5,*)'FILE DOES NOT EXIST. RETYPE.'
         GOTO 210
 230     DO 290 J=1,25
           READ(2,1100)WRDNUM(J,I),(WRDARR(K,J,I),K=1,20),WRDDIF(J,I)
 1100      FORMAT(1X,I3,1X,20A1,I1)
 290     CONTINUE
C
C CLOSE INPUT FILES
C
 300   CLOSE(UNIT=2)
       CLOSE(UNIT=1)
       CLOSE(UNIT=4)
C
C ASK FOR BATCH (OR WEEK) NUMBER
C
       WRITE(5,*)'WHAT IS THE BATCH WEEK NUMBER FOR THIS RUN ? (I2)'
       READ(5,1600)WKNUM
 1600  FORMAT(I2)
C
C OPEN OUTPUT FILE AND START MAIN CONTROL LOOP
C
       DO 400 I=1,2
         WRITE(5,*)'WHAT DO YOU WANT TO CALL OUTPUT FILE',I,' ?'
 310     CALL READFN(5,FILNAM)
         OPEN(UNIT=3,NAME=FILNAM,TYPE='NEW',ERR=320)
         GOTO 330
 320     WRITE(5,*)'FILENAME ALREADY USED - TYPE ANOTHER.'
         GOTO 310
 330     DO 390 J=1,60
           WRITE(3,2000)ESC
 2000      FORMAT('1',A1,'[2w',1X,32X,'BMRB (ASTON UNIV.) WORD STUDY'
    1             ,32X,'I'/)
```

```
            WRITE(3,2100)WKNUM,I,J
 2100       FORMAT(1X,7X,'CODE :',I2,':',I1,':',I2,':',12X,
     1      'QUESTIONNAIRE NO.'//,1X,7X,'UNDERSTANDING SAFETY LABELS'/)
C
C WRITE OUT INSTRUCTIONS
C
 340        WRITE(3,2101)((INSARR(CHARS,LINES),CHARS=1,80),LINES=1,9)
 2101       FORMAT(1X,2X,'1.',3X,80A1/1X,7X,80A1/1X,7X,80A1//1X,7X,
     1      80A1//1X,7X,80A1//1X,7X,80A1/1X,7X,80A1//1X,7X,80A1//1X,
     2      7X,80A1//)
            DO 380 DIF=1,5
              DO 380 K=1,10
                ELNUM=RANARR(K,J)
                IF(WRDDIF(ELNUM,I).NE.DIF)GOTO 380
C
C FIND LENGTH OF STRING IN WORD ARRAY
C
                DO 350 LENTST=20,1,-1
                  IF(WRDARR(LENTST,ELNUM,I).NE.SPACE)GOTO 360
 350            CONTINUE
 360            NCHRS=LENTST
C
C FIND NUMBER OF DASHES TO BE PRINTED AFTER WORD TO REACH RIGHT MARGIN
C
                NDASH=51-NCHRS
C
C PRINT WORD NUMBER,WORD AND DASHES
C
                WRITE(3,2200)ESC
 2200           FORMAT(1X,A1,'[8w')
                WRITE(3,2300)WRDNUM(ELNUM,I),(WRDARR(WORD,ELNUM,I),
     1             WORD=1,NCHRS),(DSHARR(M),M=1,NDASH)
 2300           FORMAT(1X,2X,'(',I3,')',1X,51A1/)
 380          CONTINUE
              WRITE(3,2103)ESC
 2103         FORMAT(1X,A1,'[2w')
            WRITE(3,2102)((INSARR(CHARS,LINES),CHARS=1,80),LINES=10,15)
 2102       FORMAT(1X,2X,'2.',3X,80A1//1X,7X,80A1/1X,7X,80A1/1X,7X,80A1
     1      /1X,7X,80A1//1X,2X,80A1/1X,55X,'----------------------'/
     2      1X,55X,'I OFFICE USE         I',17X,'I'/1X,55X,
     3      '----------------------')
 390      CONTINUE
C
C CLOSE OUTPUT FILE AND RESET PRINTER TO DEFAULT PRINT SIZE
C
          WRITE(5,2400)ESC
 2400     FORMAT(1X,A1,'[w')
          CLOSE(UNIT=3)
 400    CONTINUE
C
C RESTART Y/N ?
C
        WRITE(5,*)'DO YOU WISH TO RESTART ? Y/N '
        CALL ASKYN(5,YES)
```

```
IF(YES)GOTO 10
STOP 'END OF RUN'
END
```

3) General administrative program.

```
C
C ***************************************************************************
C       BMRBGEN.FTN
C ***************************************************************************
C
C Iain R. Graydon
C Applied Psychology Department
C University of Aston
C Birmingham
C
C Version 2.1
C 20th Nov 1983
C Mod 2.1 includes routine to input supplementary data from SPS runs
C
C A generalised program to carry out most of the processing necessary
C for the BMRB safety word study. The program calls various specialised
C subroutines.
C
C       Luns used :
C               LUN1 - INPUT FILES
C               LUN2 - INPUT FILES
C               LUN3 - OUTPUT FILES
C               LUN4 - OUTPUT FILES
C               LUN5 - TI:              interactive dialogue
C               LUN6 - LP:              listing printer
C
C
C       Subroutines used :
C                600 PRECOD (1) Generate computer pre-codes
C                700 CODGEN (2) Generate word code sheets
C                800 CODDES (3) Input code descriptions
C                900 GENREC (4) Generate recode pro formas
C               1000 RECDAT (5) Input recode judge data
C               6000 SPLDAT (6) Input supplementary data
C
C ***************************************************************************
C Common variables
C
        IMPLICIT INTEGER (A-Z)
        COMMON WRDARR,RANARR,WRDNUM,WRDDIF,WKNUM,NBATCH,INSARR,FILNAM
        COMMON WRDFIL,DESFIL,DATFIL,RECFIL,PREFIL
        COMMON SPLFIL
        BYTE WRDARR(20,25),INSARR(80,15),FILNAM(10)
        BYTE WRDFIL(14),DESFIL(14),DATFIL(14),RECFIL(14),PREFIL(14)
        BYTE SPLFIL(14)
        INTEGER RANARR(10,60),WRDNUM(25),WRDDIF(25),WKNUM,NBATCH
C
C ***************************************************************************
C Local variables
C
        LOGICAL YES
        BYTE ESC,DUMMY
```

```
      BYTE SPACE,DSH,DSHARR(51)
      BYTE BUF(80)
      INTEGER ELNUM,SEQEL(10)
      DATA ESC,DSH,SPACE,TAB /27,'_',' ',9/
C
      CALL PAGE(5)
C
C Open input file for random sequencies
C
      IRUN=0
 10   IF(IRUN.GE.1)GOTO 60
      OPEN(UNIT=1,NAME='RANFIL.OUT',TYPE='OLD',ERR=30,READONLY)
      GOTO 40
 30   WRITE(5,*)'Unable to find "RANFIL.OUT" - copy file to disc'
      GOTO 9999
C
C Dummy read
C
 40   READ(1,1400)DUMMY
 1400 FORMAT(24X,A1)
      DO 50 IRAN=1,60
        READ(1,1500)(RANARR(J,IRAN),J=1,10)
 1500   FORMAT(25X,10(1X,I2))
 50   CONTINUE
C
C Ask for week number
C
 60   WRITE(5,*)'What week are you processing ? '
      READ(5,5400)WKNUM
 5400 FORMAT(I2)
C
C Set up filename prototype and add ascii null string for rooting
C
 210    WRITE(5,*)'Enter the filename prototype (i.e 9 chars max) :'
        READ(5,215)(FILNAM(ICHR),ICHR=1,9)
 215    FORMAT(9A1)
        FILNAM(10)=0
C
C Use string concatenation string to set up all filenames
C
        CALL CONCAT(FILNAM,'.WRD',WRDFIL,14)
        CALL CONCAT(FILNAM,'.DES',DESFIL,14)
        CALL CONCAT(FILNAM,'.DAT',DATFIL,14)
        CALL CONCAT(FILNAM,'.PRE',PREFIL,14)
        CALL CONCAT(FILNAM,'.REC',RECFIL,14)
        CALL CONCAT(FILNAM,'.SPL',SPLFIL,14)
C
C Open input files for words i.e 2*25 and input to word array
C
        OPEN(UNIT=2,NAME=WRDFIL,TYPE='OLD',ERR=220,READONLY)
        GOTO 230
 220    WRITE(5,*)'File does not exist. retype.'
        GOTO 210
 230    DO 290 J=1,25
```

```
            READ(2,2230)WRDNUM(J),(WRDARR(K,J),K=1,20),WRDDIF(J)
 2230       FORMAT(1X,I3,1X,20A1,I1)
 290      CONTINUE
C
C Close input files
C
 300    CLOSE(UNIT=2)
        CLOSE(UNIT=1)
C
C       Select option ?
C
        CALL PAGE(5)
 500    WRITE(5,5500)
 5500   FORMAT(1X,'Enter option number required:'//
     1  1X,5X,'(1) Generate computer pre-codes'//
     2  1X,5X,'(2) Generate word code sheets'//
     3  1X,5X,'(3) Input code descriptions'//
     4  1X,5X,'(4) Generate recode pro formas'//
     5  1X,5X,'(5) Input recode judge data'//
     6  1X,5X,'(6) Input Supplementary data'//
     7  '$','Enter option : ')
        READ(5,5510)IOPT
 5510   FORMAT (I1)
        IF (IOPT.LT.1.OR.IOPT.GT.6)GOTO 550     ! IOPT not in range
C
C       Goto apropriate subroutine
C
        GOTO (1000,2000,3000,4000,5000,6000)IOPT
C
C If none of these then report error
C
 550    WRITE(5,*)'Error - option not in range. Retype'
        GOTO 500
C
C Access subroutines
C
 1000   CALL PRECOD
        GOTO 9000
 2000   CALL CODGEN
        GOTO 9000
 3000   CALL CODDES
        GOTO 9000
 4000   CALL GENREC
        GOTO 9000
 5000   CALL RECDAT
        GOTO 9000
 6000   CALL SPLDAT
        GOTO 9000
 9000   CONTINUE
C
C Reset printer and restart routines
C
C Restart Y/N ?
C
```

```
        IRUN = IRUN + 1
        WRITE(5,*)'Do you wish to restart ? Y/N '
        CALL ASKYN(5,YES)
        IF(YES)GOTO 10
 1300   STOP 'End of run'
 9999   STOP 'Due to filename error'
        END
C
C ***************************************************************************
C        SUBROUTINE PRECOD
C ***************************************************************************
C
C Iain R. Graydon
C Applied Psychology Department
C University of Aston
C Birmingham
C
C Version 2.0
C 25th Feb 1983
C
C Written to aid coders in the BMRB survey of safety word comprehension
C
C Subroutine acesses a series of 60 random sequencies generated by CSLRAN.FTN
C Each sequence contains 10 integers selected from a integer pool comprising
C 1 to 25 inclusive.Each integer appears twice in every 5 random sequencies
C and never appears twice in the same sequence.
C
C The integers are subsequently used as subscripts for accessing the ith
C element of an 20 byte array containing a safety word.This word is then
C output with the appropriate print size in a ten word list with instructions.
C The ten words are arranged in order of increasing perceived difficulty.
C
C Every ten elements comprise a random list of ten words selected from the
C 25 word pool.This ends a processing cycle and the whole operation is
C repeated for the next random list of 10 elements until all 60 sequencies
C have been created.
C
        SUBROUTINE PRECOD
C
C ***************************************************************************
C Common variables
C
        IMPLICIT INTEGER (A-Z)
        COMMON WRDARR,RANARR,WRDNUM,WRDDIF,WKNUM,NBATCH,INSARR,FILNAM
        COMMON WRDFIL,DESFIL,DATFIL,RECFIL,PREFIL
        BYTE WRDARR(20,25),INSARR(80,15),FILNAM(10)
        BYTE WRDFIL(14),DESFIL(14),DATFIL(14),RECFIL(14),PREFIL(14)
        INTEGER RANARR(10,60),WRDNUM(25),WRDDIF(25),WKNUM,NBATCH
C
C ***************************************************************************
C Local variables
C
        BYTE ESC,SPACE,DSH,DSHARR(51),DUMMY
        BYTE BUF(80),BCHNUM
```

```
        INTEGER ELNUM,SEQEL(10)
        DATA ESC,DSH,SPACE,TAB/27,'_',' ',9/
C
C Open output file, spool to top of form
C and set up vertical and horizontal pitch
C for each file
C
          OPEN(UNIT=3,NAME=PREFIL,TYPE='NEW')
C
C Start processing
C
          WRITE(5,500)(PREFIL(ICHR),ICHR=1,14)
 500      FORMAT(1X,'Writing batch to file ',14A1)
 330      WRITE(3,3000)ESC,ESC,ESC
 3000     FORMAT('1',A1,'[44t',A1,'[6z',A1,'[3w')
          DO 390 J=1,60
C
C Write heading and week/batch/list nos to top of coding form
C
            WEEK=WKNUM
            IF(WKNUM.EQ.10)WEEK=0
            BCHNUM=FILNAM(7)
            WRITE(3,2100)WKNUM,BCHNUM,J
 2100       FORMAT('1'////'----------'/1X,'I',I2,':',A1,':',I2,'I'/1X,
     1                  '----------'/)
            WRITE(3,2200)J
 2200       FORMAT(1X,10X,'IAIN R. GRAYDON',40X,':LPS5480',9X,' EXT 4910'
     1            /1X,24X,'APPLIED PSYCHOLOGY',106X,I2,4X,'60'////)
            WRDCNT=0
            DO 380 DIF=1,5
              DO 380 K=1,10
                ELNUM=RANARR(K,J)
                IF(WRDDIF(ELNUM).NE.DIF)GOTO 380
                WRDCNT=WRDCNT + 1
                SEQEL(WRDCNT)=WRDNUM(ELNUM)
C
C Print word numbers for ten element random list
C
 380        CONTINUE
            ENCODE(80,2300,BUF)WEEK,(SEQEL(K),K=1,10)
 2300       FORMAT(I1,9X,10(1X,I3,3X))
              DO 390 NCOPY=1,10
                WRITE(3,2400)BUF
 2400           FORMAT('+',79(A1,1X))
 390      CONTINUE
C
C Reset printer to default print size
C
          WRITE(3,2500)ESC,ESC,ESC
 2500     FORMAT('1',A1,'[z',A1,'[66t',A1,'[w')
          CLOSE(UNIT=3)
 400    CONTINUE
        RETURN
        END
```

```
C
C ***************************************************************************
C        SUBROUTINE CODGEN
C ***************************************************************************
C
C Iain R. Graydon
C Applied Psychology Department
C University of Aston
C Birmingham
C
C Version 2.0
C 25th February 1983
C
C Written for BMRB survey of safety word comprehension
C Subroutine fetches 2 input files containing 25 words each that were relevant
C to the test week.
C It then outputs coding pro formas for coders
C N.B.Output goes DIRECT TO PRINTER to avoid disc space problems
C
        SUBROUTINE CODGEN
C
C ***************************************************************************
C Common variables
C
        IMPLICIT INTEGER (A-Z)
        COMMON WRDARR,RANARR,WRDNUM,WRDDIF,WKNUM,IBATCH,INSARR,FILNAM
        COMMON WRDFIL,DESFIL,DATFIL,RECFIL,PREFIL
        BYTE WRDARR(20,25),INSARR(80,15),FILNAM(10)
        BYTE WRDFIL(14),DESFIL(14),DATFIL(14),RECFIL(14),PREFIL(14)
        INTEGER RANARR(10,60),WRDNUM(25),WRDDIF(25),WKNUM,IBATCH
C
C ***************************************************************************
C Local variables
C
        LOGICAL YES
        BYTE ESC,SPACE,DSH,DSHARR(80),DUMMY
        DATA ESC,DSH,SPACE,TAB/27,'_',' ',9/
        DATA IOATT/"1400/
C
C Attach printer to the task
C
        CALL QIO(IOATT,6)
 10     DO 50 IDSH=1,80
 50       DSHARR(IDSH)=DSH
C
C Open instruction file for input to array
C
        OPEN(UNIT=1,NAME='HEADER.COD',TYPE='OLD',ERR=120,READONLY)
        GOTO 130
 120    WRITE(5,*)'UNABLE TO FIND "HEADER.COD" - COPY FILE TO DISC'
        GOTO 900
 130    DO 140 LINES=1,8
          READ(1,1500)(INSARR(CHARS,LINES),CHARS=1,80)
 1500     FORMAT(80A1)
```

```
 140    CONTINUE
C
C Sending output to printer and not to file
C
          WRITE(5,1200)
 1200     FORMAT(1X,'Code sheet output going direct to printer')
C
C Start processing for each word of the 25 word subfile
C
 330      DO 390 WORD=1,25
C
C Find length of word string
C
            DO 350 LENTST=20,1,-1
              IF(WRDARR(LENTST,WORD).NE.SPACE)GOTO 360
 350        CONTINUE
 360        NCHRS=LENTST
C
C Print word number and word and codes 1 to 75 (i.e. 3 pages)
C
            DO 390 PAGES=1,3
            WRITE(6,2200)ESC
 2200       FORMAT('1',A1,'[8w')
            WRITE(6,2300)WRDNUM(WORD),(WRDARR(WRDLEN,WORD),
     1      WRDLEN=1,NCHRS)
 2300       FORMAT(1X,20X,'(',I3,')',1X,20A1/)
C
C Write out instructions
C
              WRITE(6,2400)ESC
              WRITE(6,2102)((INSARR(CHARS,LINES),CHARS=1,80),LINES=1,8)
 2102         FORMAT(7(1X,80A1/)/1X,80A1)
 382            DO 385 LINES=1,25
                  WRITE(6,2105)(DSHARR(IDSH),IDSH=1,76)
 2105             FORMAT(1X,76A1)
                  CODNUM=PAGES*25-25+LINES
 384              WRITE(6,2107)CODNUM
 2107             FORMAT(1X,I3,13X,'¦')
 385            CONTINUE
 390          WRITE(6,2105)(DSHARR(IDSH),IDSH=1,76)
C
C Reset printer
C
          WRITE(6,2400)ESC
 2400     FORMAT(1X,A1,'[w')
          WRITE(5,*)'End of code sheet output'
 400    CONTINUE
        RETURN
 900    STOP 'Due to  filename error'
        END
C
C ***************************************************************************
C        SUBROUTINE CODDES
C ***************************************************************************
```

```
C
C Iain R. Graydon
C Applied Psychology Department
C University of Aston
C Birmingham
C
C Version 2.0
C 25th Feb 1983
C
C This subroutine allows input of word code descritions
C appearing in the BMRB safety word study
C
      SUBROUTINE CODDES
C
C ***************************************************************************
C Common variables
C
      IMPLICIT INTEGER (A-Z)
      COMMON WRDARR,RANARR,WRDNUM,WRDDIF,WKNUM,IBATCH,INSARR,FILNAM
      COMMON WRDFIL,DESFIL,DATFIL,RECFIL,PREFIL
      BYTE WRDARR(20,25),INSARR(80,15),FILNAM(10)
      BYTE WRDFIL(14),DESFIL(14),DATFIL(14),RECFIL(14),PREFIL(14)
      INTEGER RANARR(10,60),WRDNUM(25),WRDDIF(25),WKNUM,IBATCH
C
C ***************************************************************************
C Local variables
C
      LOGICAL YES
      BYTE DESARR(80),ESC,WRDBUF(20),DESBUF(80)
      BYTE DEFBUF(80),CONBUF(80)
      DATA ESC /27/
C
C     Start processing each word
C
C     Open output file
C
      OPEN(UNIT=1,NAME=DESFIL,TYPE='OLD',ERR=50)
      OPEN(UNIT=3,NAME=DESFIL,TYPE='NEW',CARRIAGECONTROL='LIST',
     1     DISP='DELETE')
C
      DO 200 IWORD=1,25
        READ(1,2000,END=70)NUM,NCOD
 2000   FORMAT(I3,2X,I3)
        READ(1,2010)(WRDBUF(CHR),CHR=1,20)
 2010   FORMAT(20A1)
        READ(1,2012)LENDEF,(DEFBUF(CHR),CHR=1,80)
 2012   FORMAT(Q,80A1)
        READ(1,2014)LENCON,(CONBUF(CHR),CHR=1,80)
 2014   FORMAT(Q,80A1)
C
        WRITE(3,1010)NUM,NCOD
        WRITE(3,1020)(WRDBUF(CHR),CHR=1,20)
        WRITE(3,3012)(DEFBUF(CHR),CHR=1,LENDEF)
        WRITE(3,3012)(CONBUF(CHR),CHR=1,LENCON)
```

```
 3012      FORMAT(80A1)
           DO 180 ICOD=1,NCOD
             READ(1,2020)LENBUF,(DESBUF(DES),DES=1,LENBUF)
 2020        FORMAT(Q,80A1)
             WRITE(3,2030)(DESBUF(DES),DES=1,LENBUF)
 2030        FORMAT(80A1)
 180       CONTINUE
 200     NWORD=IWORD
         GOTO 70
   50    WRITE(5,*)'There is no existing output file - opening new file'
   60    OPEN(UNIT=3,NAME=DESFIL,TYPE='NEW',CARRIAGECONTROL='LIST')
   70    CONTINUE
         DO 400 IWORD=1,25
         IF(IWORD.LE.NWORD)GOTO 400
         WRITE(5,1000)WRDNUM(IWORD),(WRDARR(ICHR,IWORD),ICHR=1,20)
 1000    FORMAT(1X,I3,2X,20A1)
         WRITE(5,*)'Type CTRL/Z to exit !'
         WRITE(5,1100)
 1100    FORMAT('$','How many codes are there for this word?')
         READ(5,1110,END=900)NCOD
 1110    FORMAT(I3)
         WRITE(3,1010)WRDNUM(IWORD),NCOD
 1010    FORMAT(I3,2X,I3)
         WRITE(3,1020)(WRDARR(ICHR,IWORD),ICHR=1,20)
 1020    FORMAT(20A1)
         WRITE(5,*)'Enter the word defininition :'
         READ(5,2020)LENDEF,(DEFBUF(ICHR),ICHR=1,80)
         WRITE(5,*)'Enter the context phrase :'
         READ(5,2020)LENCON,(CONBUF(ICHR),ICHR=1,80)
C
         WRITE(3,2030)(DEFBUF(ICHR),ICHR=1,LENDEF)
         WRITE(3,2030)(CONBUF(ICHR),ICHR=1,LENCON)
C
C        Enter code descriptions
C
         WRITE(5,*)'Enter descriptions :'
         DO 300 IDES=1,NCOD
         WRITE(5,1200)IDES
 1200    FORMAT('$','Code ',I3,':')
         READ(5,1300)LENBUF,(DESARR(CHR),CHR=1,80)
 1300    FORMAT(Q,80A1)
         WRITE(3,1310)IDES,(DESARR(CHR),CHR=1,LENBUF)
 1310    FORMAT(I3,2X,80A1)
  300    CONTINUE
  400    CONTINUE
C
C Close output file(s)
C
 450     CLOSE(UNIT=3,DISPOSE='SAVE')
         CLOSE(UNIT=1,DISPOSE='DELETE')
 500     CONTINUE
 600     RETURN
 900     CLOSE(UNIT=3,DISPOSE='SAVE')
         CLOSE(UNIT=1,DISPOSE='DELETE')
```

```
        STOP 'CTRL/Z typed'
        END
C
C ***************************************************************************
C         SUBROUTINE GENREC
C ***************************************************************************
C
C Iain R. Graydon
C Applied Psychology Department
C University of Aston
C Birmingham
C
C Version 2.0
C 25th Feb 1983
C
C Subroutine generates recode pro formas for qualified recode judges
C to assign their categories to raw data meanings generated from the
C main BMRB study
C
        SUBROUTINE GENREC
C
C ***************************************************************************
C Common variables
C
        IMPLICIT INTEGER (A-Z)
        COMMON WRDARR,RANARR,WRDNUM,WRDDIF,WKNUM,IBATCH,INSARR,FILNAM
        COMMON WRDFIL,DESFIL,DATFIL,RECFIL,PREFIL
        BYTE WRDARR(20,25),INSARR(80,15),FILNAM(10)
        BYTE WRDFIL(14),DESFIL(14),DATFIL(14),RECFIL(14),PREFIL(14)
        INTEGER RANARR(10,60),WRDNUM(25),WRDDIF(25),WKNUM,IBATCH
C
C Local variables
C
        LOGICAL YES
        BYTE ESC,SPACE,DSH,DSHARR(80),DUMMY
        BYTE WORD(20),DESBUF(80),DEFBUF(80),CONBUF(80)
        INTEGER LENBUF,LENDEF,LENCON
        DATA ESC,DSH,SPACE,TAB/27,'_',' ',9/
C
C Open instruction file for input to array
C
        CALL ERRSET(29,,,,.FALSE.)
        OPEN(UNIT=1,NAME='HEADER.REC',TYPE='OLD',ERR=120,READONLY)
        GOTO 130
 120    WRITE(5,*)'Unable to find "HEADER.REC" - copy file to disc'
        GOTO 900
 130    DO 140 LINES=1,15
          READ(1,1500)(INSARR(CHARS,LINES),CHARS=1,80)
 1500     FORMAT(80A1)
 140    CONTINUE
C
C Open code description file for input - lun 2
C
          OPEN(UNIT=2,NAME=DESFIL,TYPE='OLD',ERR=220)
```

```
          GOTO 230
 220      WRITE (5,*)'Description input file not on main disk - exiting'
          GOTO 900
 230      CONTINUE
C
C Open recode output file - lun 3
C
          OPEN(UNIT=3,NAME=RECFIL,TYPE='OLD',ERR=320)
          CLOSE(UNIT=3)
          WRITE (5,*)'File already exists - creating new version'
 320      OPEN(UNIT=3,NAME=RECFIL,TYPE='NEW')
 330      CONTINUE
C
C Start processing for each of the 25 words
C
          DO 480 WRD=1,25
            LPCNT=0
            IDES=0
            READ(2,2200,END=500)WRDNM,NCOD
 2200       FORMAT(I3,2X,I3)
            READ(2,2300)LENWRD,(WORD(ICHR),ICHR=1,20)
 2300       FORMAT(Q,20A1)
            READ(2,2310)LENDEF,(DEFBUF(ICHR),ICHR=1,80)
            READ(2,2310)LENCON,(CONBUF(ICHR),ICHR=1,80)
 2310       FORMAT(Q,80A1)
C
C Printing word ,definition and context phrase
C
 340        WRITE(3,3100)ESC
 3100       FORMAT('1',A1,'[8w')
            WRITE(3,3200)WRDNM,(WORD(ICHR),ICHR=1,LENWRD)
 3200       FORMAT(1X,'(',I3,')'20A1)
            WRITE(3,3010)ESC,(DEFBUF(ICHR),ICHR=1,LENDEF)
            WRITE(3,3010)ESC,(CONBUF(ICHR),ICHR=1,LENCON)
 3010       FORMAT(1X,A1,'[2w',80A1)
C
C Write out header - jump round after first time round loop
C
            IF(LPCNT.GT.0)GOTO 355
            DO 350 ILINE=1,12
              WRITE(3,3300)(INSARR(ICHR,ILINE),ICHR=1,80)
 3300         FORMAT(1X,80A1)
 350        CONTINUE
 355        DO 360 ILINE=13,15
 360        WRITE(3,3300)(INSARR(ICHR,ILINE),ICHR=1,80)
C
C Write out codes for one page
C The first time round the loop 20 codes are output
C after which 28 are normally output till NCOD is reached
C Then proceed to next word
C
            LAST=28
            IF(LPCNT.EQ.0)LAST=20
            DO 400 ICNT=1,LAST
```

```
              IDES=IDES + 1
              READ (2,2400)CODNUM,LENBUF,(DESBUF(ICHR),ICHR=1,80)
 2400         FORMAT(I3,2X,Q,80A1)
C
C Double spaced descriptions
C
              WRITE(3,3400)CODNUM,(DESBUF(ICHR),ICHR=1,LENBUF)
 3400         FORMAT('0',I3,2X,'(',3X,')',2X,80A1)
C
C       If IDES =  NCOD then loop round and read in next word
C
              LPCNT=LPCNT + 1
              IF(IDES.GE.NCOD)GOTO 480
 400        CONTINUE
 450      GOTO 340
 480      CONTINUE
 500    CONTINUE
        WRITE(3,4400)ESC
 4400   FORMAT(1X,A1,'[w')
        CLOSE(UNIT=2)
        CLOSE(UNIT=3)
        CALL ERRSET(29,,,,.TRUE.)
 600    RETURN
 900    STOP 'Due to filename error'
        END
C
C ***************************************************************************
C                       SUBROUTINE RECDAT
C ***************************************************************************
C
C
C Iain R. Graydon
C Applied Psychology Department
C University of Aston
C Birmingham
C
C Version 2.0
C 25th Feb 1983
C
C This subroutine allows input of recode judge date obtained from the
C BMRB safety word study.it accepts in a form compatible with the CONSENSUS
C program used in the final analysis.
C
C File handling :
C       As in subroutine coddes check for old output file.If it exists then
C Open it and open a 'new' version too.copy all 'old' file data into 'new'
C file then add new data to the new file from the program.Allow for CTRL/Z
C to permit user to exit from the program without losing the data in the new
C file.If program crashes make sure old file is saved even if 'new' file is
C lost.Only with a normal or CTRL/Z exit should 'new' file be saved when the
C 'old' file can be safely deleted.
C
        SUBROUTINE RECDAT
C
```

```
C ********************************************************************************
C Common variables
C
      IMPLICIT INTEGER (A-Z)
      COMMON WRDARR,RANARR,WRDNUM,WRDDIF,WKNUM,IBATCH,INSARR,FILNAM
      COMMON WRDFIL,DESFIL,DATFIL,RECFIL,PREFIL
      BYTE WRDARR(20,25),INSARR(80,15),FILNAM(10)
      BYTE WRDFIL(14),DESFIL(14),DATFIL(14),RECFIL(14),PREFIL(14)
      INTEGER RANARR(10,60),WRDNUM(25),WRDDIF(25),WKNUM,IBATCH
C
C ********************************************************************************
C Local variables
C
      LOGICAL YES
      BYTE DATBUF(80),WRDBUF(20),ESC
      INTEGER LENBUF,VALARR(25),JREC,WRDLST,IREC
      DATA ESC/27/
C
C Enter judge number
C
      WRITE(5,*)'Which judge is this ? (2 digits):'
      READ(5,5030)JUDNUM
 5030 FORMAT(I2)
C
C Test for output file
C
      WRITE(5,2)(DATFIL(I),I=1,14)
 2    FORMAT(1X,14A1)
      OPEN(UNIT=1,NAME=DATFIL,TYPE='OLD',ERR=50)
      OPEN(UNIT=3,NAME=DATFIL,TYPE='NEW',CARRIAGECONTROL='LIST',
     1      DISPOSE='DELETE')
C
C Copy 'old' file to 'new' file
C
      DO 201 IJUDGE=1,30
        NWORD=0
        DO 200 IWORD=1,25
 40       READ(1,3030,END=210)JWORD,(WRDBUF(ICHR),ICHR=1,17),
     1    JUDGE,JREC,JCOD,(VALARR(I),I=1,25)
          WRITE(3,3030)JWORD,(WRDBUF(ICHR),ICHR=1,17),
     1    JUDGE,JREC,JCOD,(VALARR(I),I=1,25)
          IF(JWORD.EQ.WRDNUM(IWORD))GOTO 40
          NWORD=IWORD
 200    CONTINUE
 201  CONTINUE
 210  CONTINUE
      GOTO 70
 50   WRITE(5,*)'No old data file - creating new one for output'
 60   OPEN(UNIT=3,NAME=DATFIL,TYPE='NEW',CARRIAGECONTROL='LIST')
 70   CONTINUE
C
C Which word and which judge ?
C
      WRDCNT=1
```

```
      DO 250 IWORD=1,25
250     IF(JWORD.EQ.WRDNUM(IWORD))WRDCNT=IWORD + 1
      IF(WRDCNT.GT.25)GOTO 570
      WRITE(5,560)JUDGE,WRDCNT -1
560   FORMAT(1X,'The last word for judge ',I3,' was word ',I3)
      GOTO 590
570   WRDCNT=1
      WRITE(5,580)JUDNUM
580   FORMAT(1X,'Start input of recode data for judge ',I2)
590   CONTINUE
      WRDLST=0          ! Number of last word read
      IREC=0            ! Record counter for each word
      DO 400 LWORD=WRDCNT,25
        WRITE(5,5040)WRDNUM(LWORD),
     1              (WRDARR(ICHR,LWORD),ICHR=1,17)
5040    FORMAT(1X,I3,2X,17A1)
        WRITE(5,*)'How many codes are there for this word ?'
        WRITE(5,*)'Type CTRL/Z to exit'
        READ(5,5000,END=999)NCOD
5000    FORMAT(I3)
        WRITE(5,*)'Enter recode values using keypad :'
        ICOD=0
360     DO 350 I=1,25
350       VALARR(I)=0
        DO 380 ICNT=1,25
          IVAL=ICNT
          ICOD=ICOD + 1
370       WRITE(5,5010)ICOD
5010      FORMAT('$','Code ',I3,':')
          READ(5,5020)VALARR(ICNT)
5020      FORMAT(I2)
C
C Check that VALARR is in range
C
          IF(VALARR(ICNT).GT.0.AND.VALARR(ICNT).LT.8)GOTO 375
          CALL BLEEP(5)
          WRITE(5,*)'Recode value outside specified range - retype'
          GOTO 370
375       IF(ICOD.GE.NCOD)GOTO 382
380     CONTINUE
C
C Write first recode values to output file on one record
C
382     IREC=IREC + 1          ! Increment record counter
        IF(WRDNUM(LWORD).NE.WRDLST)IREC=1  ! If new word record = 1
        WRITE(3,3030)WRDNUM(LWORD),
     1  (WRDARR(ICHR,LWORD),ICHR=1,17),
     2  JUDNUM,IREC,NCOD,(VALARR(I),I=1,IVAL)
3030    FORMAT(I3,2X,17A1,I2,I1,I3,25(1X,I1))
        WRDLST=WRDNUM(LWORD)
390     IF(ICOD.LT.NCOD)GOTO 360
400   CONTINUE
C
C End of processing - close output file(s)
```

```
C
        CLOSE(UNIT=3,DISPOSE='SAVE')
        CLOSE(UNIT=1,DISPOSE='DELETE')
        RETURN
 900    STOP 'DUE TO FILENAME ERROR'
 999    CLOSE(UNIT=3,DISPOSE='SAVE')
        CLOSE(UNIT=1,DISPOSE='DELETE')
        STOP 'CTRL/Z typed'
        END
C
C ***************************************************************************
C                       SUBROUTINE SPLDAT
C ***************************************************************************
C
C
C Iain R. Graydon
C Applied Psychology Department
C University of Aston
C Birmingham
C
C Version 1.0
C 19th Nov 1983
C
C This subroutine allows input of supplementary data obtained from the
C BMRB safety word study i.e. summary data such as MISSING VALUES.
C
C File handling :
C       As in subroutine CODDES check for old output file.If it exists then
C Open it and open a 'new' version too.copy all 'old' file data into 'new'
C file then add new data to the new file from the program.Allow for CTRL/Z
C to permit user to exit from the program without losing the data in the new
C file.If program crashes make sure old file is saved even if 'new' file is
C lost.Only with a normal or CTRL/Z exit should 'new' file be saved when the
C 'old' file can be safely deleted.
C
        SUBROUTINE SPLDAT
C
C ***************************************************************************
C Common variables
C
        IMPLICIT INTEGER (A-Z)
        COMMON WRDARR,RANARR,WRDNUM,WRDDIF,WKNUM,IBATCH,INSARR,FILNAM
        COMMON WRDFIL,DESFIL,DATFIL,RECFIL,PREFIL
        COMMON SPLFIL
        BYTE WRDARR(20,25),INSARR(80,15),FILNAM(10)
        BYTE WRDFIL(14),DESFIL(14),DATFIL(14),RECFIL(14),PREFIL(14)
        BYTE SPLFIL(14)
        INTEGER RANARR(10,60),WRDNUM(25),WRDDIF(25),WKNUM,IBATCH
C
C ***************************************************************************
C Local variables
C
        LOGICAL YES
        BYTE WRDBUF(20),ESC
```

```
      INTEGER N       ! Sample size
      REAL MISS,UNCO,INAP,AH,SEX,ANOM
      REAL PROMPT(7)
      DATA PROMPT/'MISS','UNCO','INAP','   N','  AH',' SEX','ANOM'/
      DATA ESC/27/
C
      NPRMT = 7       ! Number of categories of supplementary data
      KBLUN = 5       ! Programmers terminal
C
C Test for output file
C
      CALL ERRSET(29,,,,.FALSE.)      ! Check this
      OPEN(UNIT=1,NAME=SPLFIL,TYPE='OLD',ERR=10)
      CLOSE(UNIT=1)
      WRITE(KBLUN,*)'OLD file already exists - EXITING .'
      GOTO 999
10    WRITE(5,*)'No old data file - creating new one for output'
20    OPEN(UNIT=3,NAME=SPLFIL,TYPE='NEW',CARRIAGECONTROL='LIST')
      CALL BLEEP(KBLUN)
      WRITE(5,580)
580   FORMAT(1X,'Start input of supplementary data using KEYPAD ')
      DO 600 IWORD=1,25
30      CONTINUE
        WRITE(KBLUN,*)        ! Dummy
        WRITE(5,9006)WRDNUM(IWORD),
     1             (WRDARR(ICHR,IWORD),ICHR=1,17)
9006    FORMAT(1X,'(',I3,')',2X,17A1)
        DO 500 IPRMT=1,NPRMT
50        WRITE(KBLUN,9001)PROMPT(IPRMT)
9001      FORMAT('$',A4,': ')
          GOTO(100,110,120,200,300,310,130),IPRMT
100       READ(KBLUN,9002,ERR=400)MISS
9002      FORMAT(F4.1)
          GOTO 500
110       READ(KBLUN,9002,ERR=400)UNCO
          GOTO 500
120       READ(KBLUN,9002,ERR=400)INAP
          GOTO 500
130       READ(KBLUN,9002,ERR=400)ANOM
          GOTO 500
200       READ(KBLUN,9003,ERR=400)N
9003      FORMAT(I3)
          GOTO 500
300       READ(KBLUN,9004,ERR=400)AH
9004      FORMAT(F5.3)
          GOTO 500
310       READ(KBLUN,9004,ERR=400)SEX
          GOTO 500
400       CALL BLEEP(KBLUN)
          WRITE(KBLUN,*)'Error - retype last value'
          GOTO 50
500     CONTINUE
C
C Is the data OK ?
```

```
C
        WRITE(KBLUN,9007)(PROMPT(I),I=1,NPRMT)
 9007   FORMAT(23X,3(A4,1X),A4,2(A4,2X),1X,A4)
        WRITE(KBLUN,9005)WRDNUM(IWORD),(WRDARR(ICHR,IWORD),ICHR=1,17),
     1    MISS,UNCO,INAP,N,AH,SEX,ANOM
        WRITE(KBLUN,9008)
 9008   FORMAT('$','Is the data OK ? Y/N :')
        CALL ASKYN(KBLUN,YES)
        IF(.NOT.YES)GOTO 30  ! Retype the data
C
C Write word number and text plus word summary data to output file
C
        WRITE(3,9005)WRDNUM(IWORD),(WRDARR(ICHR,IWORD),ICHR=1,17),
     1    MISS,UNCO,INAP,N,AH,SEX,ANOM
 9005   FORMAT(I3,2X,17A1,1X,3(F4.1,1X),I3,1X,2(F5.3,1X),F4.1)
C
C Next word
C
 600    CONTINUE
C
C End of processing - close output file(s)
C
        CLOSE(UNIT=3,DISPOSE='SAVE')
        RETURN
 999    STOP 'Due to filename error'
        END
```

4) Consensus program for analysing judge categorisations

```
C
C       CONSEN.FTN
C
C       RONALD EASTERBY & IAIN R. GRAYDON
C       APPLIED PSYCHOLODY DEPARTMENT
C       UNIVERSITY OF ASTON
C       BIRMINGHAM
C
C       VERSION 3.3
C       JAN 7TH 1983
C
C
C Program to amalgamate word meaning recodes from NJUDGE judges (Max=20)
C and generate a value reflecting the consensus across the judges.
C For each raw response category a profile (PROFIL) containing the NJUDGE
C judgements is created and the median judgement calculated.
C Next the PROFIL is sorted into ascending order using subroutine SRTINT.
C At this point the consensus value can be calculated using the following
C Depending on the consensus or lack of consensus the appropriate algorithm
C is invoked :
C Checks for :  1.Clear consensus- Highest value greater than (NJUDGE/2+1)
C               2.Tied consensus :
C               3.Bimodal consensus
C               4.No consensus
C
C Max number of response categories = 100
C Recode values are (with respect to array position):
C
C               (1) -  1 certain yes
C               (2) -  2 very likely
C               (3) -  3 likely
C               (4) -  4 marginally likely
C       PROFIL  (5) -  5 unlikely
C               (6) -  6 wrong
C               (7) -  7 inappropriate context
C               (8) - 98 don't know
C               (9) - 99 missing values
C              (10) -    value of consensus judge recode
C
C Degrees of consensus are defined as follows :
C
C       1  UNANAMITY
C       2  STRONG consensus
C       3  MODEST consensus
C       4  WEAK consensus
C       5  TIED consensus
C       6  BIMODAL consensus
C       7  ANOMALOUS consensus
C       8  No consensus
C
C ********************************************************************************
C
```

```
        IMPLICIT INTEGER(A-Z)
C
C Version 7 :   Common areas for CONSEN
C               File CONSENCOM.FTN
C
        COMMON /DATCOM/DATARR(120,10),CONRES(120)
        COMMON /TXTCOM/TXT(80),CONTXT(26,8)
        INTEGER DATARR,CONRES
        BYTE    TXT,CONTXT
C
C ***************************************************************************
C Local variables
C
        INTEGER PROFIL(10),PROVEC(10)
C
C Filename arrays and fixed extensions
C
        BYTE WRDFIL(14),DESFIL(14),WPLFIL(14),DATFIL(14)
        BYTE SUMFIL(14),EXCFIL(14),SPSFIL(14)
        BYTE FILNAM(10)
C
C Device assignments
C
        INTEGER WRDDEV,DESDEV,DATDEV,WPLDEV,SUMDEV,EXCDEV,SPSDEV
        INTEGER KBLUN
C
C Variable declarations
C
        BYTE WORD(18),WRDTXT(18),RESULT(6,16)
        BYTE RECORD(80),DUMMY(26)
        BYTE TXT1(80),TXT2(80)

C
        INTEGER VALARR(40)
        INTEGER JUDGE(10),BIMOD,MAX,MIN,CONCNT(20)
C
        LOGICAL YES,TRACE,ADJUST,WPL,SUM,HARRIS,MANCH
        LOGICAL PREV,DFLT,SPSS,ANFLG
C
C ***************************************************************************
C
C The dummy array RECORD avoids a reread situation and allows for testing
C for a new word number in advance.
C
C Set up LUNS :
C
        WRDDEV=1        ! word list (40 words)  -.WRD (SY:)
        DESDEV=2        ! description list      -.DES (DY:0)
        DATDEV=3        ! data file             -.DAT (DY:1)
        WPLDEV=4        ! output file for data  -.WPL (SY:)
        KBLUN=5
        EXCDEV=6        ! exception summary file-.EXC (SY:)
        SUMDEV=7        ! output summary file   -.LST (SY:)
        TXTDEV=8        ! Consensus category names-CONSEN.TXT (SY:)
```

```
      SPSDEV=9          ! SPSS command output file -.SPS(SY:)
C
C Read in consensus category names from file
C
 1    OPEN(UNIT=TXTDEV,NAME='CONSEN.TXT',TYPE='OLD',READONLY,ERR=5)
 5    DO 6 J=1,8
      READ(TXTDEV,1001)ILEN,(CONTXT(I,J),I=1,ILEN)
1001  FORMAT(1X,Q,26A1)
      CONTINUE
 6    CONTINUE
 7    CLOSE(UNIT=TXTDEV)
      PREV=.FALSE.
C
C Read in file name prototype
C Files to have common name with variable extension
C Extensions set up using CONCAT string handling routine
C NB 'LP.LST' file will be deleted once output to printer
C
      CALL PAGE(KBLUN)
10    WRITE(KBLUN,9001)
9001  FORMAT('$','Enter filename prototype (9 chars max) :')
      READ(KBLUN,9002)(FILNAM(I),I=1,9)
9002  FORMAT(9A1)
      FILNAM(10)=0              !ASCII null string for string rooting
C
C Create file extensions
C
11    CALL CONCAT(FILNAM,'.WRD',WRDFIL,13)
12    CALL CONCAT(FILNAM,'.DES',DESFIL,13)
13    CALL CONCAT(FILNAM,'.WPL',WPLFIL,13)
14    CALL CONCAT(FILNAM,'.LST',SUMFIL,13)
15    CALL CONCAT(FILNAM,'.SPS',SPSFIL,13)
16    CALL CONCAT(FILNAM,'.DAT',DATFIL,13)
17    CALL CONCAT(FILNAM,'.EXC',EXCFIL,13)
C
C READ IN NUMBER OF JUDGES TO BE PROCESSED
C
      WRITE(KBLUN,9003)
9003  FORMAT('$','Enter the number of judges to be processed : ')
      READ(KBLUN,9004)NJUDGE
9004  FORMAT(I2)
C
C Create criterion value based on no. of judges
C
      MAX=INT(FLOAT(NJUDGE)/2)+1
      MIN=INT(FLOAT(NJUDGE)/3)
      WRITE(KBLUN,*)'Max criterion =',MAX,' Minimum criterion =',MIN
C
C Default settings for control of output
C
100   DFLT=.FALSE.
      TRACE=.FALSE.
      ADJUST=.FALSE.
      SUM=.FALSE.
```

```
        SPSS=.TRUE.
        HARRIS=.TRUE.
        MANCH=.FALSE.
        ANFLG=.FALSE.
C
 101    IF(PREV)GO TO 108
        WRITE(KBLUN,*)'Default options are :'
        WRITE(KBLUN,*)'* No trace'
        WRITE(KBLUN,*)'* No adjust'
        WRITE(KBLUN,*)'* HARRIS system'
        WRITE(KBLUN,*)'* No anomalous analysis'
        WRITE(KBLUN,9005)
 9005   FORMAT('$','Do you want default options Y/N ? ')
        CALL ASKYN(KBLUN,DFLT)
        IF(DFLT)GO TO 108
C
C Set up new option flags if default not wanted
C
 102    WRITE(KBLUN,*)'Create SPSS file Y/N ?'
        CALL ASKYN(KBLUN,SPSS)
 103    WRITE(KBLUN,*)'Summary file ? Y/N '
        CALL ASKYN(KBLUN,SUM)
 104    WRITE(KBLUN,*)'Word processor list ? Y/N '
        CALL ASKYN(KBLUN,WPL)
 105    WRITE(KBLUN,*)'Adjust consensus values - Y/N ? '
        CALL ASKYN(KBLUN,ADJUST)
        IF(ADJUST)TRACE=.FALSE.
        IF(ADJUST)GO TO 107
 106    WRITE(KBLUN,*)'Trace facility Y/N ? '
        CALL ASKYN(KBLUN,TRACE)
        IF(TRACE)WRITE(KBLUN,*)'Trace faciltiy "ON"'
 107    WRITE(KBLUN,*)'MANCHESTER system ? Y/N '
        CALL ASKYN(KBLUN,MANCH)
        IF(MANCH)HARRIS=.FALSE.
 109    WRITE(KBLUN,*)'Anomalous analysis ? Y/N '
        CALL ASKYN(KBLUN,ANFLG)
C
C How many words ?
C
 108    WRITE(KBLUN,9006)
 9006   FORMAT('$','How many words to be processed (max=40) :')
        READ(KBLUN,*)NWRD
C
C Open files - if error then exit and check files on disk
C
 120    CONTINUE
 121    OPEN(UNIT=WRDDEV,NAME=WRDFIL,TYPE='OLD',READONLY,ERR=9991)
 122    OPEN(UNIT=DESDEV,NAME=DESFIL,TYPE='OLD',READONLY,ERR=9992)
 123    OPEN(UNIT=DATDEV,NAME=DATFIL,TYPE='OLD',READONLY,ERR=9993)
        CLOSE(UNIT=DATDEV)  ! Data file is opened/closed in main loop
C
C CHECK FOR EXISTENCE OF 'NEW' FILES BEFORE OPENING THEM
C
 124    IF(WPL) OPEN(UNIT=WPLDEV,NAME=WPLFIL,TYPE='NEW')
```

```
 125     IF(SUM) OPEN(UNIT=SUMDEV,NAME=SUMFIL,TYPE='NEW')
 126     OPEN(UNIT=EXCDEV,NAME=EXCFIL,TYPE='NEW')
 127     IF(SPSS) OPEN(UNIT=SPSDEV,NAME=SPSFIL,TYPE='NEW')
 130     CONTINUE
         WRITE(KBLUN,*)'The following files have now been opened :'
 131     WRITE(KBLUN,9007)(WRDFIL(I),I=1,13)
 132     WRITE(KBLUN,9007)(DESFIL(I),I=1,13)
 133     WRITE(KBLUN,9007)(DATFIL(I),I=1,13)
 134     IF(WPL) WRITE(KBLUN,9007)(WPLFIL(I),I=1,13)
 135     IF(SUM) WRITE(KBLUN,9007)(SUMFIL(I),I=1,13)
 136     WRITE(KBLUN,9007)(EXCFIL(I),I=1,13)
 137     IF(SPSS) WRITE(KBLUN,9007)(SPSFIL(I),I=1,13)
 145     IF(SPSS) CALL HEAD(SPSDEV,FILNAM,HARRIS,MANCH)
 9007    FORMAT(1X,13A1)
C
C ***************************************************************************
C MAIN CONTROL LOOP CYCLING THROUGH THE 40/25 WORDS
C ***************************************************************************
C
 140     DO 500 IWRD=1,NWRD
         OPEN(UNIT=DATDEV,NAME=DATFIL,TYPE='OLD',READONLY)
C
C Read in the IWRD word from the WORD file
C
           READ(WRDDEV,9008)NUM,(WORD(ICHR),ICHR=1,17)
 9008      FORMAT(1X,I3,1X,17A1)
           WRITE(KBLUN,9009)NUM,(WORD(ICHR),ICHR=1,17)
 9009      FORMAT(1X,'(',I3,')',2X,17A1)
C
C Read the number of codes for the IWRD
C Read in the IWRD headings from the DESCRIPTION file
C
           READ(DESDEV,*)ID1,NCODES
           READ(DESDEV,9010)(WRDTXT(I),I=1,18)
 9010      FORMAT(18A1)
           READ(DESDEV,9011)(TXT1(80),I=1,80)
           READ(DESDEV,9011)(TXT2(80),I=1,80)
 9011      FORMAT(80A1)
C
C Zero data array for each word
C
 150       DO 160 I=1,120
             CONRES(I)=0
             DO 155 J=1,10
               DATARR(I,J)=0
 155         CONTINUE
 160       CONTINUE
           IJUD=0
C
C Start reading records from the data file
C       - N.B. END = PROCESS
C That is keep searching serially through the file for the current
C word until the bottom of the file is reached then analysise that
C word
```

```
C
 200      READ(DATDEV,9012,END=300)WRDNUM,(WRDTXT(ICHR),ICHR=1,17),
     1    JUDNUM,IREC,NCDUM,(VALARR(IVAL),IVAL=1,25)
 9012     FORMAT(I3,2X,17A1,I2,I1,I3,25(I2))
C
C If not current word then loop and read until end of file
C
 205      IF(WRDNUM.NE.NUM)GOTO 200
C
C Increment judge counter when IREC = 1
C Then update data array with data for current word
C
 210      JREC=1+(INT(FLOAT((NCODES-1)/25)))
          WRITE(KBLUN,*)NCODES,JREC
 215      DO 230 J=1,JREC
            IF(IREC.EQ.1)IJUD=IJUD + 1
            JUDGE(IJUD)=JUDNUM
 218        DO 220 ILOOP=1,25
              ICOD=(IREC-1)*25+ILOOP
              DATARR(ICOD,IJUD)=VALARR(ILOOP)
              IF(ICOD.GE.NCODES)GOTO 290
 220        CONTINUE
C
C Now pick up next data record
C
 221        READ(3,9012,END=300)WRDNUM,(WRDTXT(ICHR),ICHR=1,17),
     *      JUDNUM,IREC,NCDUM,(VALARR(IVAL),IVAL=1,25)
 230      CONTINUE
C
C Now find another record with current word
C
 290      GOTO 200
C
C ***************************************************************************
C
C When EOF found for data file then all data for current word
C has been read into the data array and program jumps output routines
C below to set recode consensus
C
C ***************************************************************************
C Routine to interrogate for
C       1)Ties
C       2)Bimodal distribution of judges recodes for a code
C       3)Even distrubtion of recode value frequencies
C         i.e.value less than NJUDGE/2+1
C
 300    CONTINUE
 301    WRITE(KBLUN,9013)NUM,(WORD(JCHR),JCHR=1,17)
 9013   FORMAT(1X,'Processing word : ('I3,') ',17A1)
C
 303    IF(SUM)WRITE(SUMDEV,9014)NUM,(WORD(ICHR),ICHR=1,17)
 9014   FORMAT('1',/////,1X,'SUMMARY OF RECODE CONSENSUS FOR :'I3,2X,
     *   ,17A1,//1X,'$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$',//)
C
```

```
 304     WRITE(EXCDEV,9015)NUM,(WORD(ICHR),ICHR=1,17)
 9015    FORMAT('1',//,1X,'EXCEPTION SUMMARY FOR WORD :',I3,2X,
     *    ,17A1,//,'$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$',//)
         WRITE(EXCDEV,9016)NJUDGE,MAX
 305     IF(SUM)WRITE(SUMDEV,9016)NJUDGE,MAX
 9016    FORMAT(1X,'NO OF JUDGES : ',I2,
     *    ,/,1X,'Modest consensus achieved if',I2,' judges agree')
C
 307     IF(WPL) WRITE(WPLDEV,9017)NUM,(WORD(JCHR),JCHR=1,17)
 9017    FORMAT(1X,'<word>',I3,17A1,/,1X'<>',/)
C
 308     WRITE(EXCDEV,9018)NCODES
 9018    FORMAT (1X,'Number of codes for word = ',I3,
     *    ,1X,//,1X,'$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$')
C
C Set profile and vector arrays
C
 309     DO 399 NC=1,NCODES
           ICODE=NC
 310       DO 311 IJ=1,80
             TXT(IJ)=0
 311       CONTINUE
           READ(DESDEV,3009)IDUM,LENBUF,(TXT(ICHR),ICHR=1,LENBUF)
 3009      FORMAT(I3,2X,Q,80A1)
           IF(NC.NE.IDUM)WRITE(KBLUN,*)'IDUM=',IDUM,'NC = ',NC
 3010      CONTINUE
 313       DO 315 J=1,10
             PROFIL(J)=0
             PROVEC(J)=J
 315       CONTINUE
 316       DO 317 I=1,20
             CONCNT(I)=0
 317       CONTINUE
           BIMOD=0
C
C Processing of data file gets under way here
C
 320       DO 325 NJ=1,NJUDGE
             IR=DATARR(NC,NJ)
             PROFIL(IR)=PROFIL(IR)+1
 325       CONTINUE
C
           CALL SRTINT(PROFIL,PROVEC,10)
           PROFIL(10)=PROVEC(1)
           CONRES(NC)=PROFIL(10)
           IP1=PROVEC(1)
           IP2=PROVEC(2)
           IP3=PROVEC(3)
           CF=PROFIL(IP1)
           CS=PROFIL(IP2)
           CT=PROFIL(IP3)
C
 340     IX=8                              !ANOMALOUS default
         IF(CF.GT.CS)GO TO 341             !Satisfactory value
```

```
        IF(CF.EQ.CS)GO TO 345           !Exceptions
        IF(CF.LT.MIN)GO TO 359          !NO consensus
 341    IF(CF.EQ.NJUDGE)IX=1                    !UNANIMITY
        IF((CF.GT.MAX).AND.(CF.LT.NJUDGE))IX=2  !STRONG consensus
        IF(CF.EQ.MAX)IX=3                               !MODEST consensus
        IF(CF.EQ.(MAX-1))IX=4                   !WEAK consensus
        GO TO 350
C
 345    BIMOD=IABS(PROVEC(1)-PROVEC(2))
        IF(BIMOD.EQ.1)IX=5      !TIED consensus
        IF(BIMOD.EQ.2)IX=6      !BIMODAL consensus
        IF(CS.EQ.CT)IX=7        !MEDIAN consensus
        IF(BIMOD.GT.2)IX=8      !ANOMALOUS
C       WRITE(KBLUN,*)'CHECK IX = ',IX
 350    CONTINUE
C
        GO TO(351,352,353,354,355,356,357,358,359),IX
 351    PROFIL(10)=PROVEC(1)    !UNANIMITY
        CONRES(NC)=PROFIL(10)
        IF(SUM)
     *    CALL CONTAB(SUMDEV,ICODE,IX,PROFIL,DESCR)
        IF(TRACE)
     *    CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
        GO TO 380
C
 352    PROFIL(10)=PROVEC(1)    !STRONG consensus
        CONRES(NC)=PROFIL(10)
        IF(SUM)
     *    CALL CONTAB(SUMDEV,ICODE,IX,PROFIL,DESCR)
        IF(TRACE)
     *   CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
        GO TO 380
C
 353    PROFIL(10)=PROVEC(1)    !MODEST consensus
        CONRES(NC)=PROFIL(10)
        IF(SUM)
     *    CALL CONTAB(SUMDEV,ICODE,IX,PROFIL,DESCR)
        IF(TRACE)
     *   CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
        GO TO 380
C
 354    PROFIL(10)=PROVEC(1)    !WEAK consensus
        CONRES(NC)=PROFIL(10)
        IF(SUM)
     *    CALL CONTAB(SUMDEV,ICODE,IX,PROFIL,DESCR)
        IF(TRACE)
     *   CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
        GO TO 380
C
 355    PROFIL(10)=PROVEC(2)    !TIED consensus
        CONRES(NC)=PROFIL(10)
        IF(SUM)
     *    CALL CONTAB(SUMDEV,ICODE,IX,PROFIL,DESCR)
        IF(TRACE)
```

```
      *   CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
          GO TO 380
C
 356      PROFIL(10)=PROVEC(1)+1  !BIMODAL consensus
          CONRES(NC)=PROFIL(10)
          IF(SUM)
      *     CALL CONTAB(SUMDEV,ICODE,IX,PROFIL,DESCR)
          IF(TRACE)
      *   CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
          GO TO 380
C
 357      PROFIL(10)=PROVEC(2)    !MEDIAN consensus
          CONRES(NC)=PROFIL(10)
          IF(SUM)
      *     CALL CONTAB(SUMDEV,ICODE,IX,PROFIL,DESCR)
          IF(TRACE)
      *   CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
          GO TO 380
C
 358      CONTINUE
          CALL ANOM(PROFIL,MAX,ICON)      !ANOMALOUS
          PROFIL(10)=ICON
          CONRES(NC)=PROFIL(10)
          IF(SUM)
      *     CALL CONTAB(SUMDEV,ICODE,IX,PROFIL,DESCR)
          CALL CONTAB(EXCDEV,ICODE,IX,PROFIL,DESCR)
          IF(TRACE)
      *   CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
          GO TO 380
C
 359      PROFIL(10)=PROVEC(3)    !NO consensus
          CONRES(NC)=PROFIL(10)
          IF(SUM)
      *     CALL CONTAB(SUMDEV,ICODE,IX,PROFIL,DESCR)
          CALL CONTAB(EXCDEV,ICODE,IX,PROFIL,DESCR)
          IF(TRACE)
      *   CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
          GO TO 380
C
380       IF(.NOT.ADJUST)GOTO 387
385       CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
386       WRITE(KBLUN,*)'New consensus result value '
          READ(KBLUN,*)PROFIL(10)
          CALL CONTAB(KBLUN,ICODE,IX,PROFIL,DESCR)
          WRITE(KBLUN,*)'Value O.K.? '
          CALL ASKYN(KBLUN,YES)
          IF(YES)GO TO 387
          GO TO 386
C
C Routine to write results to output files
C Also automatically creates SPSS file from
C consensus values
C
 387      IF(.NOT.WPL)GO TO 398
```

```
 388     WRITE(WPLDEV,9019)I
 9019    FORMAT(1X,'<code>',I3)
         WRITE(WPLDEV,9020)(TXT(L),L=1,76)
 9020    FORMAT(1X,'<description>',76A1)
         WRITE(WPLDEV,9021)CONRES(NC)
 9021    FORMAT(1X,'<category>',I2,/,1X,'<>',//)
C
 398     CONTINUE
 399     CONTINUE
         CALL SPSFMT(SPSDEV,WORD,NUM,ICODE,NCODES,ANFLG)
 400     CONTINUE
C
C End of processing for current word
C CLOSE DATA File Ready to read in next word
C Read next word or exit if last word - end of main loop
C
         CLOSE(UNIT=DATDEV)
 500     CONTINUE
C
C ******************************************************************************
C ******************************************************************************
C
 900     CONTINUE
         WRITE(KBLUN,*)'End of processing run - closing all files'
         CLOSE(UNIT=WRDDEV)
         CLOSE(UNIT=DESDEV)
         IF(WPL) CLOSE(UNIT=WPLDEV)
         CLOSE(UNIT=EXCDEV)
         IF(SUM) CLOSE(UNIT=SUMDEV)
         IF(SPSS) CALL TAIL(SPSDEV,HARRIS,MANCH)
         IF(SPSS) CLOSE(UNIT=SPSDEV)
 9900    WRITE(KBLUN,9022)
 9022    FORMAT('$','Run complete - do you wish to restart Y/N ? ')
         CALL ASKYN(KBLUN,YES)
         IF(.NOT.YES)GOTO 9999
 920     WRITE(KBLUN,*)'Use previous setup  Y/N/?'
         CALL ASKYN(KBLUN,PREV)
         GO TO 1
 9991    WRITE(KBLUN,*)'ERROR - Word file does not exist - check files'
         STOP 'Run aborted'
 9992    WRITE(KBLUN,*)'ERROR - Description file does not exist - ',
     1   'check files '
         STOP 'Run aborted'
 9993    WRITE(KBLUN,*)'ERROR - Data file does not exist - check files'
         STOP 'Run aborted'
 9999    STOP 'End of successful Run'
         END
C
C HEAD .FTN
C R.S.EASTERBY
C Applied Psychology Department
C University of Aston
C Birmingham
C
```

```
C Modified by I.R.GRAYDON
C 26th April 1983
C
C Routine to write the head and the tail for an SPSS program which accesses
C an already saved SPSS data file on either th HARRIS 500 or UMRCC systems.
C The middle section of the program consists of RECODE procedures where the
C recode values are created by the program CONSEN,and also some simple
C statistics (currently FREQUENCIES)
C
C*******************************************************************************
C
      SUBROUTINE HEAD(DEV,FILNAM,HARRIS,MANCH)
C
C*******************************************************************************
C Arguments
C
      IMPLICIT INTEGER (A-Z)
      INTEGER DEV              ! input
      BYTE FILNAM(10)          ! input
      LOGICAL HARRIS,MANCH     ! input
C
C*******************************************************************************
C local variables
C
      BYTE JOBNAM(8),SAVFIL(8)
      INTEGER R
C
C*******************************************************************************
C Start
C
 1    IF(HARRIS)GO TO 200
 100  WRITE (DEV,9001)(JOBNAM(ICHR),ICHR=1,7)
 9001 FORMAT(1X,'JOB :EATXX',7A1,',CP76(P4000,TD32,SP)')
      WRITE (DEV,*)'LIBRARY(PROCLIB)'
      WRITE (DEV,9002)(FILNAM(ICHR),ICHR=6,7)
 9002 FORMAT(1X,'SPSS(G = REBM',2A1,'SV)')
      WRITE (DEV,*)'####S'
 200  WRITE (DEV,9003)(FILNAM(ICHR),ICHR=1,9)
 9003 FORMAT(1X,'RUN NAME       RECODE RUN FROM DATA FILE ',9A1'.DAT')
      WRITE (DEV,9004)(FILNAM(ICHR),ICHR=6,7)
 9004 FORMAT(1X,'GET FILE       BM',2A1,'SV')
      WRITE (DEV,*)'VALUE LABELS   MEANING'
      WRITE (DEV,*)'               (1)CERTAIN'
      WRITE (DEV,*)'               (2)VERY LIKELY'
      WRITE (DEV,*)'               (3)LIKELY'
      WRITE (DEV,*)'               (4)MARG. LIKELY'
      WRITE (DEV,*)'               (5)UNLIKELY'
      WRITE (DEV,*)'               (6)WRONG'
      WRITE (DEV,*)'               (7)INAP.CONTEXT'
      WRITE (DEV,*)'               (98)DON"T KNOW/'
      WRITE (DEV,*)'MISSING VALUES MEANING (99)/'
      WRITE (DEV,*)'RECODE         MEANING'
      WRITE (DEV,*)'               (900=98)'
      WRITE (DEV,*)'               (999=99)'
```

```
        RETURN
        END
C
C ***************************************************************************
C TAIL ROUTINE
C ***************************************************************************
C
        SUBROUTINE TAIL(DEV,HARRIS,MANCH)
C
C ***************************************************************************
C Arguments
C
        IMPLICIT INTEGER (A-Z)
        INTEGER DEV             ! input
        LOGICAL HARRIS,MANCH    ! input
C
C ***************************************************************************
C
700     WRITE (DEV,*)'FINISH'
        IF(MANCH)WRITE (DEV,*)'####'
        IF(MANCH)WRITE (DEV,*)'****'
800     RETURN
        END
C       SRTINT.FTN
C
        SUBROUTINE SRTINT(ARRAY,ARRVEC,N)
C
C
C
        INTEGER ARRAY(100),SRTTMP(100),ARRVEC(100),SCR
        INTEGER N,P,Q
1       DO 5 I=1,N
        SRTTMP(I)=ARRAY(I)
5       CONTINUE
C
C RIPPLE SORT
C
10      M=N-1
        DO 50 I=1,M
11        IFLAG=0
20        DO 40 K=1,M
            P=K
            Q=(K+1)
            IF(ARRAY(Q).LE.ARRAY(P))GO TO 35
            IFLAG=1
C
            SCR=ARRAY(P)
            ARRAY(P)=ARRAY(Q)
            ARRAY(Q)=SCR
C
            ISWP2=ARRVEC(P)
            ARRVEC(P)=ARRVEC(Q)
            ARRVEC(Q)=ISWP2
C
```

```
60          CONTINUE
35          CONTINUE
40        CONTINUE
          IF(IFLAG.EQ.0)GO TO 75
50      CONTINUE
C
75      CONTINUE
C
80      DO 85 I=1,N
          ARRAY(I)=SRTTMP(I)
85      CONTINUE
        RETURN
        END
        SUBROUTINE CONTAB(DEV,NC,IX,PROFIL,
     *                    DESCR)

C
C ************************************************************
C
C       VERSION 7 :     COMMON AREAS FOR CONSENSUS
C                       FILE CONSENCOM.FTN
C
        INTEGER DATARR,CONRES
        BYTE TXT,CONTXT
C
        COMMON /DATCOM/DATARR(120,10),CONRES(120)
        COMMON /TXTCOM/TXT(80),CONTXT(26,8)

C
C ************************************************************
C Variable declarations
C
        INTEGER PROFIL(10)
        INTEGER DEV,NC,IX
C
 5      WRITE(DEV,100)
 100    FORMAT(1X)
C
 10     WRITE(DEV,101)NC,(TXT(ICHR),ICHR=1,80)
 101    FORMAT(1X,I3,2X,80A1)
C
 20     WRITE(DEV,102)(CONTXT(ICHR,IX),ICHR=1,26)
 102    FORMAT(1X,26A1)
C
 30     WRITE(DEV,103)
 103    FORMAT( 1X,5X,'J1  J2  J3  J4  J5  J6  J7  J8  J9  J10',
     *  '      Profile',10X,'Result')
C
 40     WRITE(DEV,104)(DATARR(NC,J),J=1,10),(PROFIL(K),K=1,9),CONRES(NC)
104     FORMAT(1X,4X,10(I2,2X),5X,9(I1,1X),2x,I2)
        RETURN
        END

C
```

```
C ********************************************************************
C       ANOM.FTN
C
        SUBROUTINE ANOM (PROFIL,MAX,ICON)
C
        IMPLICIT INTEGER(A-Z)
C
        INTEGER PROFIL(10),MAX,ICON,ISUM
C
5       ISUM=0
C
10      DO 15 I=1,9
          ISUM=ISUM+PROFIL(I)
          IF(ISUM.GE.MAX)GO TO 20
15      CONTINUE
20      ICON=I+10
        RETURN
        END

C
C ************************************************************
C       SPSFMT.FTN
C
C        R.S.EASTERBY
C       JAN 12TH 1983
C
C Modified by I.R.GRAYDON
C       26th April 1983
C
C       SUBROUTINE TO GENERATE SPSS COMMAND FILE
C       Variables needed for this routine
C       DEV : device name for output  of spss file
C       WORD : word( in text form)
C       WRDNUM : word number
C       NCODES : number of codes for particiular response
C
C ************************************************************************
C
        SUBROUTINE SPSFMT(DEV,WORD,WRDNUM,NC,NCODES,ANFLG)
C
C ************************************************************************
C
        IMPLICIT INTEGER(A-Z)
C
C       VERSION 7 :     COMMON AREAS FOR CONSENSUS
C                       FILE CONSENCOM.FTN
C
        COMMON /DATCOM/DATARR(120,10),CONRES(120)
        COMMON /TXTCOM/TXT(80),CONTXT(26,8)
        INTEGER DATARR,CONRES
        BYTE TXT,CONTXT
C
        BYTE WORD(18)
C
```

```
C ***************************************************************************
C
      INTEGER  P(20),M(50,7),DEV,WRDNUM,NCODES,IDUM(10)
      LOGICAL FIRST,LAST,ANFLG
C
C ZERO OUT ARRAYS
C
      KBLUN=5
 1    WRITE(KBLUN,*)'SPSFMT ROUTINE ACTIVE'
      DO 5 R=1,7
        P(R)=0
        DO 4 C=1,50
          M(C,R)=0
 4      CONTINUE
 5    CONTINUE
      IF(.NOT.ANFLG)GOTO 6000 ! No anomalous analysis
C
C ***************************************************************************
C Anomalous coding
C
      WRITE (DEV,9001)(WORD(ICHR),ICHR=1,18)
 9001 FORMAT(1X,'TASK NAME      ANOMALOUS RESPONSES FOR WORD ',18A1)
      WRITE (DEV,2002)WRDNUM
 2002 FORMAT(1X,'*SELECT IF     (ITEM = ',I3,')')
      WRITE (DEV,*)'*RECODE        MEANING'
C
 210  DO 215 N=1,NCODES
        IF(CONRES(N).LT.10)GO TO 215  !Ignore normal consensus values
        CONRES(N)=CONRES(N)-10     !Adjust anamalous consensus values
        R=CONRES(N)
        P(R)=P(R)+1
        C=P(R)
        M(C,R)=N
 215  CONTINUE
C
 220  DO 250 R=1,7
        IF( M(1,R).EQ.0 )GO TO 250
        IDX=P(R)
 240    DO 245 C=1,IDX
          WRITE (DEV,2401)M(C,R),R
 2401     FORMAT(1X,'               (',I3,' = ',I3,')',)
 245    CONTINUE
 250  CONTINUE
      WRITE(DEV,*)'               (ELSE=100)'
C
C RECODING COMPLETE : WRITE TASK DESCRIPTION
C
      WRITE (DEV,*)'FREQUENCIES    GENERAL=MEANING'
      WRITE(DEV,*)'COMMENT'
C
C ***************************************************************************
C Full recode commands start here
C
 6000 CONTINUE
```

```
      WRITE (DEV,5001)(WORD(ICHR),ICHR=1,18)
 5001 FORMAT(1X,'TASK NAME      FULL RECODE ANALYSIS FOR WORD ',18A1)
      WRITE (DEV,5002)WRDNUM
 5002 FORMAT(1X,'*SELECT IF     (ITEM EQ ',I3')')
      WRITE (DEV,*)'*RECODE        MEANING'
C
C Routine - to write each normal recode to SPSFIL word by word
C
 501  DO 504 R=1,7
        P(R)=0
        DO 503 C=1,50
          M(C,R)=0
 503    CONTINUE
        ICNT=0
 504  CONTINUE
C
 505  DO 510 N=1,NCODES
        R=CONRES(N)
        P(R)=P(R)+1
        C=P(R)
        M(C,R)=N
 510  CONTINUE
C
 515  DO 516 R=1,7
 5003 FORMAT(1X,10(2X,I3))
 516  CONTINUE
C
 520  DO 580 R=1,7
      IF(M(1,R).EQ.0)GO TO 580
      IDX=P(R)
      ICNT=0
      ICNT=0
      LPCNT=0
      LAST=.FALSE.
C
 530  DO 570 C=1,IDX
C
 540  DO 545 ICD=1,5
      ICNT=LPCNT*5+ICD
      IDW=ICD
      IDUM(ICD)=M(ICNT,R)
      IF(ICNT.EQ.IDX)LAST=.TRUE.
      IF(LAST)GO TO 550
 545  CONTINUE
 550  CONTINUE
 560  GO TO(561,562,563,564,565),IDW
 561  WRITE (DEV,5101)(IDUM(I),I=1,IDW),R
      GO TO 569
 562  WRITE (DEV,5102)(IDUM(I),I=1,IDW),R
      GO TO 569
 563  WRITE (DEV,5103)(IDUM(I),I=1,IDW),R
      GO TO 569
 564  WRITE (DEV,5104)(IDUM(I),I=1,IDW),R
      GO TO 569
```

```
565     WRITE (DEV,5105)(IDUM(I),I=1,IDW),R
        GO TO 569
569     LPCNT=LPCNT+1
        IF(LAST)GO TO 580
        GO TO 540
570     CONTINUE
580     CONTINUE
        WRITE (DEV,*)'FREQUENCIES    GENERAL=MEANING'
571     WRITE (DEV,5000)
5000    FORMAT(1X,'COMMENT          **************************')
5101    FORMAT(1X,15X,'(',1(I3),' = ',I2,')')
5102    FORMAT(1X,15X,'(',1(I3),',',I3,' = ',I2,')')
5103    FORMAT(1X,15X,'(',2((I3),','),I3,' = ',I2,')')
5104    FORMAT(1X,15X,'(',3((I3),','),I3,' = ',I2,')')
5105    FORMAT(1X,15X,'(',4((I3),','),I3,' = ',I2,')')
        END
```

5) Program used to generate the data tabulations

```
C
C BMREXT.FTN
C
C R.S.EASTERBY
C Applied Psychology Dept
C University of Aston in Birmingham
C
C DEC 10TH 1983
C Adapted from BMRSUM to give extended tables containing supplementary
C summary data.
C
C Modified considerably by
C I.R. Graydon
C 28th January 1984
C Program reads in TWO input files :
C       Updated results file    - .UPD
C       Supplementary data      - .SPL
C
C The program recreates the cumulative frequency tables from scratch
C based on the cumulative frequencies - this is slightly more accurate
C than the old .TBL files. The program also tidies up the ragged edges
C of the tables in the process by padding out any remaining rightmost
C values in the table with the don't know 'U' character
C Program then combines the input files and reformats them as an
C extended table/data file :
C       Extended table file     - .NEW
C
C The output from this pass of the program is in a suitable format for
C sorting
C
C In addition there are several options included :
C       1)Include cumulative percentage for a given category to allow
C         subsequent sorting
C       2)Compute Missing values to include uncooperative subjects
C         and/or inappropriate responses
C       3)Optionally exclude the percentage of uncooperative subjects
C         and/or inappropriate subjects from the output file
C N.B. These options should allow subsequent sorting of the extended
C       table files by :
C               1)Cumulative percentage responses
C               2)Degree of significance of SEX/AH subdivisions
C               3)Percentage inappropriate responses
C Indeed it will allow sorting by any specified variable as long as the
C field can be adequately specified
C
C       I.R.Graydon
C       29th January 1984
C
C ***************************************************************************
C Local variables
C
        IMPLICIT INTEGER(A-Z)
```

```
C
        BYTE CATCOD(10)
        BYTE WRDTXT(20)
        BYTE TABLE(50)
        BYTE FILNAM(10)
        BYTE UPDFIL(14),HDRFIL(14),SPLFIL(14)
        BYTE NEWFIL(14),SRTFIL(14),EXTFIL(14)
        BYTE UVAL,DUMMY
C
        INTEGER WRDNUM,WRDCHK,WRDCH2,MAX,MIN,IWORD,IGRP
        INTEGER SRTDEV,UPDDEV,HDRDEV,NEWDEV,KBLUN,EXTDEV,SPLDEV
        INTEGER NRES,SRTCAT,IVAL
C
        REAL FRQ(10),CUMFRQ(10)
        REAL MISS,UNCO,INAP,AH,SEX,ANOM,SRTNUM
        REAL CATNUM(10)
C
        LOGICAL YES,YESUNC,YESINA,OUTUNC,OUTINA,OUTSMP,IFLAG
C
        DATA UVAL/'U'/
        DATA CATCOD/'1','2','3','4','5',' ','U',0,0,0/
C
C Device assignments
C
        EXTDEV=1        ! final extended output         -.EXT
        UPDDEV=2        ! input update data file        -.UPD
        HDRDEV=3        ! Header file                   -.TBL
        NEWDEV=4        ! output file for SORT          -.NEW
        KBLUN=5
        SPLDEV=6        ! input supplementary file      -.SPL
        SRTDEV=4        ! temporary sort file           -.SRT
C
C Read in file name prototype
C Files to have common name with variable extension
C Extensions set up using CONCAT string handling routine
C
        CALL PAGE(KBLUN)
        NCAT=7
        NWRD=25
        IFLAG=.FALSE.
 10     WRITE(KBLUN,9001)
 9001   FORMAT('$','Enter filename prototype (9 chars max) :')
        READ(KBLUN,9002)(FILNAM(I),I=1,9)
 9002   FORMAT(9A1)
        FILNAM(10)=0            !ASCII null string for string rooting
C
C Create file extensions
C
        CALL CONCAT(FILNAM,'.EXT',EXTFIL,13)
        CALL CONCAT(FILNAM,'.UPD',UPDFIL,13)
        CALL CONCAT(FILNAM,'.HDR',HDRFIL,13)
        CALL CONCAT(FILNAM,'.SPL',SPLFIL,13)
        CALL CONCAT(FILNAM,'.NEW',NEWFIL,13)
        CALL CONCAT(FILNAM,'.SRT',SRTFIL,13)
```

```
C
        WRITE(KBLUN,101)(EXTFIL(ICHAR),ICHAR=1,14)
        WRITE(KBLUN,101)(UPDFIL(ICHAR),ICHAR=1,14)
        WRITE(KBLUN,101)(HDRFIL(ICHAR),ICHAR=1,14)
        WRITE(KBLUN,101)(SPLFIL(ICHAR),ICHAR=1,14)
        WRITE(KBLUN,101)(NEWFIL(ICHAR),ICHAR=1,14)
        WRITE(KBLUN,101)(SRTFIL(ICHAR),ICHAR=1,14)
 101    FORMAT(1X,14A1)
C
C Filename and steering routine here
C
 15     WRITE(KBLUN,*)'How many groups of 25 words in the file?'
        READ(KBLUN,9004)NGRP
 9004   FORMAT(I2)
C
C Steering - are you outputting the final results or outputting
C intermediate files for subsequent sorting ?
C
          WRITE(KBLUN,9007)
 9007     FORMAT('$','Have you done a general sort(Y/N): ')
          CALL ASKYN(KBLUN,YES)
          IF(YES)GOTO 600
C
        OPEN(UNIT=UPDDEV,NAME=UPDFIL,TYPE='OLD')
        OPEN(UNIT=SPLDEV,NAME=SPLFIL,TYPE='OLD',READONLY)
        OPEN(UNIT=NEWDEV,NAME=NEWFIL,TYPE='NEW')
C
C ***************************************************************************
C Start main control loop
C
        WRITE(KBLUN,*)'Please wait'
        DO 500 IGRP=1,NGRP
C
C Start processing loop
C
        DO 470 IWORD=1,NWRD
C
C Read in results update file .UPD containing raw
C and cumulative data
C
          READ(UPDDEV,9003,END=999,ERR=998)WRDNUM,
     1          (WRDTXT(ICHR),ICHR=1,17),
     2          (FRQ(J),J=1,10),(CUMFRQ(IVAL),IVAL=1,5)
 9003   FORMAT(1X,I3,2X,17A1,3X,15(1X,F5.1))
C
C Read in word number and supplementary data from .SPL file
C containing summary data
C
          READ(SPLDEV,9005,END=999,ERR=998)WRDCHK,
     1    MISS,UNCO,INAP,NRES,AH,SEX,ANOM
 9005     FORMAT(I3,2X,17X,1X,3(F4.1,1X),I3,1X,2(F5.3,1X),F4.1)
C
C Check that .SPL and .UPD word numbers agree
C If it does not agree then exit with status
```

```
C
          IF(WRDNUM.NE.WRDCHK)GOTO 995
C
C ***************************************************************************
C Generate new table from cumulative frequencies to limit rounding errors
C Table processing code
C
        DO 405 K=1,50
          TABLE(K)=0            ! initialise table array
 405    CONTINUE
        LSTPLT=1
C
 411    DO 425 J=1,NCAT
          IF(J.LE.5)NPLT=INT((CUMFRQ(J)/2.0) + 0.5)
          IF(J.EQ.6)NPLT=LSTPLT + INT((FRQ(J)/2.0) + 0.5)
          IF(J.EQ.7)NPLT=LSTPLT + INT((FRQ(J)/2.0) + 0.5)
 415      DO 420 L=LSTPLT,NPLT
            TABLE(L)=CATCOD(J)
 420      CONTINUE
          IF(J.EQ.7.AND.NPLT.GE.50)GOTO 422
C
C Tidy edges for last plot
C
          DO 421 L=NPLT,50
            TABLE(L)=CATCOD(J)
 421      CONTINUE
 422      LSTPLT=NPLT
 425    CONTINUE
C
C ***************************************************************************
C Output intermediate data file in compressed format for sorting.
C Note that this file will then be reprocessed by this program to
C give a tidy SORTED output.
C
 440        WRITE(NEWDEV,9024)WRDNUM,(WRDTXT(ICHR),ICHR=1,17),
     2      (TABLE(ICHR),ICHR=1,50),MISS,UNCO,INAP,NRES,AH,SEX,
     3      ANOM,(CUMFRQ(IVAL),IVAL=1,5)
 9024       FORMAT(1X,I3,17A1,50A1,3F4.1,I3,2F5.3,F4.1,5F5.1)
C
C Next word
C
 470    CONTINUE
C
C Next group of 25 words
C
 500    CONTINUE
C
C End of main control loop
C ***************************************************************
C Close files
 550    CLOSE(UNIT=UPDDEV)
        CLOSE(UNIT=NEWDEV)
        CLOSE(UNIT=SPLDEV)
        STOP 'End of sort run'
```

```
C
C ***************************************************************
C Final output reformatting
C
 600    CONTINUE
        OPEN(UNIT=SRTDEV,NAME=SRTFIL,TYPE='OLD',READONLY)
        OPEN(UNIT=EXTDEV,NAME=EXTFIL,TYPE='NEW')
        OPEN(UNIT=HDRDEV,NAME=HDRFIL,TYPE='NEW')
C
C Set up processing options for final output of EXTENDED SORTED data
C
          WRITE(KBLUN,9008)
 9008     FORMAT('$','Include unco-op. subs in missing values (Y/N): ')
          CALL ASKYN(KBLUN,YESUNC)
          IF(YESUNC)WRITE(HDRDEV,9031)
 9031     FORMAT(1X,'Unco. subjects included in missing values ')
C
          WRITE(KBLUN,9010)
 9010     FORMAT('$','Include inap. resp. in missing values (Y/N): ')
          CALL ASKYN(KBLUN,YESINA)
          IF(YESINA)WRITE(HDRDEV,9033)
 9033     FORMAT(1X,'Inap. resp. included in missing values ')
C
          WRITE(KBLUN,9009)
 9009     FORMAT('$','Include unco-op. subs in OUTPUT file (Y/N): ')
          CALL ASKYN(KBLUN,OUTUNC)
          IF(.NOT.OUTUNC)WRITE(HDRDEV,9032)
 9032     FORMAT(1X,'Unco. subjects excluded from output')
C
          WRITE(KBLUN,9011)
 9011     FORMAT('$','Include inap. resp. in OUTPUT file (Y/N): ')
          CALL ASKYN(KBLUN,OUTINA)
          IF(.NOT.OUTINA)WRITE(HDRDEV,9034)
 9034     FORMAT(1X,'Inap. responses excluded from output ')
C
          WRITE(KBLUN,9012)
 9012     FORMAT('$','Correct N to exclude missing values(Y/N): ')
          CALL ASKYN(KBLUN,OUTSMP)
          IF(OUTSMP)WRITE(HDRDEV,9035)
 9035     FORMAT(1X,'Sample size excludes missing values')
          IF(.NOT.OUTSMP)WRITE(HDRDEV,9036)
 9036     FORMAT(1X,'Sample size includes missing values')
C
          WRITE(HDRDEV,*)
          WRITE(HDRDEV,*)
C
C ***************************************************************
C Processing table
C
        DO 900 IWORD=1,500
C
C Read in the SORTED compressed file
C
            READ(SRTDEV,9024,END=1000)WRDNUM,(WRDTXT(ICHR),ICHR=1,17),
```

```
     2      (TABLE(ICHR),ICHR=1,50),MISS,UNCO,INAP,NRES,AH,SEX,
     3      ANOM,(CUMFRQ(IVAL),IVAL=1,5)
           IF(.NOT.OUTSMP)GOTO 605
             CORSMP=MISS + UNCO + INAP
             NRES=NRES - (FLOAT(NRES) * FLOAT(CORSMP/100.0))
 605       CONTINUE
           IF(YESUNC)MISS = MISS + UNCO
           IF(YESINA)MISS = MISS + INAP
C
C ******** Output extended data table according to options ***********
C
        IF(OUTUNC.AND.OUTINA)GOTO 640 ! include unco and inap in output
        IF(OUTUNC)GOTO 630            ! include unco only in output
        IF(OUTINA)GOTO 620            ! include inap only in output
C
C By default both unco and inap are to be excluded from output
C
 610    IF(IFLAG)GOTO 615
        WRITE(HDRDEV,9050)
 9050   FORMAT(1X,'NUM',2X,'WORD TEXT',9X,'¦',23X,'¦¦',23X,'¦',1X,
     1  'MISS',2X,'N',3X,'AH',3X,'SEX',3X,'ANOM')
        WRITE(HDRDEV,9054)
 9054   FORMAT(1X,'================================================',
     1  '================================================')
        IFLAG=.TRUE.
C

 615        WRITE(EXTDEV,9020)WRDNUM,(WRDTXT(ICHR),ICHR=1,17),
     2      (TABLE(ICHR),ICHR=1,50),MISS,NRES,AH,SEX,ANOM,
 9020       FORMAT(1X,I3,2X,17A1,1X,50A1,1X,F4.1,1X,I3,1X,2(F5.3,1X),
     1      F4.1)
        GOTO 900
C
C Include inap - exclude unco
C
 620    IF(IFLAG)GOTO 625
        WRITE(HDRDEV,9051)
 9051   FORMAT(1X,'NUM',2X,'WORD TEXT',9X,'¦',23X,'¦¦',23X,'¦',1X,
     1  'MISS',1X,'INAP',2X,'N',3X,'AH',3X,'SEX',3X,'ANOM')
        WRITE(HDRDEV,9055)
 9055   FORMAT(1X,'================================================',
     1  '================================================')
        IFLAG=.TRUE.
C
 625        WRITE(EXTDEV,9021)WRDNUM,(WRDTXT(ICHR),ICHR=1,17),
     2      (TABLE(ICHR),ICHR=1,50),MISS,INAP,NRES,AH,SEX,ANOM,
 9021       FORMAT(1X,I3,2X,17A1,1X,50A1,1X,2(F4.1,1X),I3,1X,
     1      2(F5.3,1X),F4.1)
        GOTO 900
C
C Include unco - exclude inap
C
 630    IF(IFLAG)GOTO 635
        WRITE(HDRDEV,9052)
```

```
 9052   FORMAT(1X,'NUM',2X,'WORD TEXT',9X,'¦',23X,'¦¦',23X,'¦',1X,
     1  'MISS',1X'UNCO',2X,'N',3X,'AH',3X,'SEX',3X,'ANOM')
        WRITE(HDRDEV,9055)
        IFLAG=.TRUE.
C
 635        WRITE(EXTDEV,9022)WRDNUM,(WRDTXT(ICHR),ICHR=1,17),
     2      (TABLE(ICHR),ICHR=1,50),MISS,UNCO,NRES,AH,SEX,ANOM,
 9022       FORMAT(1X,I3,2X,17A1,1X,50A1,1X,2(F4.1,1X),I3,1X,
     1      2(F5.3,1X),F4.1)
        GOTO 900
C
C Include unco AND inap
C
 640    IF(IFLAG)GOTO 645
        WRITE(HDRDEV,9053)
 9053   FORMAT(1X,'NUM',2X,'WORD TEXT',9X,'¦',23X,'¦¦',23X,'¦',1X,
     1  'MISS',1X'UNCO',1X,'INAP',2X,'N',3X,'AH',3X,'SEX',3X,'ANOM')
        WRITE(HDRDEV,9056)
9056    FORMAT(1X,'================================================',
     1  '============================================================')
            IFLAG=.TRUE.
C
 645        WRITE(EXTDEV,9023)WRDNUM,(WRDTXT(ICHR),ICHR=1,17),
     2      (TABLE(ICHR),ICHR=1,50),MISS,UNCO,INAP,NRES,AH,SEX,
     3      ANOM
 9023       FORMAT(1X,I3,2X,17A1,1X,50A1,1X,3(F4.1,1X),I3,1X,
     1      2(F5.3,1X),F4.1)
 900    CONTINUE
C
C Close output files
C
 1000   CONTINUE
        CLOSE(UNIT=EXTDEV)
        CLOSE(UNIT=SRTDEV)
        CLOSE(UNIT=HDRDEV)
        WRITE(KBLUN,9041)(HDRFIL(ICHR),ICHR=1,14)
 9041   FORMAT(1X,'The appropriate header has been written to  file :',
     1  14A1/1X,'This will enable output files to be sorted before'/
     2  1X,'the header is included.')
        STOP 'End of final output run'
C
C Error conditions
C
 995    STOP 'SPL and UPD word numbers do not agree - exiting '
 997    STOP 'Error in reading TBL file - exiting'
 998    STOP 'Error in reading SPL file - exiting'
 999    STOP 'Error in length of file - exiting'
        END
```

6) Program to match demographic data to raw data.

```
C
C FSRTRFT - HARRIS 500
C
C THIS PROGRAM MATCHES AN ALREADY MERGED AND SORTED DATA FILE
C WITH A SORTED DEMOGRAPHIC DATA FILE. THE MATCH IS MADE ACCORDING
C TO THE CASES NUMBERS ON THE RESPECTIVE RECORDS. IN EVENT OF A MISMATCH
C THE RELEVANT RECORD IS OUTPUT TO LFN 16.
C WHEN A MATCH IS ACHEIVED THEN THE DATA CARD WHICH CONTAINS 10 RESPONSES
C FROM ONE SUBJECT IS SPLIT INTO 10 SEPARATE RECORDS AND THE DEMOGRAPHIC
C CARD IS PREFIXED TO EACH ONE.
C
C IAIN R. GRAYDON
C IDRG
C APPLIED PSYCHOLOGY DEPARTMENT
C UNIVERSITY OF ASTON
C
C 21ST OCTOBER 1982
C
C
C VARIABLE DECLARATIONS
C
      REAL RAWBUF(80),DEMBUF(20)
      INTEGER DEMARR(5),WRD(10),COD(10)
      LOGICAL FLAG
      INTEGER DNUM,RNUM,AGE,NPAPER,WKNUM
C
C START
C
      IREC=0
      IBAD=0
 100  IFLAG=.TRUE.
C
C READ DEM CARD FROM LFN 15
C
 110  READ(15,1500,END=700)DNUM,(DEMARR(ICHR),ICHR=1,5)
 1500 FORMAT(1X,I4,5A3)
      IF(.NOT.FLAG)GOTO 200
C
C READ RAW DATA FROM LFN 13
C
 120  READ(13,1300,END=800)WKNUM,RNUM,AGE,NPAPER,(WRD(J),COD(J),J=1,10)
 1300 FORMAT(I1,I4,I2,I3,10(1X,2I3))
C
C COMPARE CASE NUMBERS FOR A MATCH
C
 200  IF(DNUM.GT.RNUM)GOTO 500
      IF(RNUM.GT.DNUM)GOTO 600
C
C WRITE AND REFORMAT DATA WITH DEM DATA
C
      IREC=IREC + 1
C
```

```
C CHECK IF ALL 10 ITEM CODES ARE 900 OR 99
C IF SO THEN MODIFY ALL CODES TO 950
C
      IC90=0
      IC99=0
      DO 250 ICOD=1,10
        IF(COD(ICOD).EQ.900)IC90=IC90 + 1
 250    IF(COD(ICOD).EQ.999)IC99=IC99 + 1
C
      IF(IC99.EQ.10)GOTO 290
      ICTOT=IC99 + IC90
      IF(ICTOT.NE.10)GOTO290
C
C MODIFY VALUES
C
      IBAD=IBAD + 1
      WRITE(3,3000)RNUM
      WRITE(3,3010)IBAD,RNUM,(COD(J),J=1,10)
      DO 260 ICOD=1,10
 260    COD(ICOD)=950
 3000 FORMAT(1X,CODE MODIFIED FOR CASE ',I4)
 3010 FORMAT(1X,I3,' CASE ',I4,' PROFILE ',10(2X,I3))
 290  DO 300 ICPOY=1,10
        WRITE914,1400)WKNUM,RNUM,AGE,NPAPER,(DEMARR(I),I=1,5),
     1  WRD(ICOPY),COD(ICOPY)
 1400   FORMAT(1X,I1,I4,1X,I2,I3,5A3,2X,2I3)
 300  CONTINUE
C
C READ NEXT CARDS FOR NEXT MATCH
C
      GOTO 100
C
C DNUM GT RNUM
C OUTPUT RAW DATA CARD TO LFN 16
C READ NEXT RAW DATA RECORD UNTIL MATCH CONDITIONS MET
C
 500  WRITE(16,1600)WKNUM,RNUM,AGE,NPAPER,(WRD(J),COD(J),J=1,10)
 1600 FORMAT(1X,I1,I4,1X,I2,I3,10(1X,2I3))
      GOTO 120
C
C RNUM GT DNUM
C OUPUT DEMOGRAPHIC DATA RECORD TO LFN 17
C SET FLAG TO FALSE
C READ NEXT DEMOGRAHIC RECORD UNTIL MATCH CONDITIONS MET
C
 600  FLAG=.FALSE.
      WRITE(17,1710)DNUM,(DEMARR(I),I=1,5)
 1710 FORMAT(1X,I4,5A3)
      GOTO 110
C
C END OF DEMOGRAPHIC DATA FILE REACHED - OUTPUT REMAINING RAW DATA
C CARDS TO LFN 16
C
 700  WRITE(16,1620)
```

```
 1620 FORMAT(1X,'THE FOLLOWING RAW DATA CARDS WERE NOT USED : ')
      DO 750 ILIN=1,200
        READ(13,1310,END=880)(RAWBUF(ICHR),ICHR=1,80)
 1310   FORMAT(80A1)
        WRITE(16,1630)9RAWBUF9ICHR),ICHR=1,80)
 1630   FORMAT(1X,80A1)
        IF(ILIN.GE.190)WRITE916,1640)
 1640   FORMAT(1X,'WARNING : MORE THAN 190 CARDS NOT USED')
 750  CONTINUE
C
C DEMOGRAPHIC DATA REMAINING - END OF RAW DATA FILE
C
 800  WRITE(17,1750)
 1750 FORMAT(1X,'THE FOLLOWING DEMOGRAPHIC DATA CARDS NOT USED')
 840  READ(15,1510,END=880)(DEMBUF9ICHR),ICHR=1,20)
 1510 FORMAT(20A1)
      WRITE(17,1760)9DEMBUF(ICHR),ICHR=1,20)
 1760 FORMAT(1X,20A1)
      GOTO 840
C
C WRITE $EOF TO OUTPUT FILES
C
 880  IVAL=IFIX((FLOAT(IBAD)/FLOAT(IREC))*100.0)
      WRITE(3,3020)IREC,IVAL
 3020 FORMAT(1X,I3,' VIABLE CASES READ WITH ',I2,'% MODIFIED ')
      ENDFILE 14
      ENDFILE 16
      ENDFILE 17
      STOP
 900  END
```

APPENDIX XII

Re-analysis of pilot study.

The tables shown below are the result of returning to the pilot study and re-analysing the data using the main study methodology. In particular, the consensual analysis was carried out on the judgements made by the nine qualified judges who participated in the recode validation study in chapter three. The results were then sorted according to the criteria used in the main study. Comparisons can be made between words appearing in both the pilot study and the main study.

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
23	ventilated	11111111111111111222222222233333333333333333 UUUUUU	* 70	4.1				G
17	respiratory	1111111111111111111111111 11111222222224 UUUUUU	* 64	11.0				G
24	confined	11111111111111111111122222222222333344555 UUUUU	* 66	9.6		A	V	G
16	puncture	11111111111111111111111111 11111111144 UUUUU	* 65	10.9				G
13	smoulder	11111111122222222222222222222222233344 UUUUUUUUUU	* 65	9.7				G
12	flammable	11111111111111222222333333333333333555 UUUUUUUUU	* 63	12.5				G
7	fumigation	1111111233333333333333333333333 UUUUUUUUUUUUUUU	* 63	11.3		A		G
36	vapour	11222222222223333333333333333344444444455 UUUUUUU	* 68	2.9		A	V	G
20	copious	11111111111111111111111112334 UUUUUUUUUUUUUUUUU	* 58	20.5			V	G
19	induce	11111111111112222222222222333 UUUUUUUUUUUUU	* 59	19.2		A		G
35	friction	12222222222222222222233333334555 UUUUUUUUUU	* 65	7.1		A		G
18	sealed	11111111111111112223333334 UUUUUU	* 66	9.6		A		G
40	spontaneous	11222333333333333333333334444445 UUUUU	* 55	21.4	I	A		G
22	explosion	11111111111111113333333333444 UUUUUUUUUU	* 66	9.6				G
39	irritant	11111111111111122222333344444444445 UUUUUUUUUU	* 61	12.9		A	V	G
1	emetic	11111111111111111113333 UUUUUUUUUUUUUUUUUUUU	* 63	12.5		A		G
11	contaminate	11112222223333333333333444444 UUUUUUUUUUUUUUUUU	* 65	9.7			V	G
4	ignition	1111111111122222233333 UUUUUUUUUUUUUUUUU	* 44	38.9	I			G
34	irreversible	11112223333333333333 UUUUU	* 60	14.3		A		G
9	corrosive	11111122233333333333334444555 UUUUUUUUUUUUUUUU	* 58	18.3		A		G
5	combustible	11111111111111111112245555555 UUUUUUUUUUUUUUUU	* 60	16.7			V	G
31	bonds	11111111111222233333444445 UUUUUUUUUUUUUUUU	* 62	10.1	I			G
30	liberates	113333333333333334445 UUUUUUUUUUUUUU	* 61	14.1		A		G
10	cumulative	11112222222222344444444 UUUUUUUUUUUUUUUUUUUU	* 51	28.2		A		G

Table A12.1 Pilot Study. Words sorted from best to worst at category 3 'Likely'

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
26	neutralize	1112333333333344445 UUUUUUUUUUUUU	* 62	13.9			V	G
6	toxic	111111111111225 UUUUUUUUU	* 59	18.1			V	G
14	compound	1111222222222344 UUUUUUUUUUUUUUUUUU	* 53	26.4	I		V	G
37	contact	111111111123335 UUUUUUU	* 62	11.5				G
29	inhale	11111112222335 UUUUUUU	* 69	2.8				G
21	irrigate	111111333335 UUUUUUUUUUUUUUUUUU	* 52	28.7	I		V	G
32	ingest	111123333345 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 51	26.1				G
38	dispose	11111112234 UUUU	* 65	7.1				G
2	abraid	11122233 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 56	22.2				G
15	incinerate	111111334 UUUUUUU	* 68	6.8		A		G
33	incandescent	2333333444444555 UUUUUUUUUUUUUUUUUUUUUUU	* 56	20.0		A		G
25	aspiration	2223355 UUUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 48	34.3	I		V	G
3	extinguish	111234444444 UUUUUUUUU	* 67	6.9		A	V	G
28	oxidise	11234555 UUUUUUUUUUUUUUUUUUUU	* 58	17.1				G
8	peroxide	1333444455 UUUUUUUU	* 64	9.8		A		G
27	mutagenic	22355 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 57	18.6				G

Table A12.1 Pilot Study. Words sorted from best to worst at category 3 'Likely' (continued).

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
2	abraid	11122233 UUUU

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
34	irreversible	1111222333333333

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
6	toxic	111111111111225 UUUUUUUUU	* 59	18.1			V	G
5	combustible	1111111111111111111224555555 UUUUUUUUUUUUUUUU	* 60	16.7			V	G
20	copious	11111111111111111111111112334 UUUUUUUUUUUUUUUUU	* 58	20.5			V	G
21	irrigate	111111333335 UUUUUUUUUUUUUUUUUUU	* 52	28.7	I		V	G
26	neutralize	1112333333333344445 UUUUUUUUUUUUU	* 62	13.9			V	G
14	compound	1111222222222344 UUUUUUUUUUUUUUUUU	* 53	26.4	I		V	G
25	aspiration	2223355 UUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 48	34.3	I		V	G
11	contaminate	1111222222333333333333344444444 UUUUUUUUUUUUUUUU	* 65	9.7			V	G
24	confined	11111111111111111111222222222222333344555 UUUUU	* 66	9.6		A	V	G
39	irritant	1111111111111122222333344444444445 UUUUUUUUUU	* 61	12.9		A	V	G
36	vapour	11222222222223333333333333333344444444455 UUUUUUU	* 68	2.9		A	V	G
3	extinguish	111234444444 UUUUUUUUU	* 67	6.9		A	V	G

Table A12.3 Pilot Study. The 12 words showing differences due to estimated verbal ability ($p < 0.05$).

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
24	confined	111111111111111111112222222222333344555 UUUUU	* 66	9.6		A	V	G
30	liberates	113333333333333344 5 UUUUUUUUUUUUU	* 61	14.1		A		G
36	vapour	11222222222233333333333333334444444455 UUUUUUU	* 68	2.9		A	V	G
34	irreversible	1111222333333333333333 UUUUU	* 60	14.3		A		G
7	fumigation	11111112333333333333333333333333 UUUUUUUUUUUUUU	* 63	11.3		A		G
39	irritant	1111111111111112222233334444444445 UUUUUUUUUU	* 61	12.9		A	V	G
9	corrosive	11111122233333333333334445555 UUUUUUUUUUUUUUU	* 58	18.3		A		G
40	spontaneous	112223333333333333333333334444445 UUUUU	* 55	21.4	I	A		G
8	peroxide	1333444455 UUUUUUUU	* 64	9.8		A		G
3	extinguish	111234444444 UUUUUUUUU	* 67	6.9		A	V	G
33	incandescent	2333333444444555 UUUUUUUUUUUUUUUUUUUUUUU	* 56	20.0		A		G
35	friction	12222222222222222222333333 4555 UUUUUUUUU	* 65	7.1		A		G
10	cumulative	11112222222222344444444 UUUUUUUUUUUUUUUUUUUUU	* 51	28.2		A		G
15	incinerate	111111334 UUUUUUU	* 68	6.8		A		G
19	induce	11111111111112222222222222333 UUUUUUUUUUUU	* 59	19.2		A		G
1	emetic	11111111111111111113333 UUUUUUUUUUUUUUUUUUUU	* 63	12.5		A		G
18	sealed	1111111111111111222333333 4 UUUUUU	* 66	9.6		A		G

Table A12.4 Pilot Study. The 13 words where anomalous responses affected more than 5% of the sample.

N - Sample size on which data is based MISS - Percentage of missing values * - Small sample
V - Differences relate to verbal ability G - Differences relate to gender
A - Anomalous responses greater then 5% I - Inappropriate responses greater than 5%

1 = Certain; 2 = Very Likely; 3 = Likely; 4 = Marginally likely; 5 = Unlikely;
Space = Wrong; U = Don't know

NUM	WORD TEXT	% 0 20 40 60 80 100	N	MISS	I	A	V	G
4	ignition	11111111111122222233333 UUUUUUUUUUUUUUUU	* 44	38.9	I			G
21	irrigate	111111333335 UUUUUUUUUUUUUUUUUU	* 52	28.7	I		V	G
25	aspiration	2223355 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	* 48	34.3	I		V	G
14	compound	1111222222222344 UUUUUUUUUUUUUUUUUU	* 53	26.4	I		V	G
31	bonds	11111111111222233333444445 UUUUUUUUUUUUUUUU	* 62	10.1	I			G
40	spontaneous	112223333333333333333333334444445 UUUUU	* 55	21.4	I	A		G

Table A12.5 Pilot Study. The 6 words where inappropriate responses affected more than 5% of the sample.